



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

## Pham 308028 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308028 has 233 members, 39 are drafts.

Phages represented in each track:

- Track 1 : Settecandela\_53, Phrappuccino\_53
- Track 2 : Tonenili\_111
- Track 3 : Belieber\_93, FoxtrotP1\_97, Pleione\_100, Capablanca\_99, Issimir\_96, Yucca\_97, OrediggerDelux\_95
- Track 4 : Janiyra\_99, Flabslab\_92, Roots515\_96, SoilZilla\_93, BackyardAgain\_94, ChaylaJr\_92, ErnieJ\_93, Loanshark\_97, Cactojaque\_92, Chargie21\_94, Melpomini\_91, Khaleesi\_96, Megamind\_96, Catera\_94, MikeLiesIn\_98, ScottMcG\_94, Ewok\_98, ParkTD\_98, TinyTim\_97, Zalkecks\_98, EmToTheThree\_100, Ablatia\_96, Bonray\_97, Willis\_98, NedWong\_98, Dietrick\_89, YemiJoy2021\_98, Kboogie\_101, DrPhinkDaddy\_96, Shelob\_99, Bipolarisk\_96, Turret\_92, Basquiat\_94, Delilah\_97, Zeenon\_99, Lukilu\_88, Ava3\_98, Quasimodo\_98, Izajani\_97, Jessibeth14\_96, Morizzled23\_97, ZygoTaiga\_96, EasyJones\_100, Maby2021\_97, Erdmann\_98, SrishMeg2525\_96, Daffodil\_102, Fongie\_95, Spud\_97, Blackbrain\_92, ChickenPhender\_93, Shrimp\_97, BobaPhatt\_93, Lee7\_95
- Track 5 : Labradorite\_97, Atlantean\_97, JPickles\_96, CharlieB\_93, CindyLou\_99, Naija\_97, Salacia\_101, FrayBell\_103, Shnickers\_98, BananaFence\_96, NuevoMundo\_103, ValleyTerrace\_98, Napoleon13\_93, LifeSavor\_97, LolaVinca\_99, Audrick\_100, Ngannou\_94, Babyland\_98, Teardrop\_97, McGee\_99, Amataga\_98, Fixie\_94, Astraea\_95, Guwapp\_97, Essence\_95, SilverDipper\_99, InigoMontoya\_99, Blackdragon\_93, Tyke\_99, Bowman\_95, GlutenPhree\_99, Derek\_98, ShiaLabeouf\_97, Pupusa\_104, Jemmno\_98, Jedediah\_101, Spec\_94, Gizmo\_101, Substance289\_96, NoodleTree\_105, Gabriel\_99, EmmaElysia\_97, BadAgartude\_94, StubbySaigey\_100, Rahel\_97, Trinitium\_94, Primadonna\_91, Darko\_97, Wally\_96, Rocha\_96, Specks\_103, Pivoine\_97, Pio\_101, Drazdys\_97, Norm\_98, LordLeafolot\_103, Momo\_97, JustHall\_94, Jaygup\_98, ArcherS7\_97, Phusco\_98, Cleatunium\_92, Ghost\_97, Tortoise16\_95, Tainan\_102, Gamgam\_98, Matsumoto\_96, DTDevon\_98, Phlegm\_100, SmallFry\_98, Chomp\_97, DirtMonster\_91, Patter\_98, Dessert\_95, Bxz1\_95, Latch\_98, Ading\_98, Adlitam\_98, YoungMoneyMata\_98, Burrough\_97, InterFolia\_106, Bangla1971\_99, Breeniome\_97, Rizal\_94, PharkleMinkus\_102, Fludd\_98
- Track 6 : I3\_103
- Track 7 : Sebata\_99, BeanWater\_89, Caravan\_92, MoMoMixon\_98, Halldule\_91, Sauce\_98, LinStu\_97, Lunareta\_96, Ronan\_91, LRRHood\_92, JulietS\_91, Yassified\_94, ET08\_86, Delylah\_100, Dandelion\_104, QBert\_91, JayJay\_103, Grungle\_85, RoMag\_92, Shaqnato\_90, Maturis\_95, Nidhogg\_98, Montpel\_96, Sprinklers\_93

- Track 8 : Iota\_92, Cali\_93
- Track 9 : Pier\_101, Blubba\_86, Domi\_91, Cane17\_86, Colt\_87
- Track 10 : Concombre\_104, Demodog\_104
- Track 11 : Moby\_88, Phox\_94, Moiqah\_88, HyRo\_89, Alice\_90, Bezza\_86, Stubby\_90, DeejaClivia\_86
- Track 12 : Mikro\_95, IkeLoa\_91, Kamryn\_97, StephanieG\_96, Jezreel\_97
- Track 13 : Vortrix\_112
- Track 14 : Lethe\_96
- Track 15 : Naval22\_105, JigglyPuff\_105
- Track 16 : Grasshills\_104, EggyFarm\_105, BigCity\_105
- Track 17 : FudgeTart\_97, Asterius\_100, McWolfish\_95, SVoro\_95, PurduePete\_97
- Track 18 : Nappy\_100, LookingGlass\_98
- Track 19 : Mangeria\_97
- Track 20 : Bigswole\_102
- Track 21 : Shifa\_86
- Track 22 : Rabinovish\_94
- Track 23 : Bread\_97
- Track 24 : Koguma\_94
- Track 25 : Duckfeet\_90
- Track 26 : Pinkcreek\_88
- Track 27 : Littleton\_97
- Track 28 : Phabba\_102
- Track 29 : Myrna\_97
- Track 30 : ScoobyDoobyDoo\_90
- Track 31 : Greely\_99
- Track 32 : Pupper\_94, SCentae\_93
- Track 33 : CherryTomatoes\_94
- Track 34 : Skog\_157
- Track 35 : Stormageddon\_13, RedWattleHog\_13
- Track 36 : Finch\_17
- Track 37 : E3\_gp77
- Track 38 : JeanGrey\_30

***Summary of Final Annotations (See graph section above for start numbers):***

The start number called the most often in the published annotations is 3, it was called in 184 of the 194 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ablatia\_96, Ading\_98, Adlitam\_98, Alice\_90, Amataga\_98, ArcherS7\_97, Asterius\_100, Astraea\_95, Atlantean\_97, Audrick\_100, Ava3\_98, Babyland\_98, BackyardAgain\_94, BadAgartude\_94, BananaFence\_96, Bangla1971\_99, Basquiat\_94, BeanWater\_89, Belieber\_93, Bezza\_86, BigCity\_105, Bigswole\_102, Bipolarisk\_96, Blackbrain\_92, Blackdragon\_93, Blubba\_86, BobaPhatt\_93, Bonray\_97, Bowman\_95, Bread\_97, Breeniome\_97, Burrough\_97, Bxz1\_95, Cactojaque\_92, Cali\_93, Cane17\_86, Capablanca\_99, Caravan\_92, Catera\_94, Chargie21\_94, CharlieB\_93, ChaylaJr\_92, ChickenPhender\_93, Chomp\_97, CindyLou\_99, Cleatunium\_92, Colt\_87, Concombre\_104, DTDevon\_98, Daffodil\_102, Dandelion\_104, Darko\_97, DeejaClivia\_86, Delilah\_97, Delylah\_100, Demodog\_104, Derek\_98, Dessert\_95, Dietrick\_89, DirtMonster\_91, Domi\_91, DrPhinkDaddy\_96,

Drazdys\_97, Duckfeet\_90, ET08\_86, EasyJones\_100, EggyFarm\_105, EmToTheThree\_100, EmmaElysia\_97, Erdmann\_98, ErnieJ\_93, Essence\_95, Ewok\_98, Fixie\_94, Flabslab\_92, Fludd\_98, Fongie\_95, FoxtrotP1\_97, FrayBell\_103, FudgeTart\_97, Gabriel\_99, Gamgam\_98, Ghost\_97, Gizmo\_101, GlutenPhree\_99, Grasshills\_104, Greely\_99, Grungle\_85, Guwapp\_97, Halldule\_91, HyRo\_89, I3\_103, IkeLoa\_91, InigoMontoya\_99, InterFolia\_106, Iota\_92, Issimir\_96, Izajani\_97, JPickles\_96, Janiyra\_99, JayJay\_103, Jaygup\_98, Jedediah\_101, Jemmno\_98, Jessibeth14\_96, Jezreel\_97, JigglyPuff\_105, JulietS\_91, JustHall\_94, Kamryn\_97, Kboogie\_101, Khaleesi\_96, Koguma\_94, LRRHood\_92, Labradorite\_97, Latch\_98, Lee7\_95, Lethe\_96, LifeSavor\_97, LinStu\_97, Littleton\_97, Loanshark\_97, LolaVinca\_99, LookingGlass\_98, LordLeafolot\_103, Lukilu\_88, Lunareta\_96, Maby2021\_97, Mangeria\_97, Matsumoto\_96, Maturis\_95, McGee\_99, McWolfish\_95, Megamind\_96, Melpomini\_91, MikeLiesIn\_98, Mikro\_95, MoMoMixon\_98, Moby\_88, Moiqah\_88, Momo\_97, Montpel\_96, Morizzled23\_97, Myrna\_97, Naija\_97, Napoleon13\_93, Nappy\_100, Naval22\_105, NedWong\_98, Ngannou\_94, Nidhogg\_98, NoodleTree\_105, Norm\_98, NuevoMundo\_103, OrediggerDelux\_95, ParkTD\_98, Patter\_98, Phabba\_102, PharkleMinkus\_102, Phlegm\_100, Phox\_94, Phusco\_98, Pier\_101, Pinkcreek\_88, Pio\_101, Pivoine\_97, Pleione\_100, Primadonna\_91, Pupusa\_104, PurduePete\_97, QBert\_91, Quasimodo\_98, Rabinovish\_94, Rahel\_97, Rizal\_94, RoMag\_92, Rocha\_96, Ronan\_91, Roots515\_96, SVoro\_95, Salacia\_101, Sauce\_98, ScoobyDoobyDoo\_90, ScottMcG\_94, Sebata\_99, Shaqato\_90, Shelob\_99, ShiaLabeouf\_97, Shifa\_86, Shnickers\_98, Shrimp\_97, SilverDipper\_99, SmallFry\_98, SoilZilla\_93, Spec\_94, Specks\_103, Sprinklers\_93, Spud\_97, SrishMeg2525\_96, StephanieG\_96, StubbySaigey\_100, Stubby\_90, Substance289\_96, Tainan\_102, Teardrop\_97, TinyTim\_97, Tonenili\_111, Tortoise16\_95, Trinitium\_94, Turret\_92, Tyke\_99, ValleyTerrace\_98, Vortrix\_112, Wally\_96, Willis\_98, Yassified\_94, YemiJoy2021\_98, YoungMoneyMata\_98, Yucca\_97, Zalkecks\_98, Zeenon\_99, ZygoTaiga\_96,

Genes that have the "Most Annotated" start but do not call it:

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Genes that do not have the "Most Annotated" start:

- CherryTomatoes\_94, E3\_gp77, Finch\_17, JeanGrey\_30, Phrappuccino\_53, Pupper\_94, RedWattleHog\_13, SCentae\_93, Settecandela\_53, Skog\_157, Stormageddon\_13,

### Summary by start number:

Start 1:

- Found in 4 of 233 ( 1.7% ) of genes in pham
- Manual Annotations of this start: 4 of 194
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CherryTomatoes\_94 (DO), Pupper\_94 (DO), SCentae\_93 (DO), Skog\_157 (DO),

Start 2:

- Found in 3 of 233 ( 1.3% ) of genes in pham
- Manual Annotations of this start: 3 of 194
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finch\_17 (singleton), RedWattleHog\_13 (DX), Stormageddon\_13 (DX),

Start 3:

- Found in 222 of 233 ( 95.3% ) of genes in pham
- Manual Annotations of this start: 184 of 194
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ablatia\_96 (C1), Ading\_98 (C1), Adlitam\_98 (C1), Alice\_90 (C1), Amataga\_98 (C1), ArcherS7\_97 (C1), Asterius\_100 (C1), Astraea\_95 (C1), Atlantean\_97 (C1), Audrick\_100 (C1), Ava3\_98 (C1), Babyland\_98 (C1), BackyardAgain\_94 (C1), BadAgartude\_94 (C1), BananaFence\_96 (C1), Bangla1971\_99 (C1), Basquiat\_94 (C1), BeanWater\_89 (C1), Belieber\_93 (C1), Bezza\_86 (C1), BigCity\_105 (C1), Bigswole\_102 (C1), Bipolarisk\_96 (C1), Blackbrain\_92 (C1), Blackdragon\_93 (C1), Blubba\_86 (C1), BobaPhatt\_93 (C1), Bonray\_97 (C1), Bowman\_95 (C1), Bread\_97 (C1), Breeniome\_97 (C1), Burrough\_97 (C1), Bxz1\_95 (C1), Cactojaque\_92 (C1), Cali\_93 (C1), Cane17\_86 (C1), Capablanca\_99 (C1), Caravan\_92 (C1), Catera\_94 (C1), Chargie21\_94 (C1), CharlieB\_93 (C1), ChaylaJr\_92 (C1), ChickenPhender\_93 (C1), Chomp\_97 (C1), CindyLou\_99 (C1), Cleatunium\_92 (C1), Colt\_87 (C1), Concombre\_104 (C1), DTDevon\_98 (C1), Daffodil\_102 (C1), Dandelion\_104 (C1), Darko\_97 (C1), DeejaClivia\_86 (C1), Delilah\_97 (C1), Delylah\_100 (C1), Demodog\_104 (C1), Derek\_98 (C1), Dessert\_95 (C1), Dietrick\_89 (C1), DirtMonster\_91 (C1), Domi\_91 (C1), DrPhinkDaddy\_96 (C1), Drazdys\_97 (C1), Duckfeet\_90 (C1), ET08\_86 (C1), EasyJones\_100 (C1), EggyFarm\_105 (C1), EmToTheThree\_100 (C1), EmmaElysia\_97 (C1), Erdmann\_98 (C1), ErnieJ\_93 (C1), Essence\_95 (C1), Ewok\_98 (C1), Fixie\_94 (C1), Flabslab\_92 (C1), Fludd\_98 (C1), Fongie\_95 (C1), FoxtrotP1\_97 (C1), FrayBell\_103 (C1), FudgeTart\_97 (C1), Gabriel\_99 (C1), Gamgam\_98 (C1), Ghost\_97 (C1), Gizmo\_101 (C1), GlutenPhree\_99 (C1), Grasshills\_104 (C1), Greely\_99 (C2), Grungle\_85 (C1), Guwapp\_97 (C1), Haldule\_91 (C1), HyRo\_89 (C1), I3\_103 (C1), IkeLoa\_91 (C1), InigoMontoya\_99 (C1), InterFolia\_106 (C1), Iota\_92 (C1), Issimir\_96 (C1), Izajani\_97 (C1), JPickles\_96 (C1), Janiyr\_99 (C1), JayJay\_103 (C1), Jaygup\_98 (C1), Jedediah\_101 (C1), Jemmno\_98 (C1), Jessibeth14\_96 (C1), Jezreel\_97 (C1), JigglyPuff\_105 (C1), JulietS\_91 (C1), JustHall\_94 (C1), Kamryn\_97 (C1), Kboogie\_101 (C1), Khaleesi\_96 (C1), Koguma\_94 (C1), LRRHood\_92 (C1), Labradorite\_97 (C1), Latch\_98 (C1), Lee7\_95 (C1), Lethe\_96 (C1), LifeSavor\_97 (C1), LinStu\_97 (C1), Littleton\_97 (C1), Loanshark\_97 (C1), LolaVinca\_99 (C1), LookingGlass\_98 (C1), LordLeafot\_103 (C1), Lukilu\_88 (C1), Lunareta\_96 (C1), Maby2021\_97 (C1), Mangeria\_97 (C1), Matsumoto\_96 (C1), Maturis\_95 (C1), McGee\_99 (C1), McWolfish\_95 (C1), Megamind\_96 (C1), Melpomini\_91 (C1), MikeLiesIn\_98 (C1), Mikro\_95 (C1), MoMoMixon\_98 (C1), Moby\_88 (C1), Moiqah\_88 (C1), Momo\_97 (C1), Montpel\_96 (C1), Morizzled23\_97 (C1), Myrna\_97 (C2), Naija\_97 (C1), Napoleon13\_93 (C1), Nappy\_100 (C1), Naval22\_105 (C1), NedWong\_98 (C1), Ngannou\_94 (C1), Nidhogg\_98 (C1), NoodleTree\_105 (C1), Norm\_98 (C1), NuevoMundo\_103 (C1), OrediggerDelux\_95 (C1), ParkTD\_98 (C1), Patter\_98 (C1), Phabba\_102 (C2), PharkleMinkus\_102 (C1), Phlegm\_100 (C1), Phox\_94 (C1), Phusco\_98 (C1), Pier\_101 (C1), Pinkcreek\_88 (C1), Pio\_101 (C1), Pivoine\_97 (C1), Pleione\_100 (C1), Primadonna\_91 (C1), Pupusa\_104 (C1), PurduePete\_97 (C1), QBert\_91 (C1), Quasimodo\_98 (C1), Rabinovish\_94 (C1), Rahel\_97 (C1), Rizal\_94 (C1), RoMag\_92 (C1), Rocha\_96 (C1), Ronan\_91 (C1), Roots515\_96 (C1), SVoro\_95 (C1), Salacia\_101 (C1), Sauce\_98 (C1), ScoobyDoobyDoo\_90 (C2), ScottMcG\_94 (C1), Sebata\_99 (C1), Shaqnato\_90 (C1), Shelob\_99 (C1), ShiaLabeouf\_97 (C1), Shifa\_86 (C1), Shnickers\_98 (C1), Shrimp\_97 (C1), SilverDipper\_99 (C1), SmallFry\_98 (C1), SoilZilla\_93 (C1), Spec\_94 (C1), Specks\_103 (C1), Sprinklers\_93 (C1), Spud\_97 (C1), SrishMeg2525\_96 (C1), StephanieG\_96 (C1), StubbySaigey\_100 (C1), Stubby\_90 (C1), Substance289\_96 (C1), Tainan\_102 (C1), Teardrop\_97 (C1),

TinyTim\_97 (C1), Tonenili\_111 (C1), Tortoise16\_95 (C1), Trinitium\_94 (C1), Turret\_92 (C1), Tyke\_99 (C1), ValleyTerrace\_98 (C1), Vortrix\_112 (C1), Wally\_96 (C1), Willis\_98 (C1), Yassified\_94 (C1), YemiJoy2021\_98 (C1), YoungMoneyMata\_98 (C1), Yucca\_97 (C1), Zalkecks\_98 (C1), Zeenon\_99 (C1), ZygoTaiga\_96 (C1),

Start 5:

- Found in 1 of 233 ( 0.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: E3\_gp77 (singleton),

Start 108:

- Found in 1 of 233 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 1 of 194
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JeanGrey\_30 (singleton),

Start 119:

- Found in 2 of 233 ( 0.9% ) of genes in pham
- Manual Annotations of this start: 2 of 194
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phrappuccino\_53 (AA), Settecandela\_53 (AA),

### **Summary by clusters:**

There are 6 clusters represented in this pham: AA, DO, singleton, DX, C2, C1,

Info for manual annotations of cluster AA:

- Start number 119 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster C1:

- Start number 3 was manually annotated 181 times for cluster C1.

Info for manual annotations of cluster C2:

- Start number 3 was manually annotated 3 times for cluster C2.

Info for manual annotations of cluster DO:

- Start number 1 was manually annotated 4 times for cluster DO.

Info for manual annotations of cluster DX:

- Start number 2 was manually annotated 2 times for cluster DX.

### **Gene Information:**

Gene: Ablatia\_96 Start: 43952, Stop: 48061, Start Num: 3

Candidate Starts for Ablatia\_96:

(Start: 3 @43952 has 184 MA's), (13, 44063), (15, 44087), (28, 44351), (29, 44357), (33, 44423), (36, 44459), (41, 44540), (43, 44576), (45, 44588), (46, 44594), (47, 44795), (48, 44855), (58, 45173), (65, 45326), (68, 45395), (72, 45422), (77, 45503), (81, 45545), (83, 45581), (84, 45593), (92, 45650), (94, 45683), (114, 45728), (117, 45746), (123, 45791), (127, 45839), (129, 45872), (139, 45950), (142,

45977), (149, 46046), (151, 46067), (164, 46193), (169, 46244), (172, 46265), (173, 46277), (184, 46319), (194, 46469), (197, 46502), (198, 46505), (203, 46556), (207, 46601), (208, 46607), (211, 46649), (216, 46712), (223, 46790), (226, 46847), (227, 46865), (230, 46898), (231, 46901), (234, 46940), (235, 46943), (238, 47024), (239, 47027), (242, 47087), (244, 47111), (247, 47162), (250, 47186), (253, 47210), (264, 47462), (267, 47519), (281, 47777), (283, 47846), (289, 47894), (296, 47981), (298, 48014), (300, 48017),

Gene: Ading\_98 Start: 45221, Stop: 49333, Start Num: 3

Candidate Starts for Ading\_98:

(Start: 3 @45221 has 184 MA's), (13, 45332), (15, 45356), (28, 45620), (29, 45626), (33, 45692), (36, 45728), (41, 45809), (43, 45845), (45, 45857), (46, 45863), (47, 46064), (58, 46445), (65, 46598), (68, 46667), (72, 46694), (77, 46775), (81, 46817), (83, 46853), (84, 46865), (92, 46922), (94, 46955), (114, 47000), (117, 47018), (123, 47063), (127, 47111), (129, 47144), (132, 47168), (139, 47222), (142, 47249), (144, 47270), (149, 47318), (151, 47339), (164, 47465), (169, 47516), (172, 47537), (173, 47549), (184, 47591), (194, 47741), (197, 47774), (198, 47777), (203, 47828), (207, 47873), (208, 47879), (211, 47921), (216, 47984), (223, 48062), (226, 48119), (227, 48137), (230, 48170), (231, 48173), (234, 48212), (235, 48215), (238, 48296), (239, 48299), (242, 48359), (244, 48383), (247, 48434), (250, 48458), (253, 48482), (264, 48734), (267, 48791), (281, 49049), (283, 49118), (289, 49166), (296, 49253), (298, 49286), (300, 49289),

Gene: Adlitam\_98 Start: 45238, Stop: 49350, Start Num: 3

Candidate Starts for Adlitam\_98:

(Start: 3 @45238 has 184 MA's), (13, 45349), (15, 45373), (28, 45637), (29, 45643), (33, 45709), (36, 45745), (41, 45826), (43, 45862), (45, 45874), (46, 45880), (47, 46081), (58, 46462), (65, 46615), (68, 46684), (72, 46711), (77, 46792), (81, 46834), (83, 46870), (84, 46882), (92, 46939), (94, 46972), (114, 47017), (117, 47035), (123, 47080), (127, 47128), (129, 47161), (132, 47185), (139, 47239), (142, 47266), (144, 47287), (149, 47335), (151, 47356), (164, 47482), (169, 47533), (172, 47554), (173, 47566), (184, 47608), (194, 47758), (197, 47791), (198, 47794), (203, 47845), (207, 47890), (208, 47896), (211, 47938), (216, 48001), (223, 48079), (226, 48136), (227, 48154), (230, 48187), (231, 48190), (234, 48229), (235, 48232), (238, 48313), (239, 48316), (242, 48376), (244, 48400), (247, 48451), (250, 48475), (253, 48499), (264, 48751), (267, 48808), (281, 49066), (283, 49135), (289, 49183), (296, 49270), (298, 49303), (300, 49306),

Gene: Alice\_90 Start: 42678, Stop: 47213, Start Num: 3

Candidate Starts for Alice\_90:

(Start: 3 @42678 has 184 MA's), (13, 42789), (15, 42813), (28, 43077), (29, 43083), (33, 43149), (36, 43185), (41, 43266), (43, 43302), (45, 43314), (46, 43320), (47, 43521), (48, 43581), (62, 43971), (64, 44007), (67, 44127), (70, 44145), (77, 44241), (80, 44274), (81, 44283), (85, 44379), (89, 44397), (94, 44469), (98, 44589), (100, 44652), (101, 44688), (104, 44736), (106, 44787), (107, 44793), (109, 44796), (111, 44832), (114, 44880), (117, 44898), (123, 44943), (127, 44991), (129, 45024), (139, 45102), (142, 45129), (149, 45198), (151, 45219), (164, 45345), (169, 45396), (172, 45417), (173, 45429), (184, 45471), (194, 45621), (197, 45654), (198, 45657), (203, 45708), (207, 45753), (208, 45759), (211, 45801), (216, 45864), (223, 45942), (226, 45999), (227, 46017), (230, 46050), (231, 46053), (234, 46092), (235, 46095), (238, 46176), (239, 46179), (242, 46239), (244, 46263), (247, 46314), (250, 46338), (253, 46362), (264, 46614), (267, 46671), (281, 46929), (283, 46998), (289, 47046), (296, 47133), (298, 47166), (300, 47169),

Gene: Amataga\_98 Start: 44483, Stop: 48595, Start Num: 3

Candidate Starts for Amataga\_98:

(Start: 3 @44483 has 184 MA's), (13, 44594), (15, 44618), (28, 44882), (29, 44888), (33, 44954), (36, 44990), (41, 45071), (43, 45107), (45, 45119), (46, 45125), (47, 45326), (58, 45707), (65, 45860), (68, 45929), (72, 45956), (77, 46037), (81, 46079), (83, 46115), (84, 46127), (92, 46184), (94, 46217), (114, 46262), (117, 46280), (123, 46325), (127, 46373), (129, 46406), (132, 46430), (139, 46484), (142,

46511), (144, 46532), (149, 46580), (151, 46601), (164, 46727), (169, 46778), (172, 46799), (173, 46811), (184, 46853), (194, 47003), (197, 47036), (198, 47039), (203, 47090), (207, 47135), (208, 47141), (211, 47183), (216, 47246), (223, 47324), (226, 47381), (227, 47399), (230, 47432), (231, 47435), (234, 47474), (235, 47477), (238, 47558), (239, 47561), (242, 47621), (244, 47645), (247, 47696), (250, 47720), (253, 47744), (264, 47996), (267, 48053), (281, 48311), (283, 48380), (289, 48428), (296, 48515), (298, 48548), (300, 48551),

Gene: ArcherS7\_97 Start: 44801, Stop: 48913, Start Num: 3

Candidate Starts for ArcherS7\_97:

(Start: 3 @44801 has 184 MA's), (13, 44912), (15, 44936), (28, 45200), (29, 45206), (33, 45272), (36, 45308), (41, 45389), (43, 45425), (45, 45437), (46, 45443), (47, 45644), (58, 46025), (65, 46178), (68, 46247), (72, 46274), (77, 46355), (81, 46397), (83, 46433), (84, 46445), (92, 46502), (94, 46535), (114, 46580), (117, 46598), (123, 46643), (127, 46691), (129, 46724), (132, 46748), (139, 46802), (142, 46829), (144, 46850), (149, 46898), (151, 46919), (164, 47045), (169, 47096), (172, 47117), (173, 47129), (184, 47171), (194, 47321), (197, 47354), (198, 47357), (203, 47408), (207, 47453), (208, 47459), (211, 47501), (216, 47564), (223, 47642), (226, 47699), (227, 47717), (230, 47750), (231, 47753), (234, 47792), (235, 47795), (238, 47876), (239, 47879), (242, 47939), (244, 47963), (247, 48014), (250, 48038), (253, 48062), (264, 48314), (267, 48371), (281, 48629), (283, 48698), (289, 48746), (296, 48833), (298, 48866), (300, 48869),

Gene: Asterius\_100 Start: 44379, Stop: 48548, Start Num: 3

Candidate Starts for Asterius\_100:

(Start: 3 @44379 has 184 MA's), (13, 44490), (15, 44514), (28, 44778), (29, 44784), (33, 44850), (36, 44886), (41, 44967), (43, 45003), (45, 45015), (46, 45021), (47, 45222), (48, 45282), (60, 45651), (62, 45672), (64, 45708), (67, 45828), (77, 45942), (80, 45975), (81, 45984), (85, 46080), (89, 46098), (94, 46170), (114, 46215), (117, 46233), (123, 46278), (127, 46326), (129, 46359), (132, 46383), (139, 46437), (142, 46464), (144, 46485), (149, 46533), (151, 46554), (164, 46680), (169, 46731), (172, 46752), (173, 46764), (184, 46806), (194, 46956), (197, 46989), (198, 46992), (203, 47043), (207, 47088), (208, 47094), (211, 47136), (216, 47199), (223, 47277), (226, 47334), (227, 47352), (230, 47385), (231, 47388), (234, 47427), (235, 47430), (238, 47511), (239, 47514), (242, 47574), (244, 47598), (247, 47649), (250, 47673), (253, 47697), (264, 47949), (267, 48006), (281, 48264), (283, 48333), (289, 48381), (296, 48468), (298, 48501), (300, 48504),

Gene: Astraea\_95 Start: 44252, Stop: 48364, Start Num: 3

Candidate Starts for Astraea\_95:

(Start: 3 @44252 has 184 MA's), (13, 44363), (15, 44387), (28, 44651), (29, 44657), (33, 44723), (36, 44759), (41, 44840), (43, 44876), (45, 44888), (46, 44894), (47, 45095), (58, 45476), (65, 45629), (68, 45698), (72, 45725), (77, 45806), (81, 45848), (83, 45884), (84, 45896), (92, 45953), (94, 45986), (114, 46031), (117, 46049), (123, 46094), (127, 46142), (129, 46175), (132, 46199), (139, 46253), (142, 46280), (144, 46301), (149, 46349), (151, 46370), (164, 46496), (169, 46547), (172, 46568), (173, 46580), (184, 46622), (194, 46772), (197, 46805), (198, 46808), (203, 46859), (207, 46904), (208, 46910), (211, 46952), (216, 47015), (223, 47093), (226, 47150), (227, 47168), (230, 47201), (231, 47204), (234, 47243), (235, 47246), (238, 47327), (239, 47330), (242, 47390), (244, 47414), (247, 47465), (250, 47489), (253, 47513), (264, 47765), (267, 47822), (281, 48080), (283, 48149), (289, 48197), (296, 48284), (298, 48317), (300, 48320),

Gene: Atlantean\_97 Start: 44483, Stop: 48595, Start Num: 3

Candidate Starts for Atlantean\_97:

(Start: 3 @44483 has 184 MA's), (13, 44594), (15, 44618), (28, 44882), (29, 44888), (33, 44954), (36, 44990), (41, 45071), (43, 45107), (45, 45119), (46, 45125), (47, 45326), (58, 45707), (65, 45860), (68, 45929), (72, 45956), (77, 46037), (81, 46079), (83, 46115), (84, 46127), (92, 46184), (94, 46217), (114, 46262), (117, 46280), (123, 46325), (127, 46373), (129, 46406), (132, 46430), (139, 46484), (142, 46511), (144, 46532), (149, 46580), (151, 46601), (164, 46727), (169, 46778), (172, 46799), (173,

46811), (184, 46853), (194, 47003), (197, 47036), (198, 47039), (203, 47090), (207, 47135), (208, 47141), (211, 47183), (216, 47246), (223, 47324), (226, 47381), (227, 47399), (230, 47432), (231, 47435), (234, 47474), (235, 47477), (238, 47558), (239, 47561), (242, 47621), (244, 47645), (247, 47696), (250, 47720), (253, 47744), (264, 47996), (267, 48053), (281, 48311), (283, 48380), (289, 48428), (296, 48515), (298, 48548), (300, 48551),

Gene: Audrick\_100 Start: 44462, Stop: 48574, Start Num: 3

Candidate Starts for Audrick\_100:

(Start: 3 @44462 has 184 MA's), (13, 44573), (15, 44597), (28, 44861), (29, 44867), (33, 44933), (36, 44969), (41, 45050), (43, 45086), (45, 45098), (46, 45104), (47, 45305), (58, 45686), (65, 45839), (68, 45908), (72, 45935), (77, 46016), (81, 46058), (83, 46094), (84, 46106), (92, 46163), (94, 46196), (114, 46241), (117, 46259), (123, 46304), (127, 46352), (129, 46385), (132, 46409), (139, 46463), (142, 46490), (144, 46511), (149, 46559), (151, 46580), (164, 46706), (169, 46757), (172, 46778), (173, 46790), (184, 46832), (194, 46982), (197, 47015), (198, 47018), (203, 47069), (207, 47114), (208, 47120), (211, 47162), (216, 47225), (223, 47303), (226, 47360), (227, 47378), (230, 47411), (231, 47414), (234, 47453), (235, 47456), (238, 47537), (239, 47540), (242, 47600), (244, 47624), (247, 47675), (250, 47699), (253, 47723), (264, 47975), (267, 48032), (281, 48290), (283, 48359), (289, 48407), (296, 48494), (298, 48527), (300, 48530),

Gene: Ava3\_98 Start: 44752, Stop: 48861, Start Num: 3

Candidate Starts for Ava3\_98:

(Start: 3 @44752 has 184 MA's), (13, 44863), (15, 44887), (28, 45151), (29, 45157), (33, 45223), (36, 45259), (41, 45340), (43, 45376), (45, 45388), (46, 45394), (47, 45595), (48, 45655), (58, 45973), (65, 46126), (68, 46195), (72, 46222), (77, 46303), (81, 46345), (83, 46381), (84, 46393), (92, 46450), (94, 46483), (114, 46528), (117, 46546), (123, 46591), (127, 46639), (129, 46672), (139, 46750), (142, 46777), (149, 46846), (151, 46867), (164, 46993), (169, 47044), (172, 47065), (173, 47077), (184, 47119), (194, 47269), (197, 47302), (198, 47305), (203, 47356), (207, 47401), (208, 47407), (211, 47449), (216, 47512), (223, 47590), (226, 47647), (227, 47665), (230, 47698), (231, 47701), (234, 47740), (235, 47743), (238, 47824), (239, 47827), (242, 47887), (244, 47911), (247, 47962), (250, 47986), (253, 48010), (264, 48262), (267, 48319), (281, 48577), (283, 48646), (289, 48694), (296, 48781), (298, 48814), (300, 48817),

Gene: Babyland\_98 Start: 43922, Stop: 48034, Start Num: 3

Candidate Starts for Babyland\_98:

(Start: 3 @43922 has 184 MA's), (13, 44033), (15, 44057), (28, 44321), (29, 44327), (33, 44393), (36, 44429), (41, 44510), (43, 44546), (45, 44558), (46, 44564), (47, 44765), (58, 45146), (65, 45299), (68, 45368), (72, 45395), (77, 45476), (81, 45518), (83, 45554), (84, 45566), (92, 45623), (94, 45656), (114, 45701), (117, 45719), (123, 45764), (127, 45812), (129, 45845), (132, 45869), (139, 45923), (142, 45950), (144, 45971), (149, 46019), (151, 46040), (164, 46166), (169, 46217), (172, 46238), (173, 46250), (184, 46292), (194, 46442), (197, 46475), (198, 46478), (203, 46529), (207, 46574), (208, 46580), (211, 46622), (216, 46685), (223, 46763), (226, 46820), (227, 46838), (230, 46871), (231, 46874), (234, 46913), (235, 46916), (238, 46997), (239, 47000), (242, 47060), (244, 47084), (247, 47135), (250, 47159), (253, 47183), (264, 47435), (267, 47492), (281, 47750), (283, 47819), (289, 47867), (296, 47954), (298, 47987), (300, 47990),

Gene: BackyardAgain\_94 Start: 43755, Stop: 47864, Start Num: 3

Candidate Starts for BackyardAgain\_94:

(Start: 3 @43755 has 184 MA's), (13, 43866), (15, 43890), (28, 44154), (29, 44160), (33, 44226), (36, 44262), (41, 44343), (43, 44379), (45, 44391), (46, 44397), (47, 44598), (48, 44658), (58, 44976), (65, 45129), (68, 45198), (72, 45225), (77, 45306), (81, 45348), (83, 45384), (84, 45396), (92, 45453), (94, 45486), (114, 45531), (117, 45549), (123, 45594), (127, 45642), (129, 45675), (139, 45753), (142, 45780), (149, 45849), (151, 45870), (164, 45996), (169, 46047), (172, 46068), (173, 46080), (184, 46122), (194, 46272), (197, 46305), (198, 46308), (203, 46359), (207, 46404), (208, 46410), (211,

46452), (216, 46515), (223, 46593), (226, 46650), (227, 46668), (230, 46701), (231, 46704), (234, 46743), (235, 46746), (238, 46827), (239, 46830), (242, 46890), (244, 46914), (247, 46965), (250, 46989), (253, 47013), (264, 47265), (267, 47322), (281, 47580), (283, 47649), (289, 47697), (296, 47784), (298, 47817), (300, 47820),

Gene: BadAgartude\_94 Start: 45921, Stop: 50033, Start Num: 3

Candidate Starts for BadAgartude\_94:

(Start: 3 @45921 has 184 MA's), (13, 46032), (15, 46056), (28, 46320), (29, 46326), (33, 46392), (36, 46428), (41, 46509), (43, 46545), (45, 46557), (46, 46563), (47, 46764), (58, 47145), (65, 47298), (68, 47367), (72, 47394), (77, 47475), (81, 47517), (83, 47553), (84, 47565), (92, 47622), (94, 47655), (114, 47700), (117, 47718), (123, 47763), (127, 47811), (129, 47844), (132, 47868), (139, 47922), (142, 47949), (144, 47970), (149, 48018), (151, 48039), (164, 48165), (169, 48216), (172, 48237), (173, 48249), (184, 48291), (194, 48441), (197, 48474), (198, 48477), (203, 48528), (207, 48573), (208, 48579), (211, 48621), (216, 48684), (223, 48762), (226, 48819), (227, 48837), (230, 48870), (231, 48873), (234, 48912), (235, 48915), (238, 48996), (239, 48999), (242, 49059), (244, 49083), (247, 49134), (250, 49158), (253, 49182), (264, 49434), (267, 49491), (281, 49749), (283, 49818), (289, 49866), (296, 49953), (298, 49986), (300, 49989),

Gene: BananaFence\_96 Start: 44620, Stop: 48732, Start Num: 3

Candidate Starts for BananaFence\_96:

(Start: 3 @44620 has 184 MA's), (13, 44731), (15, 44755), (28, 45019), (29, 45025), (33, 45091), (36, 45127), (41, 45208), (43, 45244), (45, 45256), (46, 45262), (47, 45463), (58, 45844), (65, 45997), (68, 46066), (72, 46093), (77, 46174), (81, 46216), (83, 46252), (84, 46264), (92, 46321), (94, 46354), (114, 46399), (117, 46417), (123, 46462), (127, 46510), (129, 46543), (132, 46567), (139, 46621), (142, 46648), (144, 46669), (149, 46717), (151, 46738), (164, 46864), (169, 46915), (172, 46936), (173, 46948), (184, 46990), (194, 47140), (197, 47173), (198, 47176), (203, 47227), (207, 47272), (208, 47278), (211, 47320), (216, 47383), (223, 47461), (226, 47518), (227, 47536), (230, 47569), (231, 47572), (234, 47611), (235, 47614), (238, 47695), (239, 47698), (242, 47758), (244, 47782), (247, 47833), (250, 47857), (253, 47881), (264, 48133), (267, 48190), (281, 48448), (283, 48517), (289, 48565), (296, 48652), (298, 48685), (300, 48688),

Gene: Bangla1971\_99 Start: 44931, Stop: 49043, Start Num: 3

Candidate Starts for Bangla1971\_99:

(Start: 3 @44931 has 184 MA's), (13, 45042), (15, 45066), (28, 45330), (29, 45336), (33, 45402), (36, 45438), (41, 45519), (43, 45555), (45, 45567), (46, 45573), (47, 45774), (58, 46155), (65, 46308), (68, 46377), (72, 46404), (77, 46485), (81, 46527), (83, 46563), (84, 46575), (92, 46632), (94, 46665), (114, 46710), (117, 46728), (123, 46773), (127, 46821), (129, 46854), (132, 46878), (139, 46932), (142, 46959), (144, 46980), (149, 47028), (151, 47049), (164, 47175), (169, 47226), (172, 47247), (173, 47259), (184, 47301), (194, 47451), (197, 47484), (198, 47487), (203, 47538), (207, 47583), (208, 47589), (211, 47631), (216, 47694), (223, 47772), (226, 47829), (227, 47847), (230, 47880), (231, 47883), (234, 47922), (235, 47925), (238, 48006), (239, 48009), (242, 48069), (244, 48093), (247, 48144), (250, 48168), (253, 48192), (264, 48444), (267, 48501), (281, 48759), (283, 48828), (289, 48876), (296, 48963), (298, 48996), (300, 48999),

Gene: Basquiat\_94 Start: 43491, Stop: 47600, Start Num: 3

Candidate Starts for Basquiat\_94:

(Start: 3 @43491 has 184 MA's), (13, 43602), (15, 43626), (28, 43890), (29, 43896), (33, 43962), (36, 43998), (41, 44079), (43, 44115), (45, 44127), (46, 44133), (47, 44334), (48, 44394), (58, 44712), (65, 44865), (68, 44934), (72, 44961), (77, 45042), (81, 45084), (83, 45120), (84, 45132), (92, 45189), (94, 45222), (114, 45267), (117, 45285), (123, 45330), (127, 45378), (129, 45411), (139, 45489), (142, 45516), (149, 45585), (151, 45606), (164, 45732), (169, 45783), (172, 45804), (173, 45816), (184, 45858), (194, 46008), (197, 46041), (198, 46044), (203, 46095), (207, 46140), (208, 46146), (211, 46188), (216, 46251), (223, 46329), (226, 46386), (227, 46404), (230, 46437), (231, 46440), (234,

46479), (235, 46482), (238, 46563), (239, 46566), (242, 46626), (244, 46650), (247, 46701), (250, 46725), (253, 46749), (264, 47001), (267, 47058), (281, 47316), (283, 47385), (289, 47433), (296, 47520), (298, 47553), (300, 47556),

Gene: BeanWater\_89 Start: 44468, Stop: 48328, Start Num: 3

Candidate Starts for BeanWater\_89:

(Start: 3 @44468 has 184 MA's), (13, 44579), (15, 44603), (28, 44867), (29, 44873), (33, 44939), (36, 44975), (41, 45056), (43, 45092), (45, 45104), (46, 45110), (60, 45431), (62, 45452), (64, 45488), (67, 45608), (77, 45722), (80, 45755), (81, 45764), (85, 45860), (89, 45878), (94, 45950), (97, 45995), (102, 46013), (105, 46058), (110, 46106), (113, 46139), (122, 46163), (129, 46217), (138, 46244), (144, 46265), (149, 46313), (151, 46334), (164, 46460), (169, 46511), (172, 46532), (173, 46544), (184, 46586), (194, 46736), (197, 46769), (198, 46772), (203, 46823), (207, 46868), (208, 46874), (211, 46916), (216, 46979), (223, 47057), (226, 47114), (227, 47132), (230, 47165), (231, 47168), (234, 47207), (235, 47210), (238, 47291), (239, 47294), (242, 47354), (244, 47378), (247, 47429), (250, 47453), (253, 47477), (264, 47729), (267, 47786), (281, 48044), (283, 48113), (289, 48161), (296, 48248), (298, 48281), (300, 48284),

Gene: Belieber\_93 Start: 43835, Stop: 47947, Start Num: 3

Candidate Starts for Belieber\_93:

(Start: 3 @43835 has 184 MA's), (13, 43946), (15, 43970), (28, 44234), (29, 44240), (33, 44306), (36, 44342), (41, 44423), (43, 44459), (45, 44471), (46, 44477), (47, 44678), (48, 44738), (58, 45059), (65, 45212), (68, 45281), (72, 45308), (77, 45389), (81, 45431), (83, 45467), (84, 45479), (92, 45536), (94, 45569), (114, 45614), (117, 45632), (123, 45677), (127, 45725), (129, 45758), (132, 45782), (139, 45836), (142, 45863), (144, 45884), (149, 45932), (151, 45953), (164, 46079), (169, 46130), (172, 46151), (173, 46163), (184, 46205), (194, 46355), (197, 46388), (198, 46391), (203, 46442), (207, 46487), (208, 46493), (211, 46535), (216, 46598), (223, 46676), (226, 46733), (227, 46751), (230, 46784), (231, 46787), (234, 46826), (235, 46829), (238, 46910), (239, 46913), (242, 46973), (244, 46997), (247, 47048), (250, 47072), (253, 47096), (264, 47348), (267, 47405), (281, 47663), (283, 47732), (289, 47780), (296, 47867), (298, 47900), (300, 47903),

Gene: Bezza\_86 Start: 43369, Stop: 47904, Start Num: 3

Candidate Starts for Bezza\_86:

(Start: 3 @43369 has 184 MA's), (13, 43480), (15, 43504), (28, 43768), (29, 43774), (33, 43840), (36, 43876), (41, 43957), (43, 43993), (45, 44005), (46, 44011), (47, 44212), (48, 44272), (62, 44662), (64, 44698), (67, 44818), (70, 44836), (77, 44932), (80, 44965), (81, 44974), (85, 45070), (89, 45088), (94, 45160), (98, 45280), (100, 45343), (101, 45379), (104, 45427), (106, 45478), (107, 45484), (109, 45487), (111, 45523), (114, 45571), (117, 45589), (123, 45634), (127, 45682), (129, 45715), (139, 45793), (142, 45820), (149, 45889), (151, 45910), (164, 46036), (169, 46087), (172, 46108), (173, 46120), (184, 46162), (194, 46312), (197, 46345), (198, 46348), (203, 46399), (207, 46444), (208, 46450), (211, 46492), (216, 46555), (223, 46633), (226, 46690), (227, 46708), (230, 46741), (231, 46744), (234, 46783), (235, 46786), (238, 46867), (239, 46870), (242, 46930), (244, 46954), (247, 47005), (250, 47029), (253, 47053), (264, 47305), (267, 47362), (281, 47620), (283, 47689), (289, 47737), (296, 47824), (298, 47857), (300, 47860),

Gene: BigCity\_105 Start: 47262, Stop: 51122, Start Num: 3

Candidate Starts for BigCity\_105:

(Start: 3 @47262 has 184 MA's), (13, 47373), (28, 47661), (29, 47667), (33, 47733), (36, 47769), (41, 47850), (43, 47886), (45, 47898), (46, 47904), (62, 48246), (64, 48282), (67, 48402), (75, 48486), (77, 48516), (80, 48549), (81, 48558), (85, 48654), (89, 48672), (94, 48744), (97, 48789), (102, 48807), (105, 48852), (110, 48900), (113, 48933), (122, 48957), (129, 49011), (138, 49038), (144, 49059), (149, 49107), (151, 49128), (164, 49254), (169, 49305), (172, 49326), (173, 49338), (184, 49380), (194, 49530), (197, 49563), (198, 49566), (203, 49617), (207, 49662), (208, 49668), (211, 49710), (216, 49773), (223, 49851), (226, 49908), (227, 49926), (230, 49959), (231, 49962), (234, 50001),

(235, 50004), (238, 50085), (239, 50088), (242, 50148), (244, 50172), (247, 50223), (250, 50247), (253, 50271), (264, 50523), (267, 50580), (281, 50838), (283, 50907), (289, 50955), (296, 51042), (298, 51075), (300, 51078),

Gene: Bigswole\_102 Start: 47610, Stop: 51575, Start Num: 3

Candidate Starts for Bigswole\_102:

(Start: 3 @47610 has 184 MA's), (13, 47721), (15, 47745), (28, 48009), (29, 48015), (33, 48081), (36, 48117), (41, 48198), (43, 48234), (45, 48246), (46, 48252), (62, 48594), (64, 48630), (67, 48750), (70, 48768), (77, 48864), (80, 48897), (81, 48906), (85, 49002), (89, 49020), (94, 49092), (99, 49221), (103, 49293), (112, 49422), (115, 49437), (118, 49446), (120, 49449), (144, 49602), (145, 49605), (164, 49713), (168, 49743), (170, 49770), (184, 49827), (194, 49977), (197, 50010), (198, 50013), (203, 50064), (207, 50109), (208, 50115), (211, 50163), (216, 50226), (223, 50304), (226, 50361), (227, 50379), (230, 50412), (231, 50415), (234, 50454), (235, 50457), (238, 50538), (239, 50541), (242, 50601), (244, 50625), (247, 50676), (250, 50700), (253, 50724), (264, 50976), (267, 51033), (281, 51291), (283, 51360), (289, 51408), (296, 51495), (298, 51528), (300, 51531),

Gene: Bipolarisk\_96 Start: 44770, Stop: 48879, Start Num: 3

Candidate Starts for Bipolarisk\_96:

(Start: 3 @44770 has 184 MA's), (13, 44881), (15, 44905), (28, 45169), (29, 45175), (33, 45241), (36, 45277), (41, 45358), (43, 45394), (45, 45406), (46, 45412), (47, 45613), (48, 45673), (58, 45991), (65, 46144), (68, 46213), (72, 46240), (77, 46321), (81, 46363), (83, 46399), (84, 46411), (92, 46468), (94, 46501), (114, 46546), (117, 46564), (123, 46609), (127, 46657), (129, 46690), (139, 46768), (142, 46795), (149, 46864), (151, 46885), (164, 47011), (169, 47062), (172, 47083), (173, 47095), (184, 47137), (194, 47287), (197, 47320), (198, 47323), (203, 47374), (207, 47419), (208, 47425), (211, 47467), (216, 47530), (223, 47608), (226, 47665), (227, 47683), (230, 47716), (231, 47719), (234, 47758), (235, 47761), (238, 47842), (239, 47845), (242, 47905), (244, 47929), (247, 47980), (250, 48004), (253, 48028), (264, 48280), (267, 48337), (281, 48595), (283, 48664), (289, 48712), (296, 48799), (298, 48832), (300, 48835),

Gene: Blackbrain\_92 Start: 43069, Stop: 47178, Start Num: 3

Candidate Starts for Blackbrain\_92:

(Start: 3 @43069 has 184 MA's), (13, 43180), (15, 43204), (28, 43468), (29, 43474), (33, 43540), (36, 43576), (41, 43657), (43, 43693), (45, 43705), (46, 43711), (47, 43912), (48, 43972), (58, 44290), (65, 44443), (68, 44512), (72, 44539), (77, 44620), (81, 44662), (83, 44698), (84, 44710), (92, 44767), (94, 44800), (114, 44845), (117, 44863), (123, 44908), (127, 44956), (129, 44989), (139, 45067), (142, 45094), (149, 45163), (151, 45184), (164, 45310), (169, 45361), (172, 45382), (173, 45394), (184, 45436), (194, 45586), (197, 45619), (198, 45622), (203, 45673), (207, 45718), (208, 45724), (211, 45766), (216, 45829), (223, 45907), (226, 45964), (227, 45982), (230, 46015), (231, 46018), (234, 46057), (235, 46060), (238, 46141), (239, 46144), (242, 46204), (244, 46228), (247, 46279), (250, 46303), (253, 46327), (264, 46579), (267, 46636), (281, 46894), (283, 46963), (289, 47011), (296, 47098), (298, 47131), (300, 47134),

Gene: Blackdragon\_93 Start: 44043, Stop: 48155, Start Num: 3

Candidate Starts for Blackdragon\_93:

(Start: 3 @44043 has 184 MA's), (13, 44154), (15, 44178), (28, 44442), (29, 44448), (33, 44514), (36, 44550), (41, 44631), (43, 44667), (45, 44679), (46, 44685), (47, 44886), (58, 45267), (65, 45420), (68, 45489), (72, 45516), (77, 45597), (81, 45639), (83, 45675), (84, 45687), (92, 45744), (94, 45777), (114, 45822), (117, 45840), (123, 45885), (127, 45933), (129, 45966), (132, 45990), (139, 46044), (142, 46071), (144, 46092), (149, 46140), (151, 46161), (164, 46287), (169, 46338), (172, 46359), (173, 46371), (184, 46413), (194, 46563), (197, 46596), (198, 46599), (203, 46650), (207, 46695), (208, 46701), (211, 46743), (216, 46806), (223, 46884), (226, 46941), (227, 46959), (230, 46992), (231, 46995), (234, 47034), (235, 47037), (238, 47118), (239, 47121), (242, 47181), (244, 47205), (247, 47256), (250, 47280), (253, 47304), (264, 47556), (267, 47613), (281, 47871), (283, 47940), (289,

47988), (296, 48075), (298, 48108), (300, 48111),

Gene: Blubba\_86 Start: 43400, Stop: 47122, Start Num: 3

Candidate Starts for Blubba\_86:

(Start: 3 @43400 has 184 MA's), (8, 43439), (13, 43511), (15, 43535), (28, 43799), (29, 43805), (33, 43871), (36, 43907), (41, 43988), (43, 44024), (45, 44036), (46, 44042), (60, 44225), (62, 44246), (64, 44282), (67, 44402), (70, 44420), (77, 44516), (80, 44549), (81, 44558), (85, 44654), (89, 44672), (94, 44744), (97, 44789), (102, 44807), (105, 44852), (110, 44900), (113, 44933), (122, 44957), (129, 45011), (138, 45038), (144, 45059), (149, 45107), (151, 45128), (164, 45254), (169, 45305), (172, 45326), (173, 45338), (184, 45380), (194, 45530), (197, 45563), (198, 45566), (203, 45617), (207, 45662), (208, 45668), (211, 45710), (216, 45773), (223, 45851), (226, 45908), (227, 45926), (230, 45959), (231, 45962), (234, 46001), (235, 46004), (238, 46085), (239, 46088), (242, 46148), (244, 46172), (247, 46223), (250, 46247), (253, 46271), (264, 46523), (267, 46580), (281, 46838), (283, 46907), (289, 46955), (296, 47042), (298, 47075), (300, 47078),

Gene: BobaPhatt\_93 Start: 43116, Stop: 47225, Start Num: 3

Candidate Starts for BobaPhatt\_93:

(Start: 3 @43116 has 184 MA's), (13, 43227), (15, 43251), (28, 43515), (29, 43521), (33, 43587), (36, 43623), (41, 43704), (43, 43740), (45, 43752), (46, 43758), (47, 43959), (48, 44019), (58, 44337), (65, 44490), (68, 44559), (72, 44586), (77, 44667), (81, 44709), (83, 44745), (84, 44757), (92, 44814), (94, 44847), (114, 44892), (117, 44910), (123, 44955), (127, 45003), (129, 45036), (139, 45114), (142, 45141), (149, 45210), (151, 45231), (164, 45357), (169, 45408), (172, 45429), (173, 45441), (184, 45483), (194, 45633), (197, 45666), (198, 45669), (203, 45720), (207, 45765), (208, 45771), (211, 45813), (216, 45876), (223, 45954), (226, 46011), (227, 46029), (230, 46062), (231, 46065), (234, 46104), (235, 46107), (238, 46188), (239, 46191), (242, 46251), (244, 46275), (247, 46326), (250, 46350), (253, 46374), (264, 46626), (267, 46683), (281, 46941), (283, 47010), (289, 47058), (296, 47145), (298, 47178), (300, 47181),

Gene: Bonray\_97 Start: 45178, Stop: 49287, Start Num: 3

Candidate Starts for Bonray\_97:

(Start: 3 @45178 has 184 MA's), (13, 45289), (15, 45313), (28, 45577), (29, 45583), (33, 45649), (36, 45685), (41, 45766), (43, 45802), (45, 45814), (46, 45820), (47, 46021), (48, 46081), (58, 46399), (65, 46552), (68, 46621), (72, 46648), (77, 46729), (81, 46771), (83, 46807), (84, 46819), (92, 46876), (94, 46909), (114, 46954), (117, 46972), (123, 47017), (127, 47065), (129, 47098), (139, 47176), (142, 47203), (149, 47272), (151, 47293), (164, 47419), (169, 47470), (172, 47491), (173, 47503), (184, 47545), (194, 47695), (197, 47728), (198, 47731), (203, 47782), (207, 47827), (208, 47833), (211, 47875), (216, 47938), (223, 48016), (226, 48073), (227, 48091), (230, 48124), (231, 48127), (234, 48166), (235, 48169), (238, 48250), (239, 48253), (242, 48313), (244, 48337), (247, 48388), (250, 48412), (253, 48436), (264, 48688), (267, 48745), (281, 49003), (283, 49072), (289, 49120), (296, 49207), (298, 49240), (300, 49243),

Gene: Bowman\_95 Start: 45388, Stop: 49500, Start Num: 3

Candidate Starts for Bowman\_95:

(Start: 3 @45388 has 184 MA's), (13, 45499), (15, 45523), (28, 45787), (29, 45793), (33, 45859), (36, 45895), (41, 45976), (43, 46012), (45, 46024), (46, 46030), (47, 46231), (58, 46612), (65, 46765), (68, 46834), (72, 46861), (77, 46942), (81, 46984), (83, 47020), (84, 47032), (92, 47089), (94, 47122), (114, 47167), (117, 47185), (123, 47230), (127, 47278), (129, 47311), (132, 47335), (139, 47389), (142, 47416), (144, 47437), (149, 47485), (151, 47506), (164, 47632), (169, 47683), (172, 47704), (173, 47716), (184, 47758), (194, 47908), (197, 47941), (198, 47944), (203, 47995), (207, 48040), (208, 48046), (211, 48088), (216, 48151), (223, 48229), (226, 48286), (227, 48304), (230, 48337), (231, 48340), (234, 48379), (235, 48382), (238, 48463), (239, 48466), (242, 48526), (244, 48550), (247, 48601), (250, 48625), (253, 48649), (264, 48901), (267, 48958), (281, 49216), (283, 49285), (289, 49333), (296, 49420), (298, 49453), (300, 49456),

Gene: Bread\_97 Start: 44838, Stop: 48947, Start Num: 3

Candidate Starts for Bread\_97:

(Start: 3 @44838 has 184 MA's), (13, 44949), (15, 44973), (28, 45237), (29, 45243), (33, 45309), (36, 45345), (41, 45426), (43, 45462), (45, 45474), (46, 45480), (47, 45681), (48, 45741), (58, 46059), (65, 46212), (68, 46281), (72, 46308), (77, 46389), (81, 46431), (83, 46467), (84, 46479), (92, 46536), (94, 46569), (114, 46614), (117, 46632), (123, 46677), (127, 46725), (129, 46758), (139, 46836), (142, 46863), (144, 46884), (149, 46932), (151, 46953), (164, 47079), (169, 47130), (172, 47151), (173, 47163), (184, 47205), (194, 47355), (197, 47388), (198, 47391), (203, 47442), (207, 47487), (208, 47493), (211, 47535), (216, 47598), (223, 47676), (226, 47733), (227, 47751), (230, 47784), (231, 47787), (234, 47826), (235, 47829), (238, 47910), (239, 47913), (242, 47973), (244, 47997), (247, 48048), (250, 48072), (253, 48096), (264, 48348), (267, 48405), (281, 48663), (283, 48732), (289, 48780), (296, 48867), (298, 48900), (300, 48903),

Gene: Breeniome\_97 Start: 44064, Stop: 48176, Start Num: 3

Candidate Starts for Breeniome\_97:

(Start: 3 @44064 has 184 MA's), (13, 44175), (15, 44199), (28, 44463), (29, 44469), (33, 44535), (36, 44571), (41, 44652), (43, 44688), (45, 44700), (46, 44706), (47, 44907), (58, 45288), (65, 45441), (68, 45510), (72, 45537), (77, 45618), (81, 45660), (83, 45696), (84, 45708), (92, 45765), (94, 45798), (114, 45843), (117, 45861), (123, 45906), (127, 45954), (129, 45987), (132, 46011), (139, 46065), (142, 46092), (144, 46113), (149, 46161), (151, 46182), (164, 46308), (169, 46359), (172, 46380), (173, 46392), (184, 46434), (194, 46584), (197, 46617), (198, 46620), (203, 46671), (207, 46716), (208, 46722), (211, 46764), (216, 46827), (223, 46905), (226, 46962), (227, 46980), (230, 47013), (231, 47016), (234, 47055), (235, 47058), (238, 47139), (239, 47142), (242, 47202), (244, 47226), (247, 47277), (250, 47301), (253, 47325), (264, 47577), (267, 47634), (281, 47892), (283, 47961), (289, 48009), (296, 48096), (298, 48129), (300, 48132),

Gene: Burrough\_97 Start: 45334, Stop: 49446, Start Num: 3

Candidate Starts for Burrough\_97:

(Start: 3 @45334 has 184 MA's), (13, 45445), (15, 45469), (28, 45733), (29, 45739), (33, 45805), (36, 45841), (41, 45922), (43, 45958), (45, 45970), (46, 45976), (47, 46177), (58, 46558), (65, 46711), (68, 46780), (72, 46807), (77, 46888), (81, 46930), (83, 46966), (84, 46978), (92, 47035), (94, 47068), (114, 47113), (117, 47131), (123, 47176), (127, 47224), (129, 47257), (132, 47281), (139, 47335), (142, 47362), (144, 47383), (149, 47431), (151, 47452), (164, 47578), (169, 47629), (172, 47650), (173, 47662), (184, 47704), (194, 47854), (197, 47887), (198, 47890), (203, 47941), (207, 47986), (208, 47992), (211, 48034), (216, 48097), (223, 48175), (226, 48232), (227, 48250), (230, 48283), (231, 48286), (234, 48325), (235, 48328), (238, 48409), (239, 48412), (242, 48472), (244, 48496), (247, 48547), (250, 48571), (253, 48595), (264, 48847), (267, 48904), (281, 49162), (283, 49231), (289, 49279), (296, 49366), (298, 49399), (300, 49402),

Gene: Bxz1\_95 Start: 46385, Stop: 50497, Start Num: 3

Candidate Starts for Bxz1\_95:

(Start: 3 @46385 has 184 MA's), (13, 46496), (15, 46520), (28, 46784), (29, 46790), (33, 46856), (36, 46892), (41, 46973), (43, 47009), (45, 47021), (46, 47027), (47, 47228), (58, 47609), (65, 47762), (68, 47831), (72, 47858), (77, 47939), (81, 47981), (83, 48017), (84, 48029), (92, 48086), (94, 48119), (114, 48164), (117, 48182), (123, 48227), (127, 48275), (129, 48308), (132, 48332), (139, 48386), (142, 48413), (144, 48434), (149, 48482), (151, 48503), (164, 48629), (169, 48680), (172, 48701), (173, 48713), (184, 48755), (194, 48905), (197, 48938), (198, 48941), (203, 48992), (207, 49037), (208, 49043), (211, 49085), (216, 49148), (223, 49226), (226, 49283), (227, 49301), (230, 49334), (231, 49337), (234, 49376), (235, 49379), (238, 49460), (239, 49463), (242, 49523), (244, 49547), (247, 49598), (250, 49622), (253, 49646), (264, 49898), (267, 49955), (281, 50213), (283, 50282), (289, 50330), (296, 50417), (298, 50450), (300, 50453),

Gene: Cactojaque\_92 Start: 43176, Stop: 47285, Start Num: 3

Candidate Starts for Cactojaque\_92:

(Start: 3 @43176 has 184 MA's), (13, 43287), (15, 43311), (28, 43575), (29, 43581), (33, 43647), (36, 43683), (41, 43764), (43, 43800), (45, 43812), (46, 43818), (47, 44019), (48, 44079), (58, 44397), (65, 44550), (68, 44619), (72, 44646), (77, 44727), (81, 44769), (83, 44805), (84, 44817), (92, 44874), (94, 44907), (114, 44952), (117, 44970), (123, 45015), (127, 45063), (129, 45096), (139, 45174), (142, 45201), (149, 45270), (151, 45291), (164, 45417), (169, 45468), (172, 45489), (173, 45501), (184, 45543), (194, 45693), (197, 45726), (198, 45729), (203, 45780), (207, 45825), (208, 45831), (211, 45873), (216, 45936), (223, 46014), (226, 46071), (227, 46089), (230, 46122), (231, 46125), (234, 46164), (235, 46167), (238, 46248), (239, 46251), (242, 46311), (244, 46335), (247, 46386), (250, 46410), (253, 46434), (264, 46686), (267, 46743), (281, 47001), (283, 47070), (289, 47118), (296, 47205), (298, 47238), (300, 47241),

Gene: Cali\_93 Start: 45351, Stop: 49211, Start Num: 3

Candidate Starts for Cali\_93:

(Start: 3 @45351 has 184 MA's), (13, 45462), (15, 45486), (28, 45750), (29, 45756), (33, 45822), (36, 45858), (41, 45939), (45, 45987), (46, 45993), (60, 46314), (62, 46335), (64, 46371), (67, 46491), (70, 46509), (77, 46605), (80, 46638), (81, 46647), (85, 46743), (89, 46761), (94, 46833), (97, 46878), (102, 46896), (105, 46941), (110, 46989), (113, 47022), (122, 47046), (129, 47100), (138, 47127), (144, 47148), (149, 47196), (151, 47217), (164, 47343), (169, 47394), (172, 47415), (173, 47427), (184, 47469), (194, 47619), (197, 47652), (198, 47655), (203, 47706), (207, 47751), (208, 47757), (211, 47799), (216, 47862), (223, 47940), (226, 47997), (227, 48015), (230, 48048), (231, 48051), (234, 48090), (235, 48093), (238, 48174), (239, 48177), (242, 48237), (244, 48261), (247, 48312), (250, 48336), (253, 48360), (264, 48612), (267, 48669), (281, 48927), (283, 48996), (289, 49044), (296, 49131), (298, 49164), (300, 49167),

Gene: Cane17\_86 Start: 43473, Stop: 47195, Start Num: 3

Candidate Starts for Cane17\_86:

(Start: 3 @43473 has 184 MA's), (8, 43512), (13, 43584), (15, 43608), (28, 43872), (29, 43878), (33, 43944), (36, 43980), (41, 44061), (43, 44097), (45, 44109), (46, 44115), (60, 44298), (62, 44319), (64, 44355), (67, 44475), (70, 44493), (77, 44589), (80, 44622), (81, 44631), (85, 44727), (89, 44745), (94, 44817), (97, 44862), (102, 44880), (105, 44925), (110, 44973), (113, 45006), (122, 45030), (129, 45084), (138, 45111), (144, 45132), (149, 45180), (151, 45201), (164, 45327), (169, 45378), (172, 45399), (173, 45411), (184, 45453), (194, 45603), (197, 45636), (198, 45639), (203, 45690), (207, 45735), (208, 45741), (211, 45783), (216, 45846), (223, 45924), (226, 45981), (227, 45999), (230, 46032), (231, 46035), (234, 46074), (235, 46077), (238, 46158), (239, 46161), (242, 46221), (244, 46245), (247, 46296), (250, 46320), (253, 46344), (264, 46596), (267, 46653), (281, 46911), (283, 46980), (289, 47028), (296, 47115), (298, 47148), (300, 47151),

Gene: Capablanca\_99 Start: 45201, Stop: 49310, Start Num: 3

Candidate Starts for Capablanca\_99:

(Start: 3 @45201 has 184 MA's), (13, 45312), (15, 45336), (28, 45600), (29, 45606), (33, 45672), (36, 45708), (41, 45789), (43, 45825), (45, 45837), (46, 45843), (47, 46044), (48, 46104), (58, 46422), (65, 46575), (68, 46644), (72, 46671), (77, 46752), (81, 46794), (83, 46830), (84, 46842), (92, 46899), (94, 46932), (114, 46977), (117, 46995), (123, 47040), (127, 47088), (129, 47121), (132, 47145), (139, 47199), (142, 47226), (144, 47247), (149, 47295), (151, 47316), (164, 47442), (169, 47493), (172, 47514), (173, 47526), (184, 47568), (194, 47718), (197, 47751), (198, 47754), (203, 47805), (207, 47850), (208, 47856), (211, 47898), (216, 47961), (223, 48039), (226, 48096), (227, 48114), (230, 48147), (231, 48150), (234, 48189), (235, 48192), (238, 48273), (239, 48276), (242, 48336), (244, 48360), (247, 48411), (250, 48435), (253, 48459), (264, 48711), (267, 48768), (281, 49026), (283, 49095), (289, 49143), (296, 49230), (298, 49263), (300, 49266),

Gene: Caravan\_92 Start: 44705, Stop: 48565, Start Num: 3

Candidate Starts for Caravan\_92:

(Start: 3 @44705 has 184 MA's), (13, 44816), (15, 44840), (28, 45104), (29, 45110), (33, 45176), (36, 45212), (41, 45293), (43, 45329), (45, 45341), (46, 45347), (60, 45668), (62, 45689), (64, 45725), (67, 45845), (77, 45959), (80, 45992), (81, 46001), (85, 46097), (89, 46115), (94, 46187), (97, 46232), (102, 46250), (105, 46295), (110, 46343), (113, 46376), (122, 46400), (129, 46454), (138, 46481), (144, 46502), (149, 46550), (151, 46571), (164, 46697), (169, 46748), (172, 46769), (173, 46781), (184, 46823), (194, 46973), (197, 47006), (198, 47009), (203, 47060), (207, 47105), (208, 47111), (211, 47153), (216, 47216), (223, 47294), (226, 47351), (227, 47369), (230, 47402), (231, 47405), (234, 47444), (235, 47447), (238, 47528), (239, 47531), (242, 47591), (244, 47615), (247, 47666), (250, 47690), (253, 47714), (264, 47966), (267, 48023), (281, 48281), (283, 48350), (289, 48398), (296, 48485), (298, 48518), (300, 48521),

Gene: Catera\_94 Start: 43341, Stop: 47450, Start Num: 3

Candidate Starts for Catera\_94:

(Start: 3 @43341 has 184 MA's), (13, 43452), (15, 43476), (28, 43740), (29, 43746), (33, 43812), (36, 43848), (41, 43929), (43, 43965), (45, 43977), (46, 43983), (47, 44184), (48, 44244), (58, 44562), (65, 44715), (68, 44784), (72, 44811), (77, 44892), (81, 44934), (83, 44970), (84, 44982), (92, 45039), (94, 45072), (114, 45117), (117, 45135), (123, 45180), (127, 45228), (129, 45261), (139, 45339), (142, 45366), (149, 45435), (151, 45456), (164, 45582), (169, 45633), (172, 45654), (173, 45666), (184, 45708), (194, 45858), (197, 45891), (198, 45894), (203, 45945), (207, 45990), (208, 45996), (211, 46038), (216, 46101), (223, 46179), (226, 46236), (227, 46254), (230, 46287), (231, 46290), (234, 46329), (235, 46332), (238, 46413), (239, 46416), (242, 46476), (244, 46500), (247, 46551), (250, 46575), (253, 46599), (264, 46851), (267, 46908), (281, 47166), (283, 47235), (289, 47283), (296, 47370), (298, 47403), (300, 47406),

Gene: Chargie21\_94 Start: 43491, Stop: 47600, Start Num: 3

Candidate Starts for Chargie21\_94:

(Start: 3 @43491 has 184 MA's), (13, 43602), (15, 43626), (28, 43890), (29, 43896), (33, 43962), (36, 43998), (41, 44079), (43, 44115), (45, 44127), (46, 44133), (47, 44334), (48, 44394), (58, 44712), (65, 44865), (68, 44934), (72, 44961), (77, 45042), (81, 45084), (83, 45120), (84, 45132), (92, 45189), (94, 45222), (114, 45267), (117, 45285), (123, 45330), (127, 45378), (129, 45411), (139, 45489), (142, 45516), (149, 45585), (151, 45606), (164, 45732), (169, 45783), (172, 45804), (173, 45816), (184, 45858), (194, 46008), (197, 46041), (198, 46044), (203, 46095), (207, 46140), (208, 46146), (211, 46188), (216, 46251), (223, 46329), (226, 46386), (227, 46404), (230, 46437), (231, 46440), (234, 46479), (235, 46482), (238, 46563), (239, 46566), (242, 46626), (244, 46650), (247, 46701), (250, 46725), (253, 46749), (264, 47001), (267, 47058), (281, 47316), (283, 47385), (289, 47433), (296, 47520), (298, 47553), (300, 47556),

Gene: CharlieB\_93 Start: 43349, Stop: 47461, Start Num: 3

Candidate Starts for CharlieB\_93:

(Start: 3 @43349 has 184 MA's), (13, 43460), (15, 43484), (28, 43748), (29, 43754), (33, 43820), (36, 43856), (41, 43937), (43, 43973), (45, 43985), (46, 43991), (47, 44192), (58, 44573), (65, 44726), (68, 44795), (72, 44822), (77, 44903), (81, 44945), (83, 44981), (84, 44993), (92, 45050), (94, 45083), (114, 45128), (117, 45146), (123, 45191), (127, 45239), (129, 45272), (132, 45296), (139, 45350), (142, 45377), (144, 45398), (149, 45446), (151, 45467), (164, 45593), (169, 45644), (172, 45665), (173, 45677), (184, 45719), (194, 45869), (197, 45902), (198, 45905), (203, 45956), (207, 46001), (208, 46007), (211, 46049), (216, 46112), (223, 46190), (226, 46247), (227, 46265), (230, 46298), (231, 46301), (234, 46340), (235, 46343), (238, 46424), (239, 46427), (242, 46487), (244, 46511), (247, 46562), (250, 46586), (253, 46610), (264, 46862), (267, 46919), (281, 47177), (283, 47246), (289, 47294), (296, 47381), (298, 47414), (300, 47417),

Gene: ChaylaJr\_92 Start: 42967, Stop: 47076, Start Num: 3

Candidate Starts for ChaylaJr\_92:

(Start: 3 @42967 has 184 MA's), (13, 43078), (15, 43102), (28, 43366), (29, 43372), (33, 43438), (36, 43474), (41, 43555), (43, 43591), (45, 43603), (46, 43609), (47, 43810), (48, 43870), (58, 44188), (65, 44341), (68, 44410), (72, 44437), (77, 44518), (81, 44560), (83, 44596), (84, 44608), (92, 44665), (94, 44698), (114, 44743), (117, 44761), (123, 44806), (127, 44854), (129, 44887), (139, 44965), (142, 44992), (149, 45061), (151, 45082), (164, 45208), (169, 45259), (172, 45280), (173, 45292), (184, 45334), (194, 45484), (197, 45517), (198, 45520), (203, 45571), (207, 45616), (208, 45622), (211, 45664), (216, 45727), (223, 45805), (226, 45862), (227, 45880), (230, 45913), (231, 45916), (234, 45955), (235, 45958), (238, 46039), (239, 46042), (242, 46102), (244, 46126), (247, 46177), (250, 46201), (253, 46225), (264, 46477), (267, 46534), (281, 46792), (283, 46861), (289, 46909), (296, 46996), (298, 47029), (300, 47032),

Gene: CherryTomatoes\_94 Start: 43720, Stop: 46974, Start Num: 1

Candidate Starts for CherryTomatoes\_94:

(Start: 1 @43720 has 4 MA's), (9, 43801), (15, 43876), (16, 43879), (18, 43936), (19, 43960), (23, 44023), (26, 44104), (27, 44119), (29, 44146), (35, 44230), (38, 44278), (43, 44365), (46, 44383), (51, 44422), (56, 44461), (57, 44470), (71, 44659), (78, 44740), (92, 44845), (93, 44866), (94, 44872), (125, 44959), (146, 45082), (147, 45100), (156, 45124), (165, 45211), (172, 45250), (205, 45538), (208, 45583), (212, 45601), (218, 45682), (227, 45805), (241, 46015), (242, 46024), (251, 46120), (252, 46123), (258, 46231), (262, 46357), (263, 46375), (266, 46429), (277, 46591), (279, 46675), (283, 46756), (295, 46891), (300, 46930), (301, 46960),

Gene: ChickenPhender\_93 Start: 43300, Stop: 47409, Start Num: 3

Candidate Starts for ChickenPhender\_93:

(Start: 3 @43300 has 184 MA's), (13, 43411), (15, 43435), (28, 43699), (29, 43705), (33, 43771), (36, 43807), (41, 43888), (43, 43924), (45, 43936), (46, 43942), (47, 44143), (48, 44203), (58, 44521), (65, 44674), (68, 44743), (72, 44770), (77, 44851), (81, 44893), (83, 44929), (84, 44941), (92, 44998), (94, 45031), (114, 45076), (117, 45094), (123, 45139), (127, 45187), (129, 45220), (139, 45298), (142, 45325), (149, 45394), (151, 45415), (164, 45541), (169, 45592), (172, 45613), (173, 45625), (184, 45667), (194, 45817), (197, 45850), (198, 45853), (203, 45904), (207, 45949), (208, 45955), (211, 45997), (216, 46060), (223, 46138), (226, 46195), (227, 46213), (230, 46246), (231, 46249), (234, 46288), (235, 46291), (238, 46372), (239, 46375), (242, 46435), (244, 46459), (247, 46510), (250, 46534), (253, 46558), (264, 46810), (267, 46867), (281, 47125), (283, 47194), (289, 47242), (296, 47329), (298, 47362), (300, 47365),

Gene: Chomp\_97 Start: 45771, Stop: 49883, Start Num: 3

Candidate Starts for Chomp\_97:

(Start: 3 @45771 has 184 MA's), (13, 45882), (15, 45906), (28, 46170), (29, 46176), (33, 46242), (36, 46278), (41, 46359), (43, 46395), (45, 46407), (46, 46413), (47, 46614), (58, 46995), (65, 47148), (68, 47217), (72, 47244), (77, 47325), (81, 47367), (83, 47403), (84, 47415), (92, 47472), (94, 47505), (114, 47550), (117, 47568), (123, 47613), (127, 47661), (129, 47694), (132, 47718), (139, 47772), (142, 47799), (144, 47820), (149, 47868), (151, 47889), (164, 48015), (169, 48066), (172, 48087), (173, 48099), (184, 48141), (194, 48291), (197, 48324), (198, 48327), (203, 48378), (207, 48423), (208, 48429), (211, 48471), (216, 48534), (223, 48612), (226, 48669), (227, 48687), (230, 48720), (231, 48723), (234, 48762), (235, 48765), (238, 48846), (239, 48849), (242, 48909), (244, 48933), (247, 48984), (250, 49008), (253, 49032), (264, 49284), (267, 49341), (281, 49599), (283, 49668), (289, 49716), (296, 49803), (298, 49836), (300, 49839),

Gene: CindyLou\_99 Start: 45812, Stop: 49924, Start Num: 3

Candidate Starts for CindyLou\_99:

(Start: 3 @45812 has 184 MA's), (13, 45923), (15, 45947), (28, 46211), (29, 46217), (33, 46283), (36, 46319), (41, 46400), (43, 46436), (45, 46448), (46, 46454), (47, 46655), (58, 47036), (65, 47189), (68, 47258), (72, 47285), (77, 47366), (81, 47408), (83, 47444), (84, 47456), (92, 47513), (94, 47546), (114, 47591), (117, 47609), (123, 47654), (127, 47702), (129, 47735), (132, 47759), (139, 47813), (142,

47840), (144, 47861), (149, 47909), (151, 47930), (164, 48056), (169, 48107), (172, 48128), (173, 48140), (184, 48182), (194, 48332), (197, 48365), (198, 48368), (203, 48419), (207, 48464), (208, 48470), (211, 48512), (216, 48575), (223, 48653), (226, 48710), (227, 48728), (230, 48761), (231, 48764), (234, 48803), (235, 48806), (238, 48887), (239, 48890), (242, 48950), (244, 48974), (247, 49025), (250, 49049), (253, 49073), (264, 49325), (267, 49382), (281, 49640), (283, 49709), (289, 49757), (296, 49844), (298, 49877), (300, 49880),

Gene: Cleatunium\_92 Start: 44469, Stop: 48581, Start Num: 3

Candidate Starts for Cleatunium\_92:

(Start: 3 @44469 has 184 MA's), (13, 44580), (15, 44604), (28, 44868), (29, 44874), (33, 44940), (36, 44976), (41, 45057), (43, 45093), (45, 45105), (46, 45111), (47, 45312), (58, 45693), (65, 45846), (68, 45915), (72, 45942), (77, 46023), (81, 46065), (83, 46101), (84, 46113), (92, 46170), (94, 46203), (114, 46248), (117, 46266), (123, 46311), (127, 46359), (129, 46392), (132, 46416), (139, 46470), (142, 46497), (144, 46518), (149, 46566), (151, 46587), (164, 46713), (169, 46764), (172, 46785), (173, 46797), (184, 46839), (194, 46989), (197, 47022), (198, 47025), (203, 47076), (207, 47121), (208, 47127), (211, 47169), (216, 47232), (223, 47310), (226, 47367), (227, 47385), (230, 47418), (231, 47421), (234, 47460), (235, 47463), (238, 47544), (239, 47547), (242, 47607), (244, 47631), (247, 47682), (250, 47706), (253, 47730), (264, 47982), (267, 48039), (281, 48297), (283, 48366), (289, 48414), (296, 48501), (298, 48534), (300, 48537),

Gene: Colt\_87 Start: 44069, Stop: 47791, Start Num: 3

Candidate Starts for Colt\_87:

(Start: 3 @44069 has 184 MA's), (8, 44108), (13, 44180), (15, 44204), (28, 44468), (29, 44474), (33, 44540), (36, 44576), (41, 44657), (43, 44693), (45, 44705), (46, 44711), (60, 44894), (62, 44915), (64, 44951), (67, 45071), (70, 45089), (77, 45185), (80, 45218), (81, 45227), (85, 45323), (89, 45341), (94, 45413), (97, 45458), (102, 45476), (105, 45521), (110, 45569), (113, 45602), (122, 45626), (129, 45680), (138, 45707), (144, 45728), (149, 45776), (151, 45797), (164, 45923), (169, 45974), (172, 45995), (173, 46007), (184, 46049), (194, 46199), (197, 46232), (198, 46235), (203, 46286), (207, 46331), (208, 46337), (211, 46379), (216, 46442), (223, 46520), (226, 46577), (227, 46595), (230, 46628), (231, 46631), (234, 46670), (235, 46673), (238, 46754), (239, 46757), (242, 46817), (244, 46841), (247, 46892), (250, 46916), (253, 46940), (264, 47192), (267, 47249), (281, 47507), (283, 47576), (289, 47624), (296, 47711), (298, 47744), (300, 47747),

Gene: Concombres\_104 Start: 47487, Stop: 51347, Start Num: 3

Candidate Starts for Concombres\_104:

(Start: 3 @47487 has 184 MA's), (13, 47598), (28, 47886), (29, 47892), (33, 47958), (36, 47994), (41, 48075), (43, 48111), (45, 48123), (46, 48129), (62, 48471), (64, 48507), (67, 48627), (77, 48741), (80, 48774), (81, 48783), (85, 48879), (89, 48897), (94, 48969), (97, 49014), (102, 49032), (105, 49077), (110, 49125), (113, 49158), (122, 49182), (129, 49236), (138, 49263), (144, 49284), (149, 49332), (151, 49353), (164, 49479), (169, 49530), (172, 49551), (173, 49563), (184, 49605), (194, 49755), (197, 49788), (198, 49791), (203, 49842), (207, 49887), (208, 49893), (211, 49935), (216, 49998), (223, 50076), (226, 50133), (227, 50151), (230, 50184), (231, 50187), (234, 50226), (235, 50229), (238, 50310), (239, 50313), (242, 50373), (244, 50397), (247, 50448), (250, 50472), (253, 50496), (264, 50748), (267, 50805), (281, 51063), (283, 51132), (289, 51180), (296, 51267), (298, 51300), (300, 51303),

Gene: DTDevon\_98 Start: 45371, Stop: 49483, Start Num: 3

Candidate Starts for DTDevon\_98:

(Start: 3 @45371 has 184 MA's), (13, 45482), (15, 45506), (28, 45770), (29, 45776), (33, 45842), (36, 45878), (41, 45959), (43, 45995), (45, 46007), (46, 46013), (47, 46214), (58, 46595), (65, 46748), (68, 46817), (72, 46844), (77, 46925), (81, 46967), (83, 47003), (84, 47015), (92, 47072), (94, 47105), (114, 47150), (117, 47168), (123, 47213), (127, 47261), (129, 47294), (132, 47318), (139, 47372), (142, 47399), (144, 47420), (149, 47468), (151, 47489), (164, 47615), (169, 47666), (172, 47687), (173,

47699), (184, 47741), (194, 47891), (197, 47924), (198, 47927), (203, 47978), (207, 48023), (208, 48029), (211, 48071), (216, 48134), (223, 48212), (226, 48269), (227, 48287), (230, 48320), (231, 48323), (234, 48362), (235, 48365), (238, 48446), (239, 48449), (242, 48509), (244, 48533), (247, 48584), (250, 48608), (253, 48632), (264, 48884), (267, 48941), (281, 49199), (283, 49268), (289, 49316), (296, 49403), (298, 49436), (300, 49439),

Gene: Daffodil\_102 Start: 45070, Stop: 49179, Start Num: 3

Candidate Starts for Daffodil\_102:

(Start: 3 @45070 has 184 MA's), (13, 45181), (15, 45205), (28, 45469), (29, 45475), (33, 45541), (36, 45577), (41, 45658), (43, 45694), (45, 45706), (46, 45712), (47, 45913), (48, 45973), (58, 46291), (65, 46444), (68, 46513), (72, 46540), (77, 46621), (81, 46663), (83, 46699), (84, 46711), (92, 46768), (94, 46801), (114, 46846), (117, 46864), (123, 46909), (127, 46957), (129, 46990), (139, 47068), (142, 47095), (149, 47164), (151, 47185), (164, 47311), (169, 47362), (172, 47383), (173, 47395), (184, 47437), (194, 47587), (197, 47620), (198, 47623), (203, 47674), (207, 47719), (208, 47725), (211, 47767), (216, 47830), (223, 47908), (226, 47965), (227, 47983), (230, 48016), (231, 48019), (234, 48058), (235, 48061), (238, 48142), (239, 48145), (242, 48205), (244, 48229), (247, 48280), (250, 48304), (253, 48328), (264, 48580), (267, 48637), (281, 48895), (283, 48964), (289, 49012), (296, 49099), (298, 49132), (300, 49135),

Gene: Dandelion\_104 Start: 47734, Stop: 51594, Start Num: 3

Candidate Starts for Dandelion\_104:

(Start: 3 @47734 has 184 MA's), (13, 47845), (15, 47869), (28, 48133), (29, 48139), (33, 48205), (36, 48241), (41, 48322), (43, 48358), (45, 48370), (46, 48376), (60, 48697), (62, 48718), (64, 48754), (67, 48874), (77, 48988), (80, 49021), (81, 49030), (85, 49126), (89, 49144), (94, 49216), (97, 49261), (102, 49279), (105, 49324), (110, 49372), (113, 49405), (122, 49429), (129, 49483), (138, 49510), (144, 49531), (149, 49579), (151, 49600), (164, 49726), (169, 49777), (172, 49798), (173, 49810), (184, 49852), (194, 50002), (197, 50035), (198, 50038), (203, 50089), (207, 50134), (208, 50140), (211, 50182), (216, 50245), (223, 50323), (226, 50380), (227, 50398), (230, 50431), (231, 50434), (234, 50473), (235, 50476), (238, 50557), (239, 50560), (242, 50620), (244, 50644), (247, 50695), (250, 50719), (253, 50743), (264, 50995), (267, 51052), (281, 51310), (283, 51379), (289, 51427), (296, 51514), (298, 51547), (300, 51550),

Gene: Darko\_97 Start: 45008, Stop: 49120, Start Num: 3

Candidate Starts for Darko\_97:

(Start: 3 @45008 has 184 MA's), (13, 45119), (15, 45143), (28, 45407), (29, 45413), (33, 45479), (36, 45515), (41, 45596), (43, 45632), (45, 45644), (46, 45650), (47, 45851), (58, 46232), (65, 46385), (68, 46454), (72, 46481), (77, 46562), (81, 46604), (83, 46640), (84, 46652), (92, 46709), (94, 46742), (114, 46787), (117, 46805), (123, 46850), (127, 46898), (129, 46931), (132, 46955), (139, 47009), (142, 47036), (144, 47057), (149, 47105), (151, 47126), (164, 47252), (169, 47303), (172, 47324), (173, 47336), (184, 47378), (194, 47528), (197, 47561), (198, 47564), (203, 47615), (207, 47660), (208, 47666), (211, 47708), (216, 47771), (223, 47849), (226, 47906), (227, 47924), (230, 47957), (231, 47960), (234, 47999), (235, 48002), (238, 48083), (239, 48086), (242, 48146), (244, 48170), (247, 48221), (250, 48245), (253, 48269), (264, 48521), (267, 48578), (281, 48836), (283, 48905), (289, 48953), (296, 49040), (298, 49073), (300, 49076),

Gene: DeejaClivia\_86 Start: 41106, Stop: 45644, Start Num: 3

Candidate Starts for DeejaClivia\_86:

(Start: 3 @41106 has 184 MA's), (13, 41217), (15, 41241), (28, 41505), (29, 41511), (33, 41577), (36, 41613), (41, 41694), (43, 41730), (45, 41742), (46, 41748), (47, 41949), (48, 42009), (62, 42402), (64, 42438), (67, 42558), (70, 42576), (77, 42672), (80, 42705), (81, 42714), (85, 42810), (89, 42828), (94, 42900), (98, 43020), (100, 43083), (101, 43119), (104, 43167), (106, 43218), (107, 43224), (109, 43227), (111, 43263), (114, 43311), (117, 43329), (123, 43374), (127, 43422), (129, 43455), (139, 43533), (142, 43560), (149, 43629), (151, 43650), (164, 43776), (169, 43827), (172, 43848), (173,

43860), (184, 43902), (194, 44052), (197, 44085), (198, 44088), (203, 44139), (207, 44184), (208, 44190), (211, 44232), (216, 44295), (223, 44373), (226, 44430), (227, 44448), (230, 44481), (231, 44484), (234, 44523), (235, 44526), (238, 44607), (239, 44610), (242, 44670), (244, 44694), (247, 44745), (250, 44769), (253, 44793), (264, 45045), (267, 45102), (281, 45360), (283, 45429), (289, 45477), (296, 45564), (298, 45597), (300, 45600),

Gene: Delilah\_97 Start: 45071, Stop: 49180, Start Num: 3

Candidate Starts for Delilah\_97:

(Start: 3 @45071 has 184 MA's), (13, 45182), (15, 45206), (28, 45470), (29, 45476), (33, 45542), (36, 45578), (41, 45659), (43, 45695), (45, 45707), (46, 45713), (47, 45914), (48, 45974), (58, 46292), (65, 46445), (68, 46514), (72, 46541), (77, 46622), (81, 46664), (83, 46700), (84, 46712), (92, 46769), (94, 46802), (114, 46847), (117, 46865), (123, 46910), (127, 46958), (129, 46991), (139, 47069), (142, 47096), (149, 47165), (151, 47186), (164, 47312), (169, 47363), (172, 47384), (173, 47396), (184, 47438), (194, 47588), (197, 47621), (198, 47624), (203, 47675), (207, 47720), (208, 47726), (211, 47768), (216, 47831), (223, 47909), (226, 47966), (227, 47984), (230, 48017), (231, 48020), (234, 48059), (235, 48062), (238, 48143), (239, 48146), (242, 48206), (244, 48230), (247, 48281), (250, 48305), (253, 48329), (264, 48581), (267, 48638), (281, 48896), (283, 48965), (289, 49013), (296, 49100), (298, 49133), (300, 49136),

Gene: Delylah\_100 Start: 44864, Stop: 48724, Start Num: 3

Candidate Starts for Delylah\_100:

(Start: 3 @44864 has 184 MA's), (13, 44975), (15, 44999), (28, 45263), (29, 45269), (33, 45335), (36, 45371), (41, 45452), (43, 45488), (45, 45500), (46, 45506), (60, 45827), (62, 45848), (64, 45884), (67, 46004), (77, 46118), (80, 46151), (81, 46160), (85, 46256), (89, 46274), (94, 46346), (97, 46391), (102, 46409), (105, 46454), (110, 46502), (113, 46535), (122, 46559), (129, 46613), (138, 46640), (144, 46661), (149, 46709), (151, 46730), (164, 46856), (169, 46907), (172, 46928), (173, 46940), (184, 46982), (194, 47132), (197, 47165), (198, 47168), (203, 47219), (207, 47264), (208, 47270), (211, 47312), (216, 47375), (223, 47453), (226, 47510), (227, 47528), (230, 47561), (231, 47564), (234, 47603), (235, 47606), (238, 47687), (239, 47690), (242, 47750), (244, 47774), (247, 47825), (250, 47849), (253, 47873), (264, 48125), (267, 48182), (281, 48440), (283, 48509), (289, 48557), (296, 48644), (298, 48677), (300, 48680),

Gene: Demodog\_104 Start: 47487, Stop: 51347, Start Num: 3

Candidate Starts for Demodog\_104:

(Start: 3 @47487 has 184 MA's), (13, 47598), (28, 47886), (29, 47892), (33, 47958), (36, 47994), (41, 48075), (43, 48111), (45, 48123), (46, 48129), (62, 48471), (64, 48507), (67, 48627), (77, 48741), (80, 48774), (81, 48783), (85, 48879), (89, 48897), (94, 48969), (97, 49014), (102, 49032), (105, 49077), (110, 49125), (113, 49158), (122, 49182), (129, 49236), (138, 49263), (144, 49284), (149, 49332), (151, 49353), (164, 49479), (169, 49530), (172, 49551), (173, 49563), (184, 49605), (194, 49755), (197, 49788), (198, 49791), (203, 49842), (207, 49887), (208, 49893), (211, 49935), (216, 49998), (223, 50076), (226, 50133), (227, 50151), (230, 50184), (231, 50187), (234, 50226), (235, 50229), (238, 50310), (239, 50313), (242, 50373), (244, 50397), (247, 50448), (250, 50472), (253, 50496), (264, 50748), (267, 50805), (281, 51063), (283, 51132), (289, 51180), (296, 51267), (298, 51300), (300, 51303),

Gene: Derek\_98 Start: 45573, Stop: 49685, Start Num: 3

Candidate Starts for Derek\_98:

(Start: 3 @45573 has 184 MA's), (13, 45684), (15, 45708), (28, 45972), (29, 45978), (33, 46044), (36, 46080), (41, 46161), (43, 46197), (45, 46209), (46, 46215), (47, 46416), (58, 46797), (65, 46950), (68, 47019), (72, 47046), (77, 47127), (81, 47169), (83, 47205), (84, 47217), (92, 47274), (94, 47307), (114, 47352), (117, 47370), (123, 47415), (127, 47463), (129, 47496), (132, 47520), (139, 47574), (142, 47601), (144, 47622), (149, 47670), (151, 47691), (164, 47817), (169, 47868), (172, 47889), (173, 47901), (184, 47943), (194, 48093), (197, 48126), (198, 48129), (203, 48180), (207, 48225), (208,

48231), (211, 48273), (216, 48336), (223, 48414), (226, 48471), (227, 48489), (230, 48522), (231, 48525), (234, 48564), (235, 48567), (238, 48648), (239, 48651), (242, 48711), (244, 48735), (247, 48786), (250, 48810), (253, 48834), (264, 49086), (267, 49143), (281, 49401), (283, 49470), (289, 49518), (296, 49605), (298, 49638), (300, 49641),

Gene: Dessert\_95 Start: 44049, Stop: 48161, Start Num: 3

Candidate Starts for Dessert\_95:

(Start: 3 @44049 has 184 MA's), (13, 44160), (15, 44184), (28, 44448), (29, 44454), (33, 44520), (36, 44556), (41, 44637), (43, 44673), (45, 44685), (46, 44691), (47, 44892), (58, 45273), (65, 45426), (68, 45495), (72, 45522), (77, 45603), (81, 45645), (83, 45681), (84, 45693), (92, 45750), (94, 45783), (114, 45828), (117, 45846), (123, 45891), (127, 45939), (129, 45972), (132, 45996), (139, 46050), (142, 46077), (144, 46098), (149, 46146), (151, 46167), (164, 46293), (169, 46344), (172, 46365), (173, 46377), (184, 46419), (194, 46569), (197, 46602), (198, 46605), (203, 46656), (207, 46701), (208, 46707), (211, 46749), (216, 46812), (223, 46890), (226, 46947), (227, 46965), (230, 46998), (231, 47001), (234, 47040), (235, 47043), (238, 47124), (239, 47127), (242, 47187), (244, 47211), (247, 47262), (250, 47286), (253, 47310), (264, 47562), (267, 47619), (281, 47877), (283, 47946), (289, 47994), (296, 48081), (298, 48114), (300, 48117),

Gene: Dietrick\_89 Start: 43003, Stop: 47112, Start Num: 3

Candidate Starts for Dietrick\_89:

(Start: 3 @43003 has 184 MA's), (13, 43114), (15, 43138), (28, 43402), (29, 43408), (33, 43474), (36, 43510), (41, 43591), (43, 43627), (45, 43639), (46, 43645), (47, 43846), (48, 43906), (58, 44224), (65, 44377), (68, 44446), (72, 44473), (77, 44554), (81, 44596), (83, 44632), (84, 44644), (92, 44701), (94, 44734), (114, 44779), (117, 44797), (123, 44842), (127, 44890), (129, 44923), (139, 45001), (142, 45028), (149, 45097), (151, 45118), (164, 45244), (169, 45295), (172, 45316), (173, 45328), (184, 45370), (194, 45520), (197, 45553), (198, 45556), (203, 45607), (207, 45652), (208, 45658), (211, 45700), (216, 45763), (223, 45841), (226, 45898), (227, 45916), (230, 45949), (231, 45952), (234, 45991), (235, 45994), (238, 46075), (239, 46078), (242, 46138), (244, 46162), (247, 46213), (250, 46237), (253, 46261), (264, 46513), (267, 46570), (281, 46828), (283, 46897), (289, 46945), (296, 47032), (298, 47065), (300, 47068),

Gene: DirtMonster\_91 Start: 44105, Stop: 48217, Start Num: 3

Candidate Starts for DirtMonster\_91:

(Start: 3 @44105 has 184 MA's), (13, 44216), (15, 44240), (28, 44504), (29, 44510), (33, 44576), (36, 44612), (41, 44693), (43, 44729), (45, 44741), (46, 44747), (47, 44948), (58, 45329), (65, 45482), (68, 45551), (72, 45578), (77, 45659), (81, 45701), (83, 45737), (84, 45749), (92, 45806), (94, 45839), (114, 45884), (117, 45902), (123, 45947), (127, 45995), (129, 46028), (132, 46052), (139, 46106), (142, 46133), (144, 46154), (149, 46202), (151, 46223), (164, 46349), (169, 46400), (172, 46421), (173, 46433), (184, 46475), (194, 46625), (197, 46658), (198, 46661), (203, 46712), (207, 46757), (208, 46763), (211, 46805), (216, 46868), (223, 46946), (226, 47003), (227, 47021), (230, 47054), (231, 47057), (234, 47096), (235, 47099), (238, 47180), (239, 47183), (242, 47243), (244, 47267), (247, 47318), (250, 47342), (253, 47366), (264, 47618), (267, 47675), (281, 47933), (283, 48002), (289, 48050), (296, 48137), (298, 48170), (300, 48173),

Gene: Domi\_91 Start: 44414, Stop: 48136, Start Num: 3

Candidate Starts for Domi\_91:

(Start: 3 @44414 has 184 MA's), (8, 44453), (13, 44525), (15, 44549), (28, 44813), (29, 44819), (33, 44885), (36, 44921), (41, 45002), (43, 45038), (45, 45050), (46, 45056), (60, 45239), (62, 45260), (64, 45296), (67, 45416), (70, 45434), (77, 45530), (80, 45563), (81, 45572), (85, 45668), (89, 45686), (94, 45758), (97, 45803), (102, 45821), (105, 45866), (110, 45914), (113, 45947), (122, 45971), (129, 46025), (138, 46052), (144, 46073), (149, 46121), (151, 46142), (164, 46268), (169, 46319), (172, 46340), (173, 46352), (184, 46394), (194, 46544), (197, 46577), (198, 46580), (203, 46631), (207, 46676), (208, 46682), (211, 46724), (216, 46787), (223, 46865), (226, 46922), (227, 46940), (230,

46973), (231, 46976), (234, 47015), (235, 47018), (238, 47099), (239, 47102), (242, 47162), (244, 47186), (247, 47237), (250, 47261), (253, 47285), (264, 47537), (267, 47594), (281, 47852), (283, 47921), (289, 47969), (296, 48056), (298, 48089), (300, 48092),

Gene: DrPhinkDaddy\_96 Start: 45290, Stop: 49399, Start Num: 3

Candidate Starts for DrPhinkDaddy\_96:

(Start: 3 @45290 has 184 MA's), (13, 45401), (15, 45425), (28, 45689), (29, 45695), (33, 45761), (36, 45797), (41, 45878), (43, 45914), (45, 45926), (46, 45932), (47, 46133), (48, 46193), (58, 46511), (65, 46664), (68, 46733), (72, 46760), (77, 46841), (81, 46883), (83, 46919), (84, 46931), (92, 46988), (94, 47021), (114, 47066), (117, 47084), (123, 47129), (127, 47177), (129, 47210), (139, 47288), (142, 47315), (149, 47384), (151, 47405), (164, 47531), (169, 47582), (172, 47603), (173, 47615), (184, 47657), (194, 47807), (197, 47840), (198, 47843), (203, 47894), (207, 47939), (208, 47945), (211, 47987), (216, 48050), (223, 48128), (226, 48185), (227, 48203), (230, 48236), (231, 48239), (234, 48278), (235, 48281), (238, 48362), (239, 48365), (242, 48425), (244, 48449), (247, 48500), (250, 48524), (253, 48548), (264, 48800), (267, 48857), (281, 49115), (283, 49184), (289, 49232), (296, 49319), (298, 49352), (300, 49355),

Gene: Drazdys\_97 Start: 44871, Stop: 48983, Start Num: 3

Candidate Starts for Drazdys\_97:

(Start: 3 @44871 has 184 MA's), (13, 44982), (15, 45006), (28, 45270), (29, 45276), (33, 45342), (36, 45378), (41, 45459), (43, 45495), (45, 45507), (46, 45513), (47, 45714), (58, 46095), (65, 46248), (68, 46317), (72, 46344), (77, 46425), (81, 46467), (83, 46503), (84, 46515), (92, 46572), (94, 46605), (114, 46650), (117, 46668), (123, 46713), (127, 46761), (129, 46794), (132, 46818), (139, 46872), (142, 46899), (144, 46920), (149, 46968), (151, 46989), (164, 47115), (169, 47166), (172, 47187), (173, 47199), (184, 47241), (194, 47391), (197, 47424), (198, 47427), (203, 47478), (207, 47523), (208, 47529), (211, 47571), (216, 47634), (223, 47712), (226, 47769), (227, 47787), (230, 47820), (231, 47823), (234, 47862), (235, 47865), (238, 47946), (239, 47949), (242, 48009), (244, 48033), (247, 48084), (250, 48108), (253, 48132), (264, 48384), (267, 48441), (281, 48699), (283, 48768), (289, 48816), (296, 48903), (298, 48936), (300, 48939),

Gene: Duckfeet\_90 Start: 43316, Stop: 47176, Start Num: 3

Candidate Starts for Duckfeet\_90:

(Start: 3 @43316 has 184 MA's), (13, 43427), (15, 43451), (28, 43715), (29, 43721), (33, 43787), (41, 43904), (43, 43940), (45, 43952), (46, 43958), (60, 44279), (62, 44300), (64, 44336), (67, 44456), (77, 44570), (80, 44603), (81, 44612), (85, 44708), (89, 44726), (94, 44798), (97, 44843), (102, 44861), (105, 44906), (110, 44954), (113, 44987), (122, 45011), (129, 45065), (138, 45092), (144, 45113), (149, 45161), (151, 45182), (164, 45308), (169, 45359), (172, 45380), (173, 45392), (184, 45434), (194, 45584), (197, 45617), (198, 45620), (203, 45671), (207, 45716), (208, 45722), (211, 45764), (216, 45827), (223, 45905), (226, 45962), (227, 45980), (230, 46013), (231, 46016), (234, 46055), (235, 46058), (238, 46139), (239, 46142), (242, 46202), (244, 46226), (247, 46277), (250, 46301), (253, 46325), (264, 46577), (267, 46634), (281, 46892), (283, 46961), (289, 47009), (296, 47096), (298, 47129), (300, 47132),

Gene: E3\_gp77 Start: 38464, Stop: 41151, Start Num: 5

Candidate Starts for E3\_gp77:

(5, 38464), (14, 38575), (15, 38584), (17, 38608), (22, 38728), (23, 38731), (29, 38854), (33, 38920), (34, 38932), (45, 39079), (76, 39328), (116, 39463), (126, 39514), (147, 39616), (157, 39649), (167, 39748), (182, 39808), (198, 39865), (219, 39976), (229, 40075), (233, 40114), (237, 40186), (238, 40195), (260, 40513), (262, 40552), (269, 40642), (272, 40669), (278, 40858),

Gene: ET08\_86 Start: 43857, Stop: 47717, Start Num: 3

Candidate Starts for ET08\_86:

(Start: 3 @43857 has 184 MA's), (13, 43968), (15, 43992), (28, 44256), (29, 44262), (33, 44328), (36, 44364), (41, 44445), (43, 44481), (45, 44493), (46, 44499), (60, 44820), (62, 44841), (64, 44877), (67, 44997), (77, 45111), (80, 45144), (81, 45153), (85, 45249), (89, 45267), (94, 45339), (97, 45384), (102, 45402), (105, 45447), (110, 45495), (113, 45528), (122, 45552), (129, 45606), (138, 45633), (144, 45654), (149, 45702), (151, 45723), (164, 45849), (169, 45900), (172, 45921), (173, 45933), (184, 45975), (194, 46125), (197, 46158), (198, 46161), (203, 46212), (207, 46257), (208, 46263), (211, 46305), (216, 46368), (223, 46446), (226, 46503), (227, 46521), (230, 46554), (231, 46557), (234, 46596), (235, 46599), (238, 46680), (239, 46683), (242, 46743), (244, 46767), (247, 46818), (250, 46842), (253, 46866), (264, 47118), (267, 47175), (281, 47433), (283, 47502), (289, 47550), (296, 47637), (298, 47670), (300, 47673),

Gene: EasyJones\_100 Start: 44359, Stop: 48468, Start Num: 3

Candidate Starts for EasyJones\_100:

(Start: 3 @44359 has 184 MA's), (13, 44470), (15, 44494), (28, 44758), (29, 44764), (33, 44830), (36, 44866), (41, 44947), (43, 44983), (45, 44995), (46, 45001), (47, 45202), (48, 45262), (58, 45580), (65, 45733), (68, 45802), (72, 45829), (77, 45910), (81, 45952), (83, 45988), (84, 46000), (92, 46057), (94, 46090), (114, 46135), (117, 46153), (123, 46198), (127, 46246), (129, 46279), (139, 46357), (142, 46384), (149, 46453), (151, 46474), (164, 46600), (169, 46651), (172, 46672), (173, 46684), (184, 46726), (194, 46876), (197, 46909), (198, 46912), (203, 46963), (207, 47008), (208, 47014), (211, 47056), (216, 47119), (223, 47197), (226, 47254), (227, 47272), (230, 47305), (231, 47308), (234, 47347), (235, 47350), (238, 47431), (239, 47434), (242, 47494), (244, 47518), (247, 47569), (250, 47593), (253, 47617), (264, 47869), (267, 47926), (281, 48184), (283, 48253), (289, 48301), (296, 48388), (298, 48421), (300, 48424),

Gene: EggyFarm\_105 Start: 47262, Stop: 51122, Start Num: 3

Candidate Starts for EggyFarm\_105:

(Start: 3 @47262 has 184 MA's), (13, 47373), (28, 47661), (29, 47667), (33, 47733), (36, 47769), (41, 47850), (43, 47886), (45, 47898), (46, 47904), (62, 48246), (64, 48282), (67, 48402), (75, 48486), (77, 48516), (80, 48549), (81, 48558), (85, 48654), (89, 48672), (94, 48744), (97, 48789), (102, 48807), (105, 48852), (110, 48900), (113, 48933), (122, 48957), (129, 49011), (138, 49038), (144, 49059), (149, 49107), (151, 49128), (164, 49254), (169, 49305), (172, 49326), (173, 49338), (184, 49380), (194, 49530), (197, 49563), (198, 49566), (203, 49617), (207, 49662), (208, 49668), (211, 49710), (216, 49773), (223, 49851), (226, 49908), (227, 49926), (230, 49959), (231, 49962), (234, 50001), (235, 50004), (238, 50085), (239, 50088), (242, 50148), (244, 50172), (247, 50223), (250, 50247), (253, 50271), (264, 50523), (267, 50580), (281, 50838), (283, 50907), (289, 50955), (296, 51042), (298, 51075), (300, 51078),

Gene: EmToTheThree\_100 Start: 46522, Stop: 50631, Start Num: 3

Candidate Starts for EmToTheThree\_100:

(Start: 3 @46522 has 184 MA's), (13, 46633), (15, 46657), (28, 46921), (29, 46927), (33, 46993), (36, 47029), (41, 47110), (43, 47146), (45, 47158), (46, 47164), (47, 47365), (48, 47425), (58, 47743), (65, 47896), (68, 47965), (72, 47992), (77, 48073), (81, 48115), (83, 48151), (84, 48163), (92, 48220), (94, 48253), (114, 48298), (117, 48316), (123, 48361), (127, 48409), (129, 48442), (139, 48520), (142, 48547), (149, 48616), (151, 48637), (164, 48763), (169, 48814), (172, 48835), (173, 48847), (184, 48889), (194, 49039), (197, 49072), (198, 49075), (203, 49126), (207, 49171), (208, 49177), (211, 49219), (216, 49282), (223, 49360), (226, 49417), (227, 49435), (230, 49468), (231, 49471), (234, 49510), (235, 49513), (238, 49594), (239, 49597), (242, 49657), (244, 49681), (247, 49732), (250, 49756), (253, 49780), (264, 50032), (267, 50089), (281, 50347), (283, 50416), (289, 50464), (296, 50551), (298, 50584), (300, 50587),

Gene: EmmaElysia\_97 Start: 44050, Stop: 48162, Start Num: 3

Candidate Starts for EmmaElysia\_97:

(Start: 3 @44050 has 184 MA's), (13, 44161), (15, 44185), (28, 44449), (29, 44455), (33, 44521), (36, 44557), (41, 44638), (43, 44674), (45, 44686), (46, 44692), (47, 44893), (58, 45274), (65, 45427), (68, 45496), (72, 45523), (77, 45604), (81, 45646), (83, 45682), (84, 45694), (92, 45751), (94, 45784), (114, 45829), (117, 45847), (123, 45892), (127, 45940), (129, 45973), (132, 45997), (139, 46051), (142, 46078), (144, 46099), (149, 46147), (151, 46168), (164, 46294), (169, 46345), (172, 46366), (173, 46378), (184, 46420), (194, 46570), (197, 46603), (198, 46606), (203, 46657), (207, 46702), (208, 46708), (211, 46750), (216, 46813), (223, 46891), (226, 46948), (227, 46966), (230, 46999), (231, 47002), (234, 47041), (235, 47044), (238, 47125), (239, 47128), (242, 47188), (244, 47212), (247, 47263), (250, 47287), (253, 47311), (264, 47563), (267, 47620), (281, 47878), (283, 47947), (289, 47995), (296, 48082), (298, 48115), (300, 48118),

Gene: Erdmann\_98 Start: 45071, Stop: 49180, Start Num: 3

Candidate Starts for Erdmann\_98:

(Start: 3 @45071 has 184 MA's), (13, 45182), (15, 45206), (28, 45470), (29, 45476), (33, 45542), (36, 45578), (41, 45659), (43, 45695), (45, 45707), (46, 45713), (47, 45914), (48, 45974), (58, 46292), (65, 46445), (68, 46514), (72, 46541), (77, 46622), (81, 46664), (83, 46700), (84, 46712), (92, 46769), (94, 46802), (114, 46847), (117, 46865), (123, 46910), (127, 46958), (129, 46991), (139, 47069), (142, 47096), (149, 47165), (151, 47186), (164, 47312), (169, 47363), (172, 47384), (173, 47396), (184, 47438), (194, 47588), (197, 47621), (198, 47624), (203, 47675), (207, 47720), (208, 47726), (211, 47768), (216, 47831), (223, 47909), (226, 47966), (227, 47984), (230, 48017), (231, 48020), (234, 48059), (235, 48062), (238, 48143), (239, 48146), (242, 48206), (244, 48230), (247, 48281), (250, 48305), (253, 48329), (264, 48581), (267, 48638), (281, 48896), (283, 48965), (289, 49013), (296, 49100), (298, 49133), (300, 49136),

Gene: ErnieJ\_93 Start: 43281, Stop: 47390, Start Num: 3

Candidate Starts for ErnieJ\_93:

(Start: 3 @43281 has 184 MA's), (13, 43392), (15, 43416), (28, 43680), (29, 43686), (33, 43752), (36, 43788), (41, 43869), (43, 43905), (45, 43917), (46, 43923), (47, 44124), (48, 44184), (58, 44502), (65, 44655), (68, 44724), (72, 44751), (77, 44832), (81, 44874), (83, 44910), (84, 44922), (92, 44979), (94, 45012), (114, 45057), (117, 45075), (123, 45120), (127, 45168), (129, 45201), (139, 45279), (142, 45306), (149, 45375), (151, 45396), (164, 45522), (169, 45573), (172, 45594), (173, 45606), (184, 45648), (194, 45798), (197, 45831), (198, 45834), (203, 45885), (207, 45930), (208, 45936), (211, 45978), (216, 46041), (223, 46119), (226, 46176), (227, 46194), (230, 46227), (231, 46230), (234, 46269), (235, 46272), (238, 46353), (239, 46356), (242, 46416), (244, 46440), (247, 46491), (250, 46515), (253, 46539), (264, 46791), (267, 46848), (281, 47106), (283, 47175), (289, 47223), (296, 47310), (298, 47343), (300, 47346),

Gene: Essence\_95 Start: 45037, Stop: 49149, Start Num: 3

Candidate Starts for Essence\_95:

(Start: 3 @45037 has 184 MA's), (13, 45148), (15, 45172), (28, 45436), (29, 45442), (33, 45508), (36, 45544), (41, 45625), (43, 45661), (45, 45673), (46, 45679), (47, 45880), (58, 46261), (65, 46414), (68, 46483), (72, 46510), (77, 46591), (81, 46633), (83, 46669), (84, 46681), (92, 46738), (94, 46771), (114, 46816), (117, 46834), (123, 46879), (127, 46927), (129, 46960), (132, 46984), (139, 47038), (142, 47065), (144, 47086), (149, 47134), (151, 47155), (164, 47281), (169, 47332), (172, 47353), (173, 47365), (184, 47407), (194, 47557), (197, 47590), (198, 47593), (203, 47644), (207, 47689), (208, 47695), (211, 47737), (216, 47800), (223, 47878), (226, 47935), (227, 47953), (230, 47986), (231, 47989), (234, 48028), (235, 48031), (238, 48112), (239, 48115), (242, 48175), (244, 48199), (247, 48250), (250, 48274), (253, 48298), (264, 48550), (267, 48607), (281, 48865), (283, 48934), (289, 48982), (296, 49069), (298, 49102), (300, 49105),

Gene: Ewok\_98 Start: 44698, Stop: 48807, Start Num: 3

Candidate Starts for Ewok\_98:

(Start: 3 @44698 has 184 MA's), (13, 44809), (15, 44833), (28, 45097), (29, 45103), (33, 45169), (36, 45205), (41, 45286), (43, 45322), (45, 45334), (46, 45340), (47, 45541), (48, 45601), (58, 45919), (65, 46072), (68, 46141), (72, 46168), (77, 46249), (81, 46291), (83, 46327), (84, 46339), (92, 46396), (94, 46429), (114, 46474), (117, 46492), (123, 46537), (127, 46585), (129, 46618), (139, 46696), (142, 46723), (149, 46792), (151, 46813), (164, 46939), (169, 46990), (172, 47011), (173, 47023), (184, 47065), (194, 47215), (197, 47248), (198, 47251), (203, 47302), (207, 47347), (208, 47353), (211, 47395), (216, 47458), (223, 47536), (226, 47593), (227, 47611), (230, 47644), (231, 47647), (234, 47686), (235, 47689), (238, 47770), (239, 47773), (242, 47833), (244, 47857), (247, 47908), (250, 47932), (253, 47956), (264, 48208), (267, 48265), (281, 48523), (283, 48592), (289, 48640), (296, 48727), (298, 48760), (300, 48763),

Gene: Finch\_17 Start: 15514, Stop: 18483, Start Num: 2

Candidate Starts for Finch\_17:

(Start: 2 @15514 has 3 MA's), (10, 15580), (22, 15796), (23, 15799), (24, 15856), (29, 15922), (30, 15946), (32, 15979), (33, 15988), (34, 16000), (37, 16033), (38, 16048), (40, 16063), (43, 16135), (44, 16138), (45, 16147), (55, 16171), (61, 16252), (69, 16384), (77, 16474), (82, 16525), (91, 16582), (148, 16777), (155, 16825), (166, 16936), (204, 17182), (221, 17302), (235, 17440), (248, 17647), (282, 18202), (283, 18265), (296, 18394), (303, 18475),

Gene: Fixie\_94 Start: 43713, Stop: 47825, Start Num: 3

Candidate Starts for Fixie\_94:

(Start: 3 @43713 has 184 MA's), (13, 43824), (15, 43848), (28, 44112), (29, 44118), (33, 44184), (36, 44220), (41, 44301), (43, 44337), (45, 44349), (46, 44355), (47, 44556), (58, 44937), (65, 45090), (68, 45159), (72, 45186), (77, 45267), (81, 45309), (83, 45345), (84, 45357), (92, 45414), (94, 45447), (114, 45492), (117, 45510), (123, 45555), (127, 45603), (129, 45636), (132, 45660), (139, 45714), (142, 45741), (144, 45762), (149, 45810), (151, 45831), (164, 45957), (169, 46008), (172, 46029), (173, 46041), (184, 46083), (194, 46233), (197, 46266), (198, 46269), (203, 46320), (207, 46365), (208, 46371), (211, 46413), (216, 46476), (223, 46554), (226, 46611), (227, 46629), (230, 46662), (231, 46665), (234, 46704), (235, 46707), (238, 46788), (239, 46791), (242, 46851), (244, 46875), (247, 46926), (250, 46950), (253, 46974), (264, 47226), (267, 47283), (281, 47541), (283, 47610), (289, 47658), (296, 47745), (298, 47778), (300, 47781),

Gene: Flabslab\_92 Start: 43037, Stop: 47146, Start Num: 3

Candidate Starts for Flabslab\_92:

(Start: 3 @43037 has 184 MA's), (13, 43148), (15, 43172), (28, 43436), (29, 43442), (33, 43508), (36, 43544), (41, 43625), (43, 43661), (45, 43673), (46, 43679), (47, 43880), (48, 43940), (58, 44258), (65, 44411), (68, 44480), (72, 44507), (77, 44588), (81, 44630), (83, 44666), (84, 44678), (92, 44735), (94, 44768), (114, 44813), (117, 44831), (123, 44876), (127, 44924), (129, 44957), (139, 45035), (142, 45062), (149, 45131), (151, 45152), (164, 45278), (169, 45329), (172, 45350), (173, 45362), (184, 45404), (194, 45554), (197, 45587), (198, 45590), (203, 45641), (207, 45686), (208, 45692), (211, 45734), (216, 45797), (223, 45875), (226, 45932), (227, 45950), (230, 45983), (231, 45986), (234, 46025), (235, 46028), (238, 46109), (239, 46112), (242, 46172), (244, 46196), (247, 46247), (250, 46271), (253, 46295), (264, 46547), (267, 46604), (281, 46862), (283, 46931), (289, 46979), (296, 47066), (298, 47099), (300, 47102),

Gene: Fludd\_98 Start: 43923, Stop: 48035, Start Num: 3

Candidate Starts for Fludd\_98:

(Start: 3 @43923 has 184 MA's), (13, 44034), (15, 44058), (28, 44322), (29, 44328), (33, 44394), (36, 44430), (41, 44511), (43, 44547), (45, 44559), (46, 44565), (47, 44766), (58, 45147), (65, 45300), (68, 45369), (72, 45396), (77, 45477), (81, 45519), (83, 45555), (84, 45567), (92, 45624), (94, 45657), (114, 45702), (117, 45720), (123, 45765), (127, 45813), (129, 45846), (132, 45870), (139, 45924), (142, 45951), (144, 45972), (149, 46020), (151, 46041), (164, 46167), (169, 46218), (172, 46239), (173, 46251), (184, 46293), (194, 46443), (197, 46476), (198, 46479), (203, 46530), (207, 46575), (208,

46581), (211, 46623), (216, 46686), (223, 46764), (226, 46821), (227, 46839), (230, 46872), (231, 46875), (234, 46914), (235, 46917), (238, 46998), (239, 47001), (242, 47061), (244, 47085), (247, 47136), (250, 47160), (253, 47184), (264, 47436), (267, 47493), (281, 47751), (283, 47820), (289, 47868), (296, 47955), (298, 47988), (300, 47991),

Gene: Fongie\_95 Start: 44911, Stop: 49020, Start Num: 3

Candidate Starts for Fongie\_95:

(Start: 3 @44911 has 184 MA's), (13, 45022), (15, 45046), (28, 45310), (29, 45316), (33, 45382), (36, 45418), (41, 45499), (43, 45535), (45, 45547), (46, 45553), (47, 45754), (48, 45814), (58, 46132), (65, 46285), (68, 46354), (72, 46381), (77, 46462), (81, 46504), (83, 46540), (84, 46552), (92, 46609), (94, 46642), (114, 46687), (117, 46705), (123, 46750), (127, 46798), (129, 46831), (139, 46909), (142, 46936), (149, 47005), (151, 47026), (164, 47152), (169, 47203), (172, 47224), (173, 47236), (184, 47278), (194, 47428), (197, 47461), (198, 47464), (203, 47515), (207, 47560), (208, 47566), (211, 47608), (216, 47671), (223, 47749), (226, 47806), (227, 47824), (230, 47857), (231, 47860), (234, 47899), (235, 47902), (238, 47983), (239, 47986), (242, 48046), (244, 48070), (247, 48121), (250, 48145), (253, 48169), (264, 48421), (267, 48478), (281, 48736), (283, 48805), (289, 48853), (296, 48940), (298, 48973), (300, 48976),

Gene: FoxtrotP1\_97 Start: 46241, Stop: 50350, Start Num: 3

Candidate Starts for FoxtrotP1\_97:

(Start: 3 @46241 has 184 MA's), (13, 46352), (15, 46376), (28, 46640), (29, 46646), (33, 46712), (36, 46748), (41, 46829), (43, 46865), (45, 46877), (46, 46883), (47, 47084), (48, 47144), (58, 47462), (65, 47615), (68, 47684), (72, 47711), (77, 47792), (81, 47834), (83, 47870), (84, 47882), (92, 47939), (94, 47972), (114, 48017), (117, 48035), (123, 48080), (127, 48128), (129, 48161), (132, 48185), (139, 48239), (142, 48266), (144, 48287), (149, 48335), (151, 48356), (164, 48482), (169, 48533), (172, 48554), (173, 48566), (184, 48608), (194, 48758), (197, 48791), (198, 48794), (203, 48845), (207, 48890), (208, 48896), (211, 48938), (216, 49001), (223, 49079), (226, 49136), (227, 49154), (230, 49187), (231, 49190), (234, 49229), (235, 49232), (238, 49313), (239, 49316), (242, 49376), (244, 49400), (247, 49451), (250, 49475), (253, 49499), (264, 49751), (267, 49808), (281, 50066), (283, 50135), (289, 50183), (296, 50270), (298, 50303), (300, 50306),

Gene: FrayBell\_103 Start: 46523, Stop: 50635, Start Num: 3

Candidate Starts for FrayBell\_103:

(Start: 3 @46523 has 184 MA's), (13, 46634), (15, 46658), (28, 46922), (29, 46928), (33, 46994), (36, 47030), (41, 47111), (43, 47147), (45, 47159), (46, 47165), (47, 47366), (58, 47747), (65, 47900), (68, 47969), (72, 47996), (77, 48077), (81, 48119), (83, 48155), (84, 48167), (92, 48224), (94, 48257), (114, 48302), (117, 48320), (123, 48365), (127, 48413), (129, 48446), (132, 48470), (139, 48524), (142, 48551), (144, 48572), (149, 48620), (151, 48641), (164, 48767), (169, 48818), (172, 48839), (173, 48851), (184, 48893), (194, 49043), (197, 49076), (198, 49079), (203, 49130), (207, 49175), (208, 49181), (211, 49223), (216, 49286), (223, 49364), (226, 49421), (227, 49439), (230, 49472), (231, 49475), (234, 49514), (235, 49517), (238, 49598), (239, 49601), (242, 49661), (244, 49685), (247, 49736), (250, 49760), (253, 49784), (264, 50036), (267, 50093), (281, 50351), (283, 50420), (289, 50468), (296, 50555), (298, 50588), (300, 50591),

Gene: FudgeTart\_97 Start: 44279, Stop: 48448, Start Num: 3

Candidate Starts for FudgeTart\_97:

(Start: 3 @44279 has 184 MA's), (13, 44390), (15, 44414), (28, 44678), (29, 44684), (33, 44750), (36, 44786), (41, 44867), (43, 44903), (45, 44915), (46, 44921), (47, 45122), (48, 45182), (60, 45551), (62, 45572), (64, 45608), (67, 45728), (77, 45842), (80, 45875), (81, 45884), (85, 45980), (89, 45998), (94, 46070), (114, 46115), (117, 46133), (123, 46178), (127, 46226), (129, 46259), (132, 46283), (139, 46337), (142, 46364), (144, 46385), (149, 46433), (151, 46454), (164, 46580), (169, 46631), (172, 46652), (173, 46664), (184, 46706), (194, 46856), (197, 46889), (198, 46892), (203, 46943), (207, 46988), (208, 46994), (211, 47036), (216, 47099), (223, 47177), (226, 47234), (227, 47252), (230,

47285), (231, 47288), (234, 47327), (235, 47330), (238, 47411), (239, 47414), (242, 47474), (244, 47498), (247, 47549), (250, 47573), (253, 47597), (264, 47849), (267, 47906), (281, 48164), (283, 48233), (289, 48281), (296, 48368), (298, 48401), (300, 48404),

Gene: Gabriel\_99 Start: 44443, Stop: 48555, Start Num: 3

Candidate Starts for Gabriel\_99:

(Start: 3 @44443 has 184 MA's), (13, 44554), (15, 44578), (28, 44842), (29, 44848), (33, 44914), (36, 44950), (41, 45031), (43, 45067), (45, 45079), (46, 45085), (47, 45286), (58, 45667), (65, 45820), (68, 45889), (72, 45916), (77, 45997), (81, 46039), (83, 46075), (84, 46087), (92, 46144), (94, 46177), (114, 46222), (117, 46240), (123, 46285), (127, 46333), (129, 46366), (132, 46390), (139, 46444), (142, 46471), (144, 46492), (149, 46540), (151, 46561), (164, 46687), (169, 46738), (172, 46759), (173, 46771), (184, 46813), (194, 46963), (197, 46996), (198, 46999), (203, 47050), (207, 47095), (208, 47101), (211, 47143), (216, 47206), (223, 47284), (226, 47341), (227, 47359), (230, 47392), (231, 47395), (234, 47434), (235, 47437), (238, 47518), (239, 47521), (242, 47581), (244, 47605), (247, 47656), (250, 47680), (253, 47704), (264, 47956), (267, 48013), (281, 48271), (283, 48340), (289, 48388), (296, 48475), (298, 48508), (300, 48511),

Gene: Gamgam\_98 Start: 44483, Stop: 48595, Start Num: 3

Candidate Starts for Gamgam\_98:

(Start: 3 @44483 has 184 MA's), (13, 44594), (15, 44618), (28, 44882), (29, 44888), (33, 44954), (36, 44990), (41, 45071), (43, 45107), (45, 45119), (46, 45125), (47, 45326), (58, 45707), (65, 45860), (68, 45929), (72, 45956), (77, 46037), (81, 46079), (83, 46115), (84, 46127), (92, 46184), (94, 46217), (114, 46262), (117, 46280), (123, 46325), (127, 46373), (129, 46406), (132, 46430), (139, 46484), (142, 46511), (144, 46532), (149, 46580), (151, 46601), (164, 46727), (169, 46778), (172, 46799), (173, 46811), (184, 46853), (194, 47003), (197, 47036), (198, 47039), (203, 47090), (207, 47135), (208, 47141), (211, 47183), (216, 47246), (223, 47324), (226, 47381), (227, 47399), (230, 47432), (231, 47435), (234, 47474), (235, 47477), (238, 47558), (239, 47561), (242, 47621), (244, 47645), (247, 47696), (250, 47720), (253, 47744), (264, 47996), (267, 48053), (281, 48311), (283, 48380), (289, 48428), (296, 48515), (298, 48548), (300, 48551),

Gene: Ghost\_97 Start: 44483, Stop: 48595, Start Num: 3

Candidate Starts for Ghost\_97:

(Start: 3 @44483 has 184 MA's), (13, 44594), (15, 44618), (28, 44882), (29, 44888), (33, 44954), (36, 44990), (41, 45071), (43, 45107), (45, 45119), (46, 45125), (47, 45326), (58, 45707), (65, 45860), (68, 45929), (72, 45956), (77, 46037), (81, 46079), (83, 46115), (84, 46127), (92, 46184), (94, 46217), (114, 46262), (117, 46280), (123, 46325), (127, 46373), (129, 46406), (132, 46430), (139, 46484), (142, 46511), (144, 46532), (149, 46580), (151, 46601), (164, 46727), (169, 46778), (172, 46799), (173, 46811), (184, 46853), (194, 47003), (197, 47036), (198, 47039), (203, 47090), (207, 47135), (208, 47141), (211, 47183), (216, 47246), (223, 47324), (226, 47381), (227, 47399), (230, 47432), (231, 47435), (234, 47474), (235, 47477), (238, 47558), (239, 47561), (242, 47621), (244, 47645), (247, 47696), (250, 47720), (253, 47744), (264, 47996), (267, 48053), (281, 48311), (283, 48380), (289, 48428), (296, 48515), (298, 48548), (300, 48551),

Gene: Gizmo\_101 Start: 46218, Stop: 50330, Start Num: 3

Candidate Starts for Gizmo\_101:

(Start: 3 @46218 has 184 MA's), (13, 46329), (15, 46353), (28, 46617), (29, 46623), (33, 46689), (36, 46725), (41, 46806), (43, 46842), (45, 46854), (46, 46860), (47, 47061), (58, 47442), (65, 47595), (68, 47664), (72, 47691), (77, 47772), (81, 47814), (83, 47850), (84, 47862), (92, 47919), (94, 47952), (114, 47997), (117, 48015), (123, 48060), (127, 48108), (129, 48141), (132, 48165), (139, 48219), (142, 48246), (144, 48267), (149, 48315), (151, 48336), (164, 48462), (169, 48513), (172, 48534), (173, 48546), (184, 48588), (194, 48738), (197, 48771), (198, 48774), (203, 48825), (207, 48870), (208, 48876), (211, 48918), (216, 48981), (223, 49059), (226, 49116), (227, 49134), (230, 49167), (231, 49170), (234, 49209), (235, 49212), (238, 49293), (239, 49296), (242, 49356), (244, 49380), (247,

49431), (250, 49455), (253, 49479), (264, 49731), (267, 49788), (281, 50046), (283, 50115), (289, 50163), (296, 50250), (298, 50283), (300, 50286),

Gene: GlutenPhree\_99 Start: 44483, Stop: 48595, Start Num: 3

Candidate Starts for GlutenPhree\_99:

(Start: 3 @44483 has 184 MA's), (13, 44594), (15, 44618), (28, 44882), (29, 44888), (33, 44954), (36, 44990), (41, 45071), (43, 45107), (45, 45119), (46, 45125), (47, 45326), (58, 45707), (65, 45860), (68, 45929), (72, 45956), (77, 46037), (81, 46079), (83, 46115), (84, 46127), (92, 46184), (94, 46217), (114, 46262), (117, 46280), (123, 46325), (127, 46373), (129, 46406), (132, 46430), (139, 46484), (142, 46511), (144, 46532), (149, 46580), (151, 46601), (164, 46727), (169, 46778), (172, 46799), (173, 46811), (184, 46853), (194, 47003), (197, 47036), (198, 47039), (203, 47090), (207, 47135), (208, 47141), (211, 47183), (216, 47246), (223, 47324), (226, 47381), (227, 47399), (230, 47432), (231, 47435), (234, 47474), (235, 47477), (238, 47558), (239, 47561), (242, 47621), (244, 47645), (247, 47696), (250, 47720), (253, 47744), (264, 47996), (267, 48053), (281, 48311), (283, 48380), (289, 48428), (296, 48515), (298, 48548), (300, 48551),

Gene: Grasshills\_104 Start: 47262, Stop: 51122, Start Num: 3

Candidate Starts for Grasshills\_104:

(Start: 3 @47262 has 184 MA's), (13, 47373), (28, 47661), (29, 47667), (33, 47733), (36, 47769), (41, 47850), (43, 47886), (45, 47898), (46, 47904), (62, 48246), (64, 48282), (67, 48402), (75, 48486), (77, 48516), (80, 48549), (81, 48558), (85, 48654), (89, 48672), (94, 48744), (97, 48789), (102, 48807), (105, 48852), (110, 48900), (113, 48933), (122, 48957), (129, 49011), (138, 49038), (144, 49059), (149, 49107), (151, 49128), (164, 49254), (169, 49305), (172, 49326), (173, 49338), (184, 49380), (194, 49530), (197, 49563), (198, 49566), (203, 49617), (207, 49662), (208, 49668), (211, 49710), (216, 49773), (223, 49851), (226, 49908), (227, 49926), (230, 49959), (231, 49962), (234, 50001), (235, 50004), (238, 50085), (239, 50088), (242, 50148), (244, 50172), (247, 50223), (250, 50247), (253, 50271), (264, 50523), (267, 50580), (281, 50838), (283, 50907), (289, 50955), (296, 51042), (298, 51075), (300, 51078),

Gene: Greely\_99 Start: 46059, Stop: 49655, Start Num: 3

Candidate Starts for Greely\_99:

(Start: 3 @46059 has 184 MA's), (7, 46083), (15, 46194), (19, 46278), (21, 46335), (22, 46338), (29, 46464), (32, 46521), (33, 46530), (38, 46596), (46, 46701), (64, 46899), (67, 47010), (74, 47076), (77, 47124), (80, 47157), (81, 47166), (95, 47232), (121, 47343), (134, 47487), (135, 47496), (136, 47499), (140, 47526), (153, 47652), (160, 47718), (171, 47811), (173, 47832), (189, 47973), (191, 48021), (195, 48051), (203, 48135), (209, 48180), (210, 48186), (215, 48237), (216, 48261), (226, 48393), (227, 48411), (228, 48429), (235, 48483), (240, 48570), (241, 48618), (264, 49053), (267, 49101), (269, 49116), (281, 49353), (283, 49422), (286, 49440), (287, 49455), (290, 49473), (293, 49548), (302, 49644),

Gene: Grungle\_85 Start: 41901, Stop: 45761, Start Num: 3

Candidate Starts for Grungle\_85:

(Start: 3 @41901 has 184 MA's), (13, 42012), (15, 42036), (28, 42300), (29, 42306), (33, 42372), (36, 42408), (41, 42489), (43, 42525), (45, 42537), (46, 42543), (60, 42864), (62, 42885), (64, 42921), (67, 43041), (77, 43155), (80, 43188), (81, 43197), (85, 43293), (89, 43311), (94, 43383), (97, 43428), (102, 43446), (105, 43491), (110, 43539), (113, 43572), (122, 43596), (129, 43650), (138, 43677), (144, 43698), (149, 43746), (151, 43767), (164, 43893), (169, 43944), (172, 43965), (173, 43977), (184, 44019), (194, 44169), (197, 44202), (198, 44205), (203, 44256), (207, 44301), (208, 44307), (211, 44349), (216, 44412), (223, 44490), (226, 44547), (227, 44565), (230, 44598), (231, 44601), (234, 44640), (235, 44643), (238, 44724), (239, 44727), (242, 44787), (244, 44811), (247, 44862), (250, 44886), (253, 44910), (264, 45162), (267, 45219), (281, 45477), (283, 45546), (289, 45594), (296, 45681), (298, 45714), (300, 45717),

Gene: Guwapp\_97 Start: 44608, Stop: 48720, Start Num: 3

Candidate Starts for Guwapp\_97:

(Start: 3 @44608 has 184 MA's), (13, 44719), (15, 44743), (28, 45007), (29, 45013), (33, 45079), (36, 45115), (41, 45196), (43, 45232), (45, 45244), (46, 45250), (47, 45451), (58, 45832), (65, 45985), (68, 46054), (72, 46081), (77, 46162), (81, 46204), (83, 46240), (84, 46252), (92, 46309), (94, 46342), (114, 46387), (117, 46405), (123, 46450), (127, 46498), (129, 46531), (132, 46555), (139, 46609), (142, 46636), (144, 46657), (149, 46705), (151, 46726), (164, 46852), (169, 46903), (172, 46924), (173, 46936), (184, 46978), (194, 47128), (197, 47161), (198, 47164), (203, 47215), (207, 47260), (208, 47266), (211, 47308), (216, 47371), (223, 47449), (226, 47506), (227, 47524), (230, 47557), (231, 47560), (234, 47599), (235, 47602), (238, 47683), (239, 47686), (242, 47746), (244, 47770), (247, 47821), (250, 47845), (253, 47869), (264, 48121), (267, 48178), (281, 48436), (283, 48505), (289, 48553), (296, 48640), (298, 48673), (300, 48676),

Gene: Halldule\_91 Start: 42931, Stop: 46791, Start Num: 3

Candidate Starts for Halldule\_91:

(Start: 3 @42931 has 184 MA's), (13, 43042), (15, 43066), (28, 43330), (29, 43336), (33, 43402), (36, 43438), (41, 43519), (43, 43555), (45, 43567), (46, 43573), (60, 43894), (62, 43915), (64, 43951), (67, 44071), (77, 44185), (80, 44218), (81, 44227), (85, 44323), (89, 44341), (94, 44413), (97, 44458), (102, 44476), (105, 44521), (110, 44569), (113, 44602), (122, 44626), (129, 44680), (138, 44707), (144, 44728), (149, 44776), (151, 44797), (164, 44923), (169, 44974), (172, 44995), (173, 45007), (184, 45049), (194, 45199), (197, 45232), (198, 45235), (203, 45286), (207, 45331), (208, 45337), (211, 45379), (216, 45442), (223, 45520), (226, 45577), (227, 45595), (230, 45628), (231, 45631), (234, 45670), (235, 45673), (238, 45754), (239, 45757), (242, 45817), (244, 45841), (247, 45892), (250, 45916), (253, 45940), (264, 46192), (267, 46249), (281, 46507), (283, 46576), (289, 46624), (296, 46711), (298, 46744), (300, 46747),

Gene: HyRo\_89 Start: 43430, Stop: 47965, Start Num: 3

Candidate Starts for HyRo\_89:

(Start: 3 @43430 has 184 MA's), (13, 43541), (15, 43565), (28, 43829), (29, 43835), (33, 43901), (36, 43937), (41, 44018), (43, 44054), (45, 44066), (46, 44072), (47, 44273), (48, 44333), (62, 44723), (64, 44759), (67, 44879), (70, 44897), (77, 44993), (80, 45026), (81, 45035), (85, 45131), (89, 45149), (94, 45221), (98, 45341), (100, 45404), (101, 45440), (104, 45488), (106, 45539), (107, 45545), (109, 45548), (111, 45584), (114, 45632), (117, 45650), (123, 45695), (127, 45743), (129, 45776), (139, 45854), (142, 45881), (149, 45950), (151, 45971), (164, 46097), (169, 46148), (172, 46169), (173, 46181), (184, 46223), (194, 46373), (197, 46406), (198, 46409), (203, 46460), (207, 46505), (208, 46511), (211, 46553), (216, 46616), (223, 46694), (226, 46751), (227, 46769), (230, 46802), (231, 46805), (234, 46844), (235, 46847), (238, 46928), (239, 46931), (242, 46991), (244, 47015), (247, 47066), (250, 47090), (253, 47114), (264, 47366), (267, 47423), (281, 47681), (283, 47750), (289, 47798), (296, 47885), (298, 47918), (300, 47921),

Gene: I3\_103 Start: 45365, Stop: 49591, Start Num: 3

Candidate Starts for I3\_103:

(Start: 3 @45365 has 184 MA's), (13, 45476), (15, 45500), (28, 45764), (29, 45770), (33, 45836), (36, 45872), (41, 45953), (45, 46001), (46, 46007), (62, 46349), (64, 46385), (67, 46505), (70, 46523), (77, 46619), (80, 46652), (81, 46661), (85, 46757), (89, 46775), (94, 46847), (98, 46967), (100, 47030), (101, 47066), (104, 47114), (106, 47165), (107, 47171), (109, 47174), (111, 47210), (114, 47258), (117, 47276), (123, 47321), (127, 47369), (129, 47402), (132, 47426), (139, 47480), (142, 47507), (144, 47528), (149, 47576), (151, 47597), (164, 47723), (169, 47774), (172, 47795), (173, 47807), (184, 47849), (194, 47999), (197, 48032), (198, 48035), (203, 48086), (207, 48131), (208, 48137), (211, 48179), (216, 48242), (223, 48320), (226, 48377), (227, 48395), (230, 48428), (231, 48431), (234, 48470), (235, 48473), (238, 48554), (239, 48557), (242, 48617), (244, 48641), (247, 48692), (250, 48716), (253, 48740), (264, 48992), (267, 49049), (281, 49307), (283, 49376), (289, 49424), (296, 49511), (298, 49544), (300, 49547),

Gene: IkeLoa\_91 Start: 43600, Stop: 47769, Start Num: 3

Candidate Starts for IkeLoa\_91:

(Start: 3 @43600 has 184 MA's), (13, 43711), (15, 43735), (28, 43999), (29, 44005), (33, 44071), (36, 44107), (41, 44188), (43, 44224), (45, 44236), (46, 44242), (47, 44443), (48, 44503), (62, 44893), (64, 44929), (67, 45049), (70, 45067), (77, 45163), (80, 45196), (81, 45205), (85, 45301), (89, 45319), (94, 45391), (114, 45436), (117, 45454), (123, 45499), (127, 45547), (129, 45580), (132, 45604), (139, 45658), (142, 45685), (144, 45706), (149, 45754), (151, 45775), (164, 45901), (169, 45952), (172, 45973), (173, 45985), (184, 46027), (194, 46177), (197, 46210), (198, 46213), (203, 46264), (207, 46309), (208, 46315), (211, 46357), (216, 46420), (223, 46498), (226, 46555), (227, 46573), (230, 46606), (231, 46609), (234, 46648), (235, 46651), (238, 46732), (239, 46735), (242, 46795), (244, 46819), (247, 46870), (250, 46894), (253, 46918), (264, 47170), (267, 47227), (281, 47485), (283, 47554), (289, 47602), (296, 47689), (298, 47722), (300, 47725),

Gene: InigoMontoya\_99 Start: 44444, Stop: 48556, Start Num: 3

Candidate Starts for InigoMontoya\_99:

(Start: 3 @44444 has 184 MA's), (13, 44555), (15, 44579), (28, 44843), (29, 44849), (33, 44915), (36, 44951), (41, 45032), (43, 45068), (45, 45080), (46, 45086), (47, 45287), (58, 45668), (65, 45821), (68, 45890), (72, 45917), (77, 45998), (81, 46040), (83, 46076), (84, 46088), (92, 46145), (94, 46178), (114, 46223), (117, 46241), (123, 46286), (127, 46334), (129, 46367), (132, 46391), (139, 46445), (142, 46472), (144, 46493), (149, 46541), (151, 46562), (164, 46688), (169, 46739), (172, 46760), (173, 46772), (184, 46814), (194, 46964), (197, 46997), (198, 47000), (203, 47051), (207, 47096), (208, 47102), (211, 47144), (216, 47207), (223, 47285), (226, 47342), (227, 47360), (230, 47393), (231, 47396), (234, 47435), (235, 47438), (238, 47519), (239, 47522), (242, 47582), (244, 47606), (247, 47657), (250, 47681), (253, 47705), (264, 47957), (267, 48014), (281, 48272), (283, 48341), (289, 48389), (296, 48476), (298, 48509), (300, 48512),

Gene: InterFolia\_106 Start: 47458, Stop: 51570, Start Num: 3

Candidate Starts for InterFolia\_106:

(Start: 3 @47458 has 184 MA's), (13, 47569), (15, 47593), (28, 47857), (29, 47863), (33, 47929), (36, 47965), (41, 48046), (43, 48082), (45, 48094), (46, 48100), (47, 48301), (58, 48682), (65, 48835), (68, 48904), (72, 48931), (77, 49012), (81, 49054), (83, 49090), (84, 49102), (92, 49159), (94, 49192), (114, 49237), (117, 49255), (123, 49300), (127, 49348), (129, 49381), (132, 49405), (139, 49459), (142, 49486), (144, 49507), (149, 49555), (151, 49576), (164, 49702), (169, 49753), (172, 49774), (173, 49786), (184, 49828), (194, 49978), (197, 50011), (198, 50014), (203, 50065), (207, 50110), (208, 50116), (211, 50158), (216, 50221), (223, 50299), (226, 50356), (227, 50374), (230, 50407), (231, 50410), (234, 50449), (235, 50452), (238, 50533), (239, 50536), (242, 50596), (244, 50620), (247, 50671), (250, 50695), (253, 50719), (264, 50971), (267, 51028), (281, 51286), (283, 51355), (289, 51403), (296, 51490), (298, 51523), (300, 51526),

Gene: Iota\_92 Start: 44260, Stop: 48120, Start Num: 3

Candidate Starts for Iota\_92:

(Start: 3 @44260 has 184 MA's), (13, 44371), (15, 44395), (28, 44659), (29, 44665), (33, 44731), (36, 44767), (41, 44848), (45, 44896), (46, 44902), (60, 45223), (62, 45244), (64, 45280), (67, 45400), (70, 45418), (77, 45514), (80, 45547), (81, 45556), (85, 45652), (89, 45670), (94, 45742), (97, 45787), (102, 45805), (105, 45850), (110, 45898), (113, 45931), (122, 45955), (129, 46009), (138, 46036), (144, 46057), (149, 46105), (151, 46126), (164, 46252), (169, 46303), (172, 46324), (173, 46336), (184, 46378), (194, 46528), (197, 46561), (198, 46564), (203, 46615), (207, 46660), (208, 46666), (211, 46708), (216, 46771), (223, 46849), (226, 46906), (227, 46924), (230, 46957), (231, 46960), (234, 46999), (235, 47002), (238, 47083), (239, 47086), (242, 47146), (244, 47170), (247, 47221), (250, 47245), (253, 47269), (264, 47521), (267, 47578), (281, 47836), (283, 47905), (289, 47953), (296, 48040), (298, 48073), (300, 48076),

Gene: Issimir\_96 Start: 45014, Stop: 49123, Start Num: 3

Candidate Starts for Issimir\_96:

(Start: 3 @45014 has 184 MA's), (13, 45125), (15, 45149), (28, 45413), (29, 45419), (33, 45485), (36, 45521), (41, 45602), (43, 45638), (45, 45650), (46, 45656), (47, 45857), (48, 45917), (58, 46235), (65, 46388), (68, 46457), (72, 46484), (77, 46565), (81, 46607), (83, 46643), (84, 46655), (92, 46712), (94, 46745), (114, 46790), (117, 46808), (123, 46853), (127, 46901), (129, 46934), (132, 46958), (139, 47012), (142, 47039), (144, 47060), (149, 47108), (151, 47129), (164, 47255), (169, 47306), (172, 47327), (173, 47339), (184, 47381), (194, 47531), (197, 47564), (198, 47567), (203, 47618), (207, 47663), (208, 47669), (211, 47711), (216, 47774), (223, 47852), (226, 47909), (227, 47927), (230, 47960), (231, 47963), (234, 48002), (235, 48005), (238, 48086), (239, 48089), (242, 48149), (244, 48173), (247, 48224), (250, 48248), (253, 48272), (264, 48524), (267, 48581), (281, 48839), (283, 48908), (289, 48956), (296, 49043), (298, 49076), (300, 49079),

Gene: Izajani\_97 Start: 45251, Stop: 49360, Start Num: 3

Candidate Starts for Izajani\_97:

(Start: 3 @45251 has 184 MA's), (13, 45362), (15, 45386), (28, 45650), (29, 45656), (33, 45722), (36, 45758), (41, 45839), (43, 45875), (45, 45887), (46, 45893), (47, 46094), (48, 46154), (58, 46472), (65, 46625), (68, 46694), (72, 46721), (77, 46802), (81, 46844), (83, 46880), (84, 46892), (92, 46949), (94, 46982), (114, 47027), (117, 47045), (123, 47090), (127, 47138), (129, 47171), (139, 47249), (142, 47276), (149, 47345), (151, 47366), (164, 47492), (169, 47543), (172, 47564), (173, 47576), (184, 47618), (194, 47768), (197, 47801), (198, 47804), (203, 47855), (207, 47900), (208, 47906), (211, 47948), (216, 48011), (223, 48089), (226, 48146), (227, 48164), (230, 48197), (231, 48200), (234, 48239), (235, 48242), (238, 48323), (239, 48326), (242, 48386), (244, 48410), (247, 48461), (250, 48485), (253, 48509), (264, 48761), (267, 48818), (281, 49076), (283, 49145), (289, 49193), (296, 49280), (298, 49313), (300, 49316),

Gene: JPickles\_96 Start: 43714, Stop: 47826, Start Num: 3

Candidate Starts for JPickles\_96:

(Start: 3 @43714 has 184 MA's), (13, 43825), (15, 43849), (28, 44113), (29, 44119), (33, 44185), (36, 44221), (41, 44302), (43, 44338), (45, 44350), (46, 44356), (47, 44557), (58, 44938), (65, 45091), (68, 45160), (72, 45187), (77, 45268), (81, 45310), (83, 45346), (84, 45358), (92, 45415), (94, 45448), (114, 45493), (117, 45511), (123, 45556), (127, 45604), (129, 45637), (132, 45661), (139, 45715), (142, 45742), (144, 45763), (149, 45811), (151, 45832), (164, 45958), (169, 46009), (172, 46030), (173, 46042), (184, 46084), (194, 46234), (197, 46267), (198, 46270), (203, 46321), (207, 46366), (208, 46372), (211, 46414), (216, 46477), (223, 46555), (226, 46612), (227, 46630), (230, 46663), (231, 46666), (234, 46705), (235, 46708), (238, 46789), (239, 46792), (242, 46852), (244, 46876), (247, 46927), (250, 46951), (253, 46975), (264, 47227), (267, 47284), (281, 47542), (283, 47611), (289, 47659), (296, 47746), (298, 47779), (300, 47782),

Gene: Janiyra\_99 Start: 44529, Stop: 48638, Start Num: 3

Candidate Starts for Janiyra\_99:

(Start: 3 @44529 has 184 MA's), (13, 44640), (15, 44664), (28, 44928), (29, 44934), (33, 45000), (36, 45036), (41, 45117), (43, 45153), (45, 45165), (46, 45171), (47, 45372), (48, 45432), (58, 45750), (65, 45903), (68, 45972), (72, 45999), (77, 46080), (81, 46122), (83, 46158), (84, 46170), (92, 46227), (94, 46260), (114, 46305), (117, 46323), (123, 46368), (127, 46416), (129, 46449), (139, 46527), (142, 46554), (149, 46623), (151, 46644), (164, 46770), (169, 46821), (172, 46842), (173, 46854), (184, 46896), (194, 47046), (197, 47079), (198, 47082), (203, 47133), (207, 47178), (208, 47184), (211, 47226), (216, 47289), (223, 47367), (226, 47424), (227, 47442), (230, 47475), (231, 47478), (234, 47517), (235, 47520), (238, 47601), (239, 47604), (242, 47664), (244, 47688), (247, 47739), (250, 47763), (253, 47787), (264, 48039), (267, 48096), (281, 48354), (283, 48423), (289, 48471), (296, 48558), (298, 48591), (300, 48594),

Gene: JayJay\_103 Start: 46545, Stop: 50405, Start Num: 3

Candidate Starts for JayJay\_103:

(Start: 3 @46545 has 184 MA's), (13, 46656), (15, 46680), (28, 46944), (29, 46950), (33, 47016), (36, 47052), (41, 47133), (43, 47169), (45, 47181), (46, 47187), (60, 47508), (62, 47529), (64, 47565), (67, 47685), (77, 47799), (80, 47832), (81, 47841), (85, 47937), (89, 47955), (94, 48027), (97, 48072), (102, 48090), (105, 48135), (110, 48183), (113, 48216), (122, 48240), (129, 48294), (138, 48321), (144, 48342), (149, 48390), (151, 48411), (164, 48537), (169, 48588), (172, 48609), (173, 48621), (184, 48663), (194, 48813), (197, 48846), (198, 48849), (203, 48900), (207, 48945), (208, 48951), (211, 48993), (216, 49056), (223, 49134), (226, 49191), (227, 49209), (230, 49242), (231, 49245), (234, 49284), (235, 49287), (238, 49368), (239, 49371), (242, 49431), (244, 49455), (247, 49506), (250, 49530), (253, 49554), (264, 49806), (267, 49863), (281, 50121), (283, 50190), (289, 50238), (296, 50325), (298, 50358), (300, 50361),

Gene: Jaygup\_98 Start: 45239, Stop: 49351, Start Num: 3

Candidate Starts for Jaygup\_98:

(Start: 3 @45239 has 184 MA's), (13, 45350), (15, 45374), (28, 45638), (29, 45644), (33, 45710), (36, 45746), (41, 45827), (43, 45863), (45, 45875), (46, 45881), (47, 46082), (58, 46463), (65, 46616), (68, 46685), (72, 46712), (77, 46793), (81, 46835), (83, 46871), (84, 46883), (92, 46940), (94, 46973), (114, 47018), (117, 47036), (123, 47081), (127, 47129), (129, 47162), (132, 47186), (139, 47240), (142, 47267), (144, 47288), (149, 47336), (151, 47357), (164, 47483), (169, 47534), (172, 47555), (173, 47567), (184, 47609), (194, 47759), (197, 47792), (198, 47795), (203, 47846), (207, 47891), (208, 47897), (211, 47939), (216, 48002), (223, 48080), (226, 48137), (227, 48155), (230, 48188), (231, 48191), (234, 48230), (235, 48233), (238, 48314), (239, 48317), (242, 48377), (244, 48401), (247, 48452), (250, 48476), (253, 48500), (264, 48752), (267, 48809), (281, 49067), (283, 49136), (289, 49184), (296, 49271), (298, 49304), (300, 49307),

Gene: JeanGrey\_30 Start: 18216, Stop: 20945, Start Num: 108

Candidate Starts for JeanGrey\_30:

(Start: 108 @18216 has 1 MA's), (130, 18456), (149, 18618), (150, 18624), (163, 18753), (173, 18852), (175, 18933), (180, 19029), (183, 19092), (200, 19317), (225, 19635), (254, 20133), (258, 20223), (277, 20586), (280, 20673), (281, 20685), (284, 20757),

Gene: Jedediah\_101 Start: 45772, Stop: 49884, Start Num: 3

Candidate Starts for Jedediah\_101:

(Start: 3 @45772 has 184 MA's), (13, 45883), (15, 45907), (28, 46171), (29, 46177), (33, 46243), (36, 46279), (41, 46360), (43, 46396), (45, 46408), (46, 46414), (47, 46615), (58, 46996), (65, 47149), (68, 47218), (72, 47245), (77, 47326), (81, 47368), (83, 47404), (84, 47416), (92, 47473), (94, 47506), (114, 47551), (117, 47569), (123, 47614), (127, 47662), (129, 47695), (132, 47719), (139, 47773), (142, 47800), (144, 47821), (149, 47869), (151, 47890), (164, 48016), (169, 48067), (172, 48088), (173, 48100), (184, 48142), (194, 48292), (197, 48325), (198, 48328), (203, 48379), (207, 48424), (208, 48430), (211, 48472), (216, 48535), (223, 48613), (226, 48670), (227, 48688), (230, 48721), (231, 48724), (234, 48763), (235, 48766), (238, 48847), (239, 48850), (242, 48910), (244, 48934), (247, 48985), (250, 49009), (253, 49033), (264, 49285), (267, 49342), (281, 49600), (283, 49669), (289, 49717), (296, 49804), (298, 49837), (300, 49840),

Gene: Jemmno\_98 Start: 45219, Stop: 49331, Start Num: 3

Candidate Starts for Jemmno\_98:

(Start: 3 @45219 has 184 MA's), (13, 45330), (15, 45354), (28, 45618), (29, 45624), (33, 45690), (36, 45726), (41, 45807), (43, 45843), (45, 45855), (46, 45861), (47, 46062), (58, 46443), (65, 46596), (68, 46665), (72, 46692), (77, 46773), (81, 46815), (83, 46851), (84, 46863), (92, 46920), (94, 46953), (114, 46998), (117, 47016), (123, 47061), (127, 47109), (129, 47142), (132, 47166), (139, 47220), (142, 47247), (144, 47268), (149, 47316), (151, 47337), (164, 47463), (169, 47514), (172, 47535), (173, 47547), (184, 47589), (194, 47739), (197, 47772), (198, 47775), (203, 47826), (207, 47871), (208, 47877), (211, 47919), (216, 47982), (223, 48060), (226, 48117), (227, 48135), (230, 48168), (231,

48171), (234, 48210), (235, 48213), (238, 48294), (239, 48297), (242, 48357), (244, 48381), (247, 48432), (250, 48456), (253, 48480), (264, 48732), (267, 48789), (281, 49047), (283, 49116), (289, 49164), (296, 49251), (298, 49284), (300, 49287),

Gene: Jessibeth14\_96 Start: 44856, Stop: 48965, Start Num: 3

Candidate Starts for Jessibeth14\_96:

(Start: 3 @44856 has 184 MA's), (13, 44967), (15, 44991), (28, 45255), (29, 45261), (33, 45327), (36, 45363), (41, 45444), (43, 45480), (45, 45492), (46, 45498), (47, 45699), (48, 45759), (58, 46077), (65, 46230), (68, 46299), (72, 46326), (77, 46407), (81, 46449), (83, 46485), (84, 46497), (92, 46554), (94, 46587), (114, 46632), (117, 46650), (123, 46695), (127, 46743), (129, 46776), (139, 46854), (142, 46881), (149, 46950), (151, 46971), (164, 47097), (169, 47148), (172, 47169), (173, 47181), (184, 47223), (194, 47373), (197, 47406), (198, 47409), (203, 47460), (207, 47505), (208, 47511), (211, 47553), (216, 47616), (223, 47694), (226, 47751), (227, 47769), (230, 47802), (231, 47805), (234, 47844), (235, 47847), (238, 47928), (239, 47931), (242, 47991), (244, 48015), (247, 48066), (250, 48090), (253, 48114), (264, 48366), (267, 48423), (281, 48681), (283, 48750), (289, 48798), (296, 48885), (298, 48918), (300, 48921),

Gene: Jezreel\_97 Start: 44934, Stop: 49103, Start Num: 3

Candidate Starts for Jezreel\_97:

(Start: 3 @44934 has 184 MA's), (13, 45045), (15, 45069), (28, 45333), (29, 45339), (33, 45405), (36, 45441), (41, 45522), (43, 45558), (45, 45570), (46, 45576), (47, 45777), (48, 45837), (62, 46227), (64, 46263), (67, 46383), (70, 46401), (77, 46497), (80, 46530), (81, 46539), (85, 46635), (89, 46653), (94, 46725), (114, 46770), (117, 46788), (123, 46833), (127, 46881), (129, 46914), (132, 46938), (139, 46992), (142, 47019), (144, 47040), (149, 47088), (151, 47109), (164, 47235), (169, 47286), (172, 47307), (173, 47319), (184, 47361), (194, 47511), (197, 47544), (198, 47547), (203, 47598), (207, 47643), (208, 47649), (211, 47691), (216, 47754), (223, 47832), (226, 47889), (227, 47907), (230, 47940), (231, 47943), (234, 47982), (235, 47985), (238, 48066), (239, 48069), (242, 48129), (244, 48153), (247, 48204), (250, 48228), (253, 48252), (264, 48504), (267, 48561), (281, 48819), (283, 48888), (289, 48936), (296, 49023), (298, 49056), (300, 49059),

Gene: JigglyPuff\_105 Start: 47434, Stop: 51294, Start Num: 3

Candidate Starts for JigglyPuff\_105:

(Start: 3 @47434 has 184 MA's), (13, 47545), (15, 47569), (28, 47833), (29, 47839), (33, 47905), (36, 47941), (41, 48022), (43, 48058), (45, 48070), (46, 48076), (62, 48418), (64, 48454), (67, 48574), (70, 48592), (77, 48688), (80, 48721), (81, 48730), (85, 48826), (89, 48844), (94, 48916), (97, 48961), (102, 48979), (105, 49024), (110, 49072), (113, 49105), (122, 49129), (129, 49183), (138, 49210), (144, 49231), (149, 49279), (151, 49300), (164, 49426), (169, 49477), (172, 49498), (173, 49510), (184, 49552), (194, 49702), (197, 49735), (198, 49738), (203, 49789), (207, 49834), (208, 49840), (211, 49882), (216, 49945), (223, 50023), (226, 50080), (227, 50098), (230, 50131), (231, 50134), (234, 50173), (235, 50176), (238, 50257), (239, 50260), (242, 50320), (244, 50344), (247, 50395), (250, 50419), (253, 50443), (264, 50695), (267, 50752), (281, 51010), (283, 51079), (289, 51127), (296, 51214), (298, 51247), (300, 51250),

Gene: JulietS\_91 Start: 42782, Stop: 46642, Start Num: 3

Candidate Starts for JulietS\_91:

(Start: 3 @42782 has 184 MA's), (13, 42893), (15, 42917), (28, 43181), (29, 43187), (33, 43253), (36, 43289), (41, 43370), (43, 43406), (45, 43418), (46, 43424), (60, 43745), (62, 43766), (64, 43802), (67, 43922), (77, 44036), (80, 44069), (81, 44078), (85, 44174), (89, 44192), (94, 44264), (97, 44309), (102, 44327), (105, 44372), (110, 44420), (113, 44453), (122, 44477), (129, 44531), (138, 44558), (144, 44579), (149, 44627), (151, 44648), (164, 44774), (169, 44825), (172, 44846), (173, 44858), (184, 44900), (194, 45050), (197, 45083), (198, 45086), (203, 45137), (207, 45182), (208, 45188), (211, 45230), (216, 45293), (223, 45371), (226, 45428), (227, 45446), (230, 45479), (231, 45482), (234, 45521), (235, 45524), (238, 45605), (239, 45608), (242, 45668), (244, 45692), (247, 45743), (250,

45767), (253, 45791), (264, 46043), (267, 46100), (281, 46358), (283, 46427), (289, 46475), (296, 46562), (298, 46595), (300, 46598),

Gene: JustHall\_94 Start: 44391, Stop: 48503, Start Num: 3

Candidate Starts for JustHall\_94:

(Start: 3 @44391 has 184 MA's), (13, 44502), (15, 44526), (28, 44790), (29, 44796), (33, 44862), (36, 44898), (41, 44979), (43, 45015), (45, 45027), (46, 45033), (47, 45234), (58, 45615), (65, 45768), (68, 45837), (72, 45864), (77, 45945), (81, 45987), (83, 46023), (84, 46035), (92, 46092), (94, 46125), (114, 46170), (117, 46188), (123, 46233), (127, 46281), (129, 46314), (132, 46338), (139, 46392), (142, 46419), (144, 46440), (149, 46488), (151, 46509), (164, 46635), (169, 46686), (172, 46707), (173, 46719), (184, 46761), (194, 46911), (197, 46944), (198, 46947), (203, 46998), (207, 47043), (208, 47049), (211, 47091), (216, 47154), (223, 47232), (226, 47289), (227, 47307), (230, 47340), (231, 47343), (234, 47382), (235, 47385), (238, 47466), (239, 47469), (242, 47529), (244, 47553), (247, 47604), (250, 47628), (253, 47652), (264, 47904), (267, 47961), (281, 48219), (283, 48288), (289, 48336), (296, 48423), (298, 48456), (300, 48459),

Gene: Kamryn\_97 Start: 45595, Stop: 49764, Start Num: 3

Candidate Starts for Kamryn\_97:

(Start: 3 @45595 has 184 MA's), (13, 45706), (15, 45730), (28, 45994), (29, 46000), (33, 46066), (36, 46102), (41, 46183), (43, 46219), (45, 46231), (46, 46237), (47, 46438), (48, 46498), (62, 46888), (64, 46924), (67, 47044), (70, 47062), (77, 47158), (80, 47191), (81, 47200), (85, 47296), (89, 47314), (94, 47386), (114, 47431), (117, 47449), (123, 47494), (127, 47542), (129, 47575), (132, 47599), (139, 47653), (142, 47680), (144, 47701), (149, 47749), (151, 47770), (164, 47896), (169, 47947), (172, 47968), (173, 47980), (184, 48022), (194, 48172), (197, 48205), (198, 48208), (203, 48259), (207, 48304), (208, 48310), (211, 48352), (216, 48415), (223, 48493), (226, 48550), (227, 48568), (230, 48601), (231, 48604), (234, 48643), (235, 48646), (238, 48727), (239, 48730), (242, 48790), (244, 48814), (247, 48865), (250, 48889), (253, 48913), (264, 49165), (267, 49222), (281, 49480), (283, 49549), (289, 49597), (296, 49684), (298, 49717), (300, 49720),

Gene: Kboogie\_101 Start: 44035, Stop: 48144, Start Num: 3

Candidate Starts for Kboogie\_101:

(Start: 3 @44035 has 184 MA's), (13, 44146), (15, 44170), (28, 44434), (29, 44440), (33, 44506), (36, 44542), (41, 44623), (43, 44659), (45, 44671), (46, 44677), (47, 44878), (48, 44938), (58, 45256), (65, 45409), (68, 45478), (72, 45505), (77, 45586), (81, 45628), (83, 45664), (84, 45676), (92, 45733), (94, 45766), (114, 45811), (117, 45829), (123, 45874), (127, 45922), (129, 45955), (139, 46033), (142, 46060), (149, 46129), (151, 46150), (164, 46276), (169, 46327), (172, 46348), (173, 46360), (184, 46402), (194, 46552), (197, 46585), (198, 46588), (203, 46639), (207, 46684), (208, 46690), (211, 46732), (216, 46795), (223, 46873), (226, 46930), (227, 46948), (230, 46981), (231, 46984), (234, 47023), (235, 47026), (238, 47107), (239, 47110), (242, 47170), (244, 47194), (247, 47245), (250, 47269), (253, 47293), (264, 47545), (267, 47602), (281, 47860), (283, 47929), (289, 47977), (296, 48064), (298, 48097), (300, 48100),

Gene: Khaleesi\_96 Start: 44818, Stop: 48927, Start Num: 3

Candidate Starts for Khaleesi\_96:

(Start: 3 @44818 has 184 MA's), (13, 44929), (15, 44953), (28, 45217), (29, 45223), (33, 45289), (36, 45325), (41, 45406), (43, 45442), (45, 45454), (46, 45460), (47, 45661), (48, 45721), (58, 46039), (65, 46192), (68, 46261), (72, 46288), (77, 46369), (81, 46411), (83, 46447), (84, 46459), (92, 46516), (94, 46549), (114, 46594), (117, 46612), (123, 46657), (127, 46705), (129, 46738), (139, 46816), (142, 46843), (149, 46912), (151, 46933), (164, 47059), (169, 47110), (172, 47131), (173, 47143), (184, 47185), (194, 47335), (197, 47368), (198, 47371), (203, 47422), (207, 47467), (208, 47473), (211, 47515), (216, 47578), (223, 47656), (226, 47713), (227, 47731), (230, 47764), (231, 47767), (234, 47806), (235, 47809), (238, 47890), (239, 47893), (242, 47953), (244, 47977), (247, 48028), (250, 48052), (253, 48076), (264, 48328), (267, 48385), (281, 48643), (283, 48712), (289, 48760), (296,

48847), (298, 48880), (300, 48883),

Gene: Koguma\_94 Start: 43002, Stop: 46862, Start Num: 3

Candidate Starts for Koguma\_94:

(Start: 3 @43002 has 184 MA's), (13, 43113), (15, 43137), (28, 43401), (29, 43407), (33, 43473), (36, 43509), (41, 43590), (45, 43638), (46, 43644), (60, 43965), (62, 43986), (64, 44022), (67, 44142), (77, 44256), (80, 44289), (81, 44298), (85, 44394), (89, 44412), (94, 44484), (97, 44529), (102, 44547), (105, 44592), (110, 44640), (113, 44673), (122, 44697), (129, 44751), (138, 44778), (144, 44799), (149, 44847), (151, 44868), (164, 44994), (169, 45045), (172, 45066), (173, 45078), (184, 45120), (194, 45270), (197, 45303), (198, 45306), (203, 45357), (207, 45402), (208, 45408), (211, 45450), (216, 45513), (223, 45591), (226, 45648), (227, 45666), (230, 45699), (231, 45702), (234, 45741), (235, 45744), (238, 45825), (239, 45828), (242, 45888), (244, 45912), (247, 45963), (250, 45987), (253, 46011), (264, 46263), (267, 46320), (281, 46578), (283, 46647), (289, 46695), (296, 46782), (298, 46815), (300, 46818),

Gene: LRRHood\_92 Start: 44821, Stop: 48681, Start Num: 3

Candidate Starts for LRRHood\_92:

(Start: 3 @44821 has 184 MA's), (13, 44932), (15, 44956), (28, 45220), (29, 45226), (33, 45292), (36, 45328), (41, 45409), (43, 45445), (45, 45457), (46, 45463), (60, 45784), (62, 45805), (64, 45841), (67, 45961), (77, 46075), (80, 46108), (81, 46117), (85, 46213), (89, 46231), (94, 46303), (97, 46348), (102, 46366), (105, 46411), (110, 46459), (113, 46492), (122, 46516), (129, 46570), (138, 46597), (144, 46618), (149, 46666), (151, 46687), (164, 46813), (169, 46864), (172, 46885), (173, 46897), (184, 46939), (194, 47089), (197, 47122), (198, 47125), (203, 47176), (207, 47221), (208, 47227), (211, 47269), (216, 47332), (223, 47410), (226, 47467), (227, 47485), (230, 47518), (231, 47521), (234, 47560), (235, 47563), (238, 47644), (239, 47647), (242, 47707), (244, 47731), (247, 47782), (250, 47806), (253, 47830), (264, 48082), (267, 48139), (281, 48397), (283, 48466), (289, 48514), (296, 48601), (298, 48634), (300, 48637),

Gene: Labradorite\_97 Start: 44170, Stop: 48282, Start Num: 3

Candidate Starts for Labradorite\_97:

(Start: 3 @44170 has 184 MA's), (13, 44281), (15, 44305), (28, 44569), (29, 44575), (33, 44641), (36, 44677), (41, 44758), (43, 44794), (45, 44806), (46, 44812), (47, 45013), (58, 45394), (65, 45547), (68, 45616), (72, 45643), (77, 45724), (81, 45766), (83, 45802), (84, 45814), (92, 45871), (94, 45904), (114, 45949), (117, 45967), (123, 46012), (127, 46060), (129, 46093), (132, 46117), (139, 46171), (142, 46198), (144, 46219), (149, 46267), (151, 46288), (164, 46414), (169, 46465), (172, 46486), (173, 46498), (184, 46540), (194, 46690), (197, 46723), (198, 46726), (203, 46777), (207, 46822), (208, 46828), (211, 46870), (216, 46933), (223, 47011), (226, 47068), (227, 47086), (230, 47119), (231, 47122), (234, 47161), (235, 47164), (238, 47245), (239, 47248), (242, 47308), (244, 47332), (247, 47383), (250, 47407), (253, 47431), (264, 47683), (267, 47740), (281, 47998), (283, 48067), (289, 48115), (296, 48202), (298, 48235), (300, 48238),

Gene: Latch\_98 Start: 44483, Stop: 48595, Start Num: 3

Candidate Starts for Latch\_98:

(Start: 3 @44483 has 184 MA's), (13, 44594), (15, 44618), (28, 44882), (29, 44888), (33, 44954), (36, 44990), (41, 45071), (43, 45107), (45, 45119), (46, 45125), (47, 45326), (58, 45707), (65, 45860), (68, 45929), (72, 45956), (77, 46037), (81, 46079), (83, 46115), (84, 46127), (92, 46184), (94, 46217), (114, 46262), (117, 46280), (123, 46325), (127, 46373), (129, 46406), (132, 46430), (139, 46484), (142, 46511), (144, 46532), (149, 46580), (151, 46601), (164, 46727), (169, 46778), (172, 46799), (173, 46811), (184, 46853), (194, 47003), (197, 47036), (198, 47039), (203, 47090), (207, 47135), (208, 47141), (211, 47183), (216, 47246), (223, 47324), (226, 47381), (227, 47399), (230, 47432), (231, 47435), (234, 47474), (235, 47477), (238, 47558), (239, 47561), (242, 47621), (244, 47645), (247, 47696), (250, 47720), (253, 47744), (264, 47996), (267, 48053), (281, 48311), (283, 48380), (289, 48428), (296, 48515), (298, 48548), (300, 48551),

Gene: Lee7\_95 Start: 45452, Stop: 49561, Start Num: 3

Candidate Starts for Lee7\_95:

(Start: 3 @45452 has 184 MA's), (13, 45563), (15, 45587), (28, 45851), (29, 45857), (33, 45923), (36, 45959), (41, 46040), (43, 46076), (45, 46088), (46, 46094), (47, 46295), (48, 46355), (58, 46673), (65, 46826), (68, 46895), (72, 46922), (77, 47003), (81, 47045), (83, 47081), (84, 47093), (92, 47150), (94, 47183), (114, 47228), (117, 47246), (123, 47291), (127, 47339), (129, 47372), (139, 47450), (142, 47477), (149, 47546), (151, 47567), (164, 47693), (169, 47744), (172, 47765), (173, 47777), (184, 47819), (194, 47969), (197, 48002), (198, 48005), (203, 48056), (207, 48101), (208, 48107), (211, 48149), (216, 48212), (223, 48290), (226, 48347), (227, 48365), (230, 48398), (231, 48401), (234, 48440), (235, 48443), (238, 48524), (239, 48527), (242, 48587), (244, 48611), (247, 48662), (250, 48686), (253, 48710), (264, 48962), (267, 49019), (281, 49277), (283, 49346), (289, 49394), (296, 49481), (298, 49514), (300, 49517),

Gene: Lethe\_96 Start: 45266, Stop: 49126, Start Num: 3

Candidate Starts for Lethe\_96:

(Start: 3 @45266 has 184 MA's), (13, 45377), (15, 45401), (28, 45665), (29, 45671), (33, 45737), (36, 45773), (41, 45854), (43, 45890), (45, 45902), (46, 45908), (50, 46040), (60, 46229), (62, 46250), (64, 46286), (67, 46406), (77, 46520), (80, 46553), (81, 46562), (85, 46658), (89, 46676), (94, 46748), (97, 46793), (102, 46811), (105, 46856), (110, 46904), (113, 46937), (122, 46961), (129, 47015), (138, 47042), (144, 47063), (149, 47111), (151, 47132), (164, 47258), (169, 47309), (172, 47330), (173, 47342), (184, 47384), (194, 47534), (197, 47567), (198, 47570), (203, 47621), (207, 47666), (208, 47672), (211, 47714), (216, 47777), (223, 47855), (226, 47912), (227, 47930), (230, 47963), (231, 47966), (234, 48005), (235, 48008), (238, 48089), (239, 48092), (242, 48152), (244, 48176), (247, 48227), (250, 48251), (253, 48275), (264, 48527), (267, 48584), (281, 48842), (283, 48911), (289, 48959), (296, 49046), (298, 49079), (300, 49082),

Gene: LifeSavor\_97 Start: 45171, Stop: 49283, Start Num: 3

Candidate Starts for LifeSavor\_97:

(Start: 3 @45171 has 184 MA's), (13, 45282), (15, 45306), (28, 45570), (29, 45576), (33, 45642), (36, 45678), (41, 45759), (43, 45795), (45, 45807), (46, 45813), (47, 46014), (58, 46395), (65, 46548), (68, 46617), (72, 46644), (77, 46725), (81, 46767), (83, 46803), (84, 46815), (92, 46872), (94, 46905), (114, 46950), (117, 46968), (123, 47013), (127, 47061), (129, 47094), (132, 47118), (139, 47172), (142, 47199), (144, 47220), (149, 47268), (151, 47289), (164, 47415), (169, 47466), (172, 47487), (173, 47499), (184, 47541), (194, 47691), (197, 47724), (198, 47727), (203, 47778), (207, 47823), (208, 47829), (211, 47871), (216, 47934), (223, 48012), (226, 48069), (227, 48087), (230, 48120), (231, 48123), (234, 48162), (235, 48165), (238, 48246), (239, 48249), (242, 48309), (244, 48333), (247, 48384), (250, 48408), (253, 48432), (264, 48684), (267, 48741), (281, 48999), (283, 49068), (289, 49116), (296, 49203), (298, 49236), (300, 49239),

Gene: LinStu\_97 Start: 45409, Stop: 49269, Start Num: 3

Candidate Starts for LinStu\_97:

(Start: 3 @45409 has 184 MA's), (13, 45520), (15, 45544), (28, 45808), (29, 45814), (33, 45880), (36, 45916), (41, 45997), (43, 46033), (45, 46045), (46, 46051), (60, 46372), (62, 46393), (64, 46429), (67, 46549), (77, 46663), (80, 46696), (81, 46705), (85, 46801), (89, 46819), (94, 46891), (97, 46936), (102, 46954), (105, 46999), (110, 47047), (113, 47080), (122, 47104), (129, 47158), (138, 47185), (144, 47206), (149, 47254), (151, 47275), (164, 47401), (169, 47452), (172, 47473), (173, 47485), (184, 47527), (194, 47677), (197, 47710), (198, 47713), (203, 47764), (207, 47809), (208, 47815), (211, 47857), (216, 47920), (223, 47998), (226, 48055), (227, 48073), (230, 48106), (231, 48109), (234, 48148), (235, 48151), (238, 48232), (239, 48235), (242, 48295), (244, 48319), (247, 48370), (250, 48394), (253, 48418), (264, 48670), (267, 48727), (281, 48985), (283, 49054), (289, 49102), (296, 49189), (298, 49222), (300, 49225),

Gene: Littleton\_97 Start: 44390, Stop: 48502, Start Num: 3

Candidate Starts for Littleton\_97:

(Start: 3 @44390 has 184 MA's), (13, 44501), (15, 44525), (28, 44789), (29, 44795), (33, 44861), (36, 44897), (41, 44978), (43, 45014), (45, 45026), (46, 45032), (47, 45233), (58, 45614), (65, 45767), (68, 45836), (72, 45863), (77, 45944), (81, 45986), (83, 46022), (84, 46034), (92, 46091), (94, 46124), (114, 46169), (117, 46187), (123, 46232), (127, 46280), (129, 46313), (139, 46391), (142, 46418), (144, 46439), (149, 46487), (151, 46508), (164, 46634), (169, 46685), (172, 46706), (173, 46718), (184, 46760), (194, 46910), (197, 46943), (198, 46946), (203, 46997), (207, 47042), (208, 47048), (211, 47090), (216, 47153), (223, 47231), (226, 47288), (227, 47306), (230, 47339), (231, 47342), (234, 47381), (235, 47384), (238, 47465), (239, 47468), (242, 47528), (244, 47552), (247, 47603), (250, 47627), (253, 47651), (264, 47903), (267, 47960), (281, 48218), (283, 48287), (289, 48335), (296, 48422), (298, 48455), (300, 48458),

Gene: Loanshark\_97 Start: 45041, Stop: 49150, Start Num: 3

Candidate Starts for Loanshark\_97:

(Start: 3 @45041 has 184 MA's), (13, 45152), (15, 45176), (28, 45440), (29, 45446), (33, 45512), (36, 45548), (41, 45629), (43, 45665), (45, 45677), (46, 45683), (47, 45884), (48, 45944), (58, 46262), (65, 46415), (68, 46484), (72, 46511), (77, 46592), (81, 46634), (83, 46670), (84, 46682), (92, 46739), (94, 46772), (114, 46817), (117, 46835), (123, 46880), (127, 46928), (129, 46961), (139, 47039), (142, 47066), (149, 47135), (151, 47156), (164, 47282), (169, 47333), (172, 47354), (173, 47366), (184, 47408), (194, 47558), (197, 47591), (198, 47594), (203, 47645), (207, 47690), (208, 47696), (211, 47738), (216, 47801), (223, 47879), (226, 47936), (227, 47954), (230, 47987), (231, 47990), (234, 48029), (235, 48032), (238, 48113), (239, 48116), (242, 48176), (244, 48200), (247, 48251), (250, 48275), (253, 48299), (264, 48551), (267, 48608), (281, 48866), (283, 48935), (289, 48983), (296, 49070), (298, 49103), (300, 49106),

Gene: LolaVinca\_99 Start: 46177, Stop: 50289, Start Num: 3

Candidate Starts for LolaVinca\_99:

(Start: 3 @46177 has 184 MA's), (13, 46288), (15, 46312), (28, 46576), (29, 46582), (33, 46648), (36, 46684), (41, 46765), (43, 46801), (45, 46813), (46, 46819), (47, 47020), (58, 47401), (65, 47554), (68, 47623), (72, 47650), (77, 47731), (81, 47773), (83, 47809), (84, 47821), (92, 47878), (94, 47911), (114, 47956), (117, 47974), (123, 48019), (127, 48067), (129, 48100), (132, 48124), (139, 48178), (142, 48205), (144, 48226), (149, 48274), (151, 48295), (164, 48421), (169, 48472), (172, 48493), (173, 48505), (184, 48547), (194, 48697), (197, 48730), (198, 48733), (203, 48784), (207, 48829), (208, 48835), (211, 48877), (216, 48940), (223, 49018), (226, 49075), (227, 49093), (230, 49126), (231, 49129), (234, 49168), (235, 49171), (238, 49252), (239, 49255), (242, 49315), (244, 49339), (247, 49390), (250, 49414), (253, 49438), (264, 49690), (267, 49747), (281, 50005), (283, 50074), (289, 50122), (296, 50209), (298, 50242), (300, 50245),

Gene: LookingGlass\_98 Start: 45344, Stop: 49204, Start Num: 3

Candidate Starts for LookingGlass\_98:

(Start: 3 @45344 has 184 MA's), (13, 45455), (15, 45479), (28, 45743), (29, 45749), (33, 45815), (36, 45851), (41, 45932), (43, 45968), (45, 45980), (46, 45986), (60, 46307), (62, 46328), (64, 46364), (67, 46484), (70, 46502), (77, 46598), (80, 46631), (81, 46640), (85, 46736), (89, 46754), (94, 46826), (97, 46871), (102, 46889), (105, 46934), (110, 46982), (113, 47015), (122, 47039), (129, 47093), (138, 47120), (144, 47141), (149, 47189), (151, 47210), (164, 47336), (169, 47387), (172, 47408), (173, 47420), (184, 47462), (194, 47612), (197, 47645), (198, 47648), (203, 47699), (207, 47744), (208, 47750), (211, 47792), (216, 47855), (223, 47933), (226, 47990), (227, 48008), (230, 48041), (231, 48044), (234, 48083), (235, 48086), (238, 48167), (239, 48170), (242, 48230), (244, 48254), (247, 48305), (250, 48329), (253, 48353), (264, 48605), (267, 48662), (281, 48920), (283, 48989), (289, 49037), (296, 49124), (298, 49157), (300, 49160),

Gene: LordLeafolot\_103 Start: 47141, Stop: 51253, Start Num: 3

Candidate Starts for LordLeafolot\_103:

(Start: 3 @47141 has 184 MA's), (13, 47252), (15, 47276), (28, 47540), (29, 47546), (33, 47612), (36, 47648), (41, 47729), (43, 47765), (45, 47777), (46, 47783), (47, 47984), (58, 48365), (65, 48518), (68, 48587), (72, 48614), (77, 48695), (81, 48737), (83, 48773), (84, 48785), (92, 48842), (94, 48875), (114, 48920), (117, 48938), (123, 48983), (127, 49031), (129, 49064), (132, 49088), (139, 49142), (142, 49169), (144, 49190), (149, 49238), (151, 49259), (164, 49385), (169, 49436), (172, 49457), (173, 49469), (184, 49511), (194, 49661), (197, 49694), (198, 49697), (203, 49748), (207, 49793), (208, 49799), (211, 49841), (216, 49904), (223, 49982), (226, 50039), (227, 50057), (230, 50090), (231, 50093), (234, 50132), (235, 50135), (238, 50216), (239, 50219), (242, 50279), (244, 50303), (247, 50354), (250, 50378), (253, 50402), (264, 50654), (267, 50711), (281, 50969), (283, 51038), (289, 51086), (296, 51173), (298, 51206), (300, 51209),

Gene: Lukilu\_88 Start: 44682, Stop: 48791, Start Num: 3

Candidate Starts for Lukilu\_88:

(Start: 3 @44682 has 184 MA's), (13, 44793), (15, 44817), (28, 45081), (29, 45087), (33, 45153), (36, 45189), (41, 45270), (43, 45306), (45, 45318), (46, 45324), (47, 45525), (48, 45585), (58, 45903), (65, 46056), (68, 46125), (72, 46152), (77, 46233), (81, 46275), (83, 46311), (84, 46323), (92, 46380), (94, 46413), (114, 46458), (117, 46476), (123, 46521), (127, 46569), (129, 46602), (139, 46680), (142, 46707), (149, 46776), (151, 46797), (164, 46923), (169, 46974), (172, 46995), (173, 47007), (184, 47049), (194, 47199), (197, 47232), (198, 47235), (203, 47286), (207, 47331), (208, 47337), (211, 47379), (216, 47442), (223, 47520), (226, 47577), (227, 47595), (230, 47628), (231, 47631), (234, 47670), (235, 47673), (238, 47754), (239, 47757), (242, 47817), (244, 47841), (247, 47892), (250, 47916), (253, 47940), (264, 48192), (267, 48249), (281, 48507), (283, 48576), (289, 48624), (296, 48711), (298, 48744), (300, 48747),

Gene: Lunareta\_96 Start: 46697, Stop: 50557, Start Num: 3

Candidate Starts for Lunareta\_96:

(Start: 3 @46697 has 184 MA's), (13, 46808), (15, 46832), (28, 47096), (29, 47102), (33, 47168), (36, 47204), (41, 47285), (43, 47321), (45, 47333), (46, 47339), (60, 47660), (62, 47681), (64, 47717), (67, 47837), (77, 47951), (80, 47984), (81, 47993), (85, 48089), (89, 48107), (94, 48179), (97, 48224), (102, 48242), (105, 48287), (110, 48335), (113, 48368), (122, 48392), (129, 48446), (138, 48473), (144, 48494), (149, 48542), (151, 48563), (164, 48689), (169, 48740), (172, 48761), (173, 48773), (184, 48815), (194, 48965), (197, 48998), (198, 49001), (203, 49052), (207, 49097), (208, 49103), (211, 49145), (216, 49208), (223, 49286), (226, 49343), (227, 49361), (230, 49394), (231, 49397), (234, 49436), (235, 49439), (238, 49520), (239, 49523), (242, 49583), (244, 49607), (247, 49658), (250, 49682), (253, 49706), (264, 49958), (267, 50015), (281, 50273), (283, 50342), (289, 50390), (296, 50477), (298, 50510), (300, 50513),

Gene: Maby2021\_97 Start: 44916, Stop: 49025, Start Num: 3

Candidate Starts for Maby2021\_97:

(Start: 3 @44916 has 184 MA's), (13, 45027), (15, 45051), (28, 45315), (29, 45321), (33, 45387), (36, 45423), (41, 45504), (43, 45540), (45, 45552), (46, 45558), (47, 45759), (48, 45819), (58, 46137), (65, 46290), (68, 46359), (72, 46386), (77, 46467), (81, 46509), (83, 46545), (84, 46557), (92, 46614), (94, 46647), (114, 46692), (117, 46710), (123, 46755), (127, 46803), (129, 46836), (139, 46914), (142, 46941), (149, 47010), (151, 47031), (164, 47157), (169, 47208), (172, 47229), (173, 47241), (184, 47283), (194, 47433), (197, 47466), (198, 47469), (203, 47520), (207, 47565), (208, 47571), (211, 47613), (216, 47676), (223, 47754), (226, 47811), (227, 47829), (230, 47862), (231, 47865), (234, 47904), (235, 47907), (238, 47988), (239, 47991), (242, 48051), (244, 48075), (247, 48126), (250, 48150), (253, 48174), (264, 48426), (267, 48483), (281, 48741), (283, 48810), (289, 48858), (296, 48945), (298, 48978), (300, 48981),

Gene: Mangeria\_97 Start: 45021, Stop: 49247, Start Num: 3

Candidate Starts for Mangeria\_97:

(Start: 3 @45021 has 184 MA's), (13, 45132), (15, 45156), (28, 45420), (29, 45426), (33, 45492), (36, 45528), (41, 45609), (43, 45645), (45, 45657), (46, 45663), (62, 46005), (64, 46041), (67, 46161), (70, 46179), (77, 46275), (80, 46308), (81, 46317), (85, 46413), (89, 46431), (94, 46503), (98, 46623), (100, 46686), (101, 46722), (104, 46770), (106, 46821), (107, 46827), (109, 46830), (111, 46866), (114, 46914), (117, 46932), (123, 46977), (127, 47025), (129, 47058), (132, 47082), (139, 47136), (142, 47163), (144, 47184), (149, 47232), (151, 47253), (164, 47379), (169, 47430), (172, 47451), (173, 47463), (184, 47505), (194, 47655), (197, 47688), (198, 47691), (203, 47742), (207, 47787), (208, 47793), (211, 47835), (216, 47898), (223, 47976), (226, 48033), (227, 48051), (230, 48084), (231, 48087), (234, 48126), (235, 48129), (238, 48210), (239, 48213), (242, 48273), (244, 48297), (247, 48348), (250, 48372), (253, 48396), (264, 48648), (267, 48705), (281, 48963), (283, 49032), (289, 49080), (296, 49167), (298, 49200), (300, 49203),

Gene: Matsumoto\_96 Start: 44799, Stop: 48911, Start Num: 3

Candidate Starts for Matsumoto\_96:

(Start: 3 @44799 has 184 MA's), (13, 44910), (15, 44934), (28, 45198), (29, 45204), (33, 45270), (36, 45306), (41, 45387), (43, 45423), (45, 45435), (46, 45441), (47, 45642), (58, 46023), (65, 46176), (68, 46245), (72, 46272), (77, 46353), (81, 46395), (83, 46431), (84, 46443), (92, 46500), (94, 46533), (114, 46578), (117, 46596), (123, 46641), (127, 46689), (129, 46722), (132, 46746), (139, 46800), (142, 46827), (144, 46848), (149, 46896), (151, 46917), (164, 47043), (169, 47094), (172, 47115), (173, 47127), (184, 47169), (194, 47319), (197, 47352), (198, 47355), (203, 47406), (207, 47451), (208, 47457), (211, 47499), (216, 47562), (223, 47640), (226, 47697), (227, 47715), (230, 47748), (231, 47751), (234, 47790), (235, 47793), (238, 47874), (239, 47877), (242, 47937), (244, 47961), (247, 48012), (250, 48036), (253, 48060), (264, 48312), (267, 48369), (281, 48627), (283, 48696), (289, 48744), (296, 48831), (298, 48864), (300, 48867),

Gene: Maturis\_95 Start: 45195, Stop: 49055, Start Num: 3

Candidate Starts for Maturis\_95:

(Start: 3 @45195 has 184 MA's), (13, 45306), (15, 45330), (28, 45594), (29, 45600), (33, 45666), (36, 45702), (41, 45783), (43, 45819), (45, 45831), (46, 45837), (60, 46158), (62, 46179), (64, 46215), (67, 46335), (77, 46449), (80, 46482), (81, 46491), (85, 46587), (89, 46605), (94, 46677), (97, 46722), (102, 46740), (105, 46785), (110, 46833), (113, 46866), (122, 46890), (129, 46944), (138, 46971), (144, 46992), (149, 47040), (151, 47061), (164, 47187), (169, 47238), (172, 47259), (173, 47271), (184, 47313), (194, 47463), (197, 47496), (198, 47499), (203, 47550), (207, 47595), (208, 47601), (211, 47643), (216, 47706), (223, 47784), (226, 47841), (227, 47859), (230, 47892), (231, 47895), (234, 47934), (235, 47937), (238, 48018), (239, 48021), (242, 48081), (244, 48105), (247, 48156), (250, 48180), (253, 48204), (264, 48456), (267, 48513), (281, 48771), (283, 48840), (289, 48888), (296, 48975), (298, 49008), (300, 49011),

Gene: McGee\_99 Start: 43667, Stop: 47779, Start Num: 3

Candidate Starts for McGee\_99:

(Start: 3 @43667 has 184 MA's), (13, 43778), (15, 43802), (28, 44066), (29, 44072), (33, 44138), (36, 44174), (41, 44255), (43, 44291), (45, 44303), (46, 44309), (47, 44510), (58, 44891), (65, 45044), (68, 45113), (72, 45140), (77, 45221), (81, 45263), (83, 45299), (84, 45311), (92, 45368), (94, 45401), (114, 45446), (117, 45464), (123, 45509), (127, 45557), (129, 45590), (132, 45614), (139, 45668), (142, 45695), (144, 45716), (149, 45764), (151, 45785), (164, 45911), (169, 45962), (172, 45983), (173, 45995), (184, 46037), (194, 46187), (197, 46220), (198, 46223), (203, 46274), (207, 46319), (208, 46325), (211, 46367), (216, 46430), (223, 46508), (226, 46565), (227, 46583), (230, 46616), (231, 46619), (234, 46658), (235, 46661), (238, 46742), (239, 46745), (242, 46805), (244, 46829), (247, 46880), (250, 46904), (253, 46928), (264, 47180), (267, 47237), (281, 47495), (283, 47564), (289, 47612), (296, 47699), (298, 47732), (300, 47735),

Gene: McWolfish\_95 Start: 44641, Stop: 48810, Start Num: 3

Candidate Starts for McWolfish\_95:

(Start: 3 @44641 has 184 MA's), (13, 44752), (15, 44776), (28, 45040), (29, 45046), (33, 45112), (36, 45148), (41, 45229), (43, 45265), (45, 45277), (46, 45283), (47, 45484), (48, 45544), (60, 45913), (62, 45934), (64, 45970), (67, 46090), (77, 46204), (80, 46237), (81, 46246), (85, 46342), (89, 46360), (94, 46432), (114, 46477), (117, 46495), (123, 46540), (127, 46588), (129, 46621), (132, 46645), (139, 46699), (142, 46726), (144, 46747), (149, 46795), (151, 46816), (164, 46942), (169, 46993), (172, 47014), (173, 47026), (184, 47068), (194, 47218), (197, 47251), (198, 47254), (203, 47305), (207, 47350), (208, 47356), (211, 47398), (216, 47461), (223, 47539), (226, 47596), (227, 47614), (230, 47647), (231, 47650), (234, 47689), (235, 47692), (238, 47773), (239, 47776), (242, 47836), (244, 47860), (247, 47911), (250, 47935), (253, 47959), (264, 48211), (267, 48268), (281, 48526), (283, 48595), (289, 48643), (296, 48730), (298, 48763), (300, 48766),

Gene: Megamind\_96 Start: 44737, Stop: 48846, Start Num: 3

Candidate Starts for Megamind\_96:

(Start: 3 @44737 has 184 MA's), (13, 44848), (15, 44872), (28, 45136), (29, 45142), (33, 45208), (36, 45244), (41, 45325), (43, 45361), (45, 45373), (46, 45379), (47, 45580), (48, 45640), (58, 45958), (65, 46111), (68, 46180), (72, 46207), (77, 46288), (81, 46330), (83, 46366), (84, 46378), (92, 46435), (94, 46468), (114, 46513), (117, 46531), (123, 46576), (127, 46624), (129, 46657), (139, 46735), (142, 46762), (149, 46831), (151, 46852), (164, 46978), (169, 47029), (172, 47050), (173, 47062), (184, 47104), (194, 47254), (197, 47287), (198, 47290), (203, 47341), (207, 47386), (208, 47392), (211, 47434), (216, 47497), (223, 47575), (226, 47632), (227, 47650), (230, 47683), (231, 47686), (234, 47725), (235, 47728), (238, 47809), (239, 47812), (242, 47872), (244, 47896), (247, 47947), (250, 47971), (253, 47995), (264, 48247), (267, 48304), (281, 48562), (283, 48631), (289, 48679), (296, 48766), (298, 48799), (300, 48802),

Gene: Melpomini\_91 Start: 42444, Stop: 46553, Start Num: 3

Candidate Starts for Melpomini\_91:

(Start: 3 @42444 has 184 MA's), (13, 42555), (15, 42579), (28, 42843), (29, 42849), (33, 42915), (36, 42951), (41, 43032), (43, 43068), (45, 43080), (46, 43086), (47, 43287), (48, 43347), (58, 43665), (65, 43818), (68, 43887), (72, 43914), (77, 43995), (81, 44037), (83, 44073), (84, 44085), (92, 44142), (94, 44175), (114, 44220), (117, 44238), (123, 44283), (127, 44331), (129, 44364), (139, 44442), (142, 44469), (149, 44538), (151, 44559), (164, 44685), (169, 44736), (172, 44757), (173, 44769), (184, 44811), (194, 44961), (197, 44994), (198, 44997), (203, 45048), (207, 45093), (208, 45099), (211, 45141), (216, 45204), (223, 45282), (226, 45339), (227, 45357), (230, 45390), (231, 45393), (234, 45432), (235, 45435), (238, 45516), (239, 45519), (242, 45579), (244, 45603), (247, 45654), (250, 45678), (253, 45702), (264, 45954), (267, 46011), (281, 46269), (283, 46338), (289, 46386), (296, 46473), (298, 46506), (300, 46509),

Gene: MikeLiesIn\_98 Start: 45084, Stop: 49193, Start Num: 3

Candidate Starts for MikeLiesIn\_98:

(Start: 3 @45084 has 184 MA's), (13, 45195), (15, 45219), (28, 45483), (29, 45489), (33, 45555), (36, 45591), (41, 45672), (43, 45708), (45, 45720), (46, 45726), (47, 45927), (48, 45987), (58, 46305), (65, 46458), (68, 46527), (72, 46554), (77, 46635), (81, 46677), (83, 46713), (84, 46725), (92, 46782), (94, 46815), (114, 46860), (117, 46878), (123, 46923), (127, 46971), (129, 47004), (139, 47082), (142, 47109), (149, 47178), (151, 47199), (164, 47325), (169, 47376), (172, 47397), (173, 47409), (184, 47451), (194, 47601), (197, 47634), (198, 47637), (203, 47688), (207, 47733), (208, 47739), (211, 47781), (216, 47844), (223, 47922), (226, 47979), (227, 47997), (230, 48030), (231, 48033), (234, 48072), (235, 48075), (238, 48156), (239, 48159), (242, 48219), (244, 48243), (247, 48294), (250, 48318), (253, 48342), (264, 48594), (267, 48651), (281, 48909), (283, 48978), (289, 49026), (296, 49113), (298, 49146), (300, 49149),

Gene: Mikro\_95 Start: 46159, Stop: 50328, Start Num: 3

Candidate Starts for Mikro\_95:

(Start: 3 @46159 has 184 MA's), (13, 46270), (15, 46294), (28, 46558), (29, 46564), (33, 46630), (36, 46666), (41, 46747), (43, 46783), (45, 46795), (46, 46801), (47, 47002), (48, 47062), (62, 47452), (64, 47488), (67, 47608), (70, 47626), (77, 47722), (80, 47755), (81, 47764), (85, 47860), (89, 47878), (94, 47950), (114, 47995), (117, 48013), (123, 48058), (127, 48106), (129, 48139), (132, 48163), (139, 48217), (142, 48244), (144, 48265), (149, 48313), (151, 48334), (164, 48460), (169, 48511), (172, 48532), (173, 48544), (184, 48586), (194, 48736), (197, 48769), (198, 48772), (203, 48823), (207, 48868), (208, 48874), (211, 48916), (216, 48979), (223, 49057), (226, 49114), (227, 49132), (230, 49165), (231, 49168), (234, 49207), (235, 49210), (238, 49291), (239, 49294), (242, 49354), (244, 49378), (247, 49429), (250, 49453), (253, 49477), (264, 49729), (267, 49786), (281, 50044), (283, 50113), (289, 50161), (296, 50248), (298, 50281), (300, 50284),

Gene: MoMoMixon\_98 Start: 44809, Stop: 48669, Start Num: 3

Candidate Starts for MoMoMixon\_98:

(Start: 3 @44809 has 184 MA's), (13, 44920), (15, 44944), (28, 45208), (29, 45214), (33, 45280), (36, 45316), (41, 45397), (43, 45433), (45, 45445), (46, 45451), (60, 45772), (62, 45793), (64, 45829), (67, 45949), (77, 46063), (80, 46096), (81, 46105), (85, 46201), (89, 46219), (94, 46291), (97, 46336), (102, 46354), (105, 46399), (110, 46447), (113, 46480), (122, 46504), (129, 46558), (138, 46585), (144, 46606), (149, 46654), (151, 46675), (164, 46801), (169, 46852), (172, 46873), (173, 46885), (184, 46927), (194, 47077), (197, 47110), (198, 47113), (203, 47164), (207, 47209), (208, 47215), (211, 47257), (216, 47320), (223, 47398), (226, 47455), (227, 47473), (230, 47506), (231, 47509), (234, 47548), (235, 47551), (238, 47632), (239, 47635), (242, 47695), (244, 47719), (247, 47770), (250, 47794), (253, 47818), (264, 48070), (267, 48127), (281, 48385), (283, 48454), (289, 48502), (296, 48589), (298, 48622), (300, 48625),

Gene: Moby\_88 Start: 40519, Stop: 45054, Start Num: 3

Candidate Starts for Moby\_88:

(Start: 3 @40519 has 184 MA's), (13, 40630), (15, 40654), (28, 40918), (29, 40924), (33, 40990), (36, 41026), (41, 41107), (43, 41143), (45, 41155), (46, 41161), (47, 41362), (48, 41422), (62, 41812), (64, 41848), (67, 41968), (70, 41986), (77, 42082), (80, 42115), (81, 42124), (85, 42220), (89, 42238), (94, 42310), (98, 42430), (100, 42493), (101, 42529), (104, 42577), (106, 42628), (107, 42634), (109, 42637), (111, 42673), (114, 42721), (117, 42739), (123, 42784), (127, 42832), (129, 42865), (139, 42943), (142, 42970), (149, 43039), (151, 43060), (164, 43186), (169, 43237), (172, 43258), (173, 43270), (184, 43312), (194, 43462), (197, 43495), (198, 43498), (203, 43549), (207, 43594), (208, 43600), (211, 43642), (216, 43705), (223, 43783), (226, 43840), (227, 43858), (230, 43891), (231, 43894), (234, 43933), (235, 43936), (238, 44017), (239, 44020), (242, 44080), (244, 44104), (247, 44155), (250, 44179), (253, 44203), (264, 44455), (267, 44512), (281, 44770), (283, 44839), (289, 44887), (296, 44974), (298, 45007), (300, 45010),

Gene: Moiqah\_88 Start: 40519, Stop: 45054, Start Num: 3

Candidate Starts for Moiqah\_88:

(Start: 3 @40519 has 184 MA's), (13, 40630), (15, 40654), (28, 40918), (29, 40924), (33, 40990), (36, 41026), (41, 41107), (43, 41143), (45, 41155), (46, 41161), (47, 41362), (48, 41422), (62, 41812), (64, 41848), (67, 41968), (70, 41986), (77, 42082), (80, 42115), (81, 42124), (85, 42220), (89, 42238), (94, 42310), (98, 42430), (100, 42493), (101, 42529), (104, 42577), (106, 42628), (107, 42634), (109, 42637), (111, 42673), (114, 42721), (117, 42739), (123, 42784), (127, 42832), (129, 42865), (139, 42943), (142, 42970), (149, 43039), (151, 43060), (164, 43186), (169, 43237), (172, 43258), (173, 43270), (184, 43312), (194, 43462), (197, 43495), (198, 43498), (203, 43549), (207, 43594), (208, 43600), (211, 43642), (216, 43705), (223, 43783), (226, 43840), (227, 43858), (230, 43891), (231, 43894), (234, 43933), (235, 43936), (238, 44017), (239, 44020), (242, 44080), (244, 44104), (247, 44155), (250, 44179), (253, 44203), (264, 44455), (267, 44512), (281, 44770), (283, 44839), (289, 44887), (296, 44974), (298, 45007), (300, 45010),

Gene: Momo\_97 Start: 44483, Stop: 48595, Start Num: 3

Candidate Starts for Momo\_97:

(Start: 3 @44483 has 184 MA's), (13, 44594), (15, 44618), (28, 44882), (29, 44888), (33, 44954), (36, 44990), (41, 45071), (43, 45107), (45, 45119), (46, 45125), (47, 45326), (58, 45707), (65, 45860), (68, 45929), (72, 45956), (77, 46037), (81, 46079), (83, 46115), (84, 46127), (92, 46184), (94, 46217), (114, 46262), (117, 46280), (123, 46325), (127, 46373), (129, 46406), (132, 46430), (139, 46484), (142, 46511), (144, 46532), (149, 46580), (151, 46601), (164, 46727), (169, 46778), (172, 46799), (173, 46811), (184, 46853), (194, 47003), (197, 47036), (198, 47039), (203, 47090), (207, 47135), (208, 47141), (211, 47183), (216, 47246), (223, 47324), (226, 47381), (227, 47399), (230, 47432), (231, 47435), (234, 47474), (235, 47477), (238, 47558), (239, 47561), (242, 47621), (244, 47645), (247, 47696), (250, 47720), (253, 47744), (264, 47996), (267, 48053), (281, 48311), (283, 48380), (289, 48428), (296, 48515), (298, 48548), (300, 48551),

Gene: Montpel\_96 Start: 46697, Stop: 50557, Start Num: 3

Candidate Starts for Montpel\_96:

(Start: 3 @46697 has 184 MA's), (13, 46808), (15, 46832), (28, 47096), (29, 47102), (33, 47168), (36, 47204), (41, 47285), (43, 47321), (45, 47333), (46, 47339), (60, 47660), (62, 47681), (64, 47717), (67, 47837), (77, 47951), (80, 47984), (81, 47993), (85, 48089), (89, 48107), (94, 48179), (97, 48224), (102, 48242), (105, 48287), (110, 48335), (113, 48368), (122, 48392), (129, 48446), (138, 48473), (144, 48494), (149, 48542), (151, 48563), (164, 48689), (169, 48740), (172, 48761), (173, 48773), (184, 48815), (194, 48965), (197, 48998), (198, 49001), (203, 49052), (207, 49097), (208, 49103), (211, 49145), (216, 49208), (223, 49286), (226, 49343), (227, 49361), (230, 49394), (231, 49397), (234, 49436), (235, 49439), (238, 49520), (239, 49523), (242, 49583), (244, 49607), (247, 49658), (250, 49682), (253, 49706), (264, 49958), (267, 50015), (281, 50273), (283, 50342), (289, 50390), (296, 50477), (298, 50510), (300, 50513),

Gene: Morizzled23\_97 Start: 43964, Stop: 48073, Start Num: 3

Candidate Starts for Morizzled23\_97:

(Start: 3 @43964 has 184 MA's), (13, 44075), (15, 44099), (28, 44363), (29, 44369), (33, 44435), (36, 44471), (41, 44552), (43, 44588), (45, 44600), (46, 44606), (47, 44807), (48, 44867), (58, 45185), (65, 45338), (68, 45407), (72, 45434), (77, 45515), (81, 45557), (83, 45593), (84, 45605), (92, 45662), (94, 45695), (114, 45740), (117, 45758), (123, 45803), (127, 45851), (129, 45884), (139, 45962), (142, 45989), (149, 46058), (151, 46079), (164, 46205), (169, 46256), (172, 46277), (173, 46289), (184, 46331), (194, 46481), (197, 46514), (198, 46517), (203, 46568), (207, 46613), (208, 46619), (211, 46661), (216, 46724), (223, 46802), (226, 46859), (227, 46877), (230, 46910), (231, 46913), (234, 46952), (235, 46955), (238, 47036), (239, 47039), (242, 47099), (244, 47123), (247, 47174), (250, 47198), (253, 47222), (264, 47474), (267, 47531), (281, 47789), (283, 47858), (289, 47906), (296, 47993), (298, 48026), (300, 48029),

Gene: Myrna\_97 Start: 46700, Stop: 50335, Start Num: 3

Candidate Starts for Myrna\_97:

(Start: 3 @46700 has 184 MA's), (6, 46721), (7, 46724), (15, 46835), (20, 46931), (22, 46979), (25, 47048), (29, 47105), (32, 47162), (33, 47171), (34, 47183), (38, 47237), (43, 47324), (64, 47552), (67, 47663), (74, 47729), (77, 47777), (80, 47810), (81, 47819), (95, 47885), (121, 47996), (129, 48101), (134, 48140), (135, 48149), (136, 48152), (140, 48179), (149, 48269), (160, 48371), (171, 48464), (173, 48485), (174, 48500), (189, 48626), (194, 48695), (195, 48710), (203, 48800), (210, 48869), (214, 48911), (215, 48920), (227, 49094), (228, 49109), (235, 49163), (241, 49298), (246, 49388), (250, 49433), (253, 49457), (261, 49703), (264, 49733), (267, 49781), (269, 49796), (281, 50033), (283, 50102), (286, 50120), (290, 50153), (291, 50156), (294, 50240), (300, 50291), (302, 50324),

Gene: Naija\_97 Start: 44483, Stop: 48595, Start Num: 3

Candidate Starts for Naija\_97:

(Start: 3 @44483 has 184 MA's), (13, 44594), (15, 44618), (28, 44882), (29, 44888), (33, 44954), (36, 44990), (41, 45071), (43, 45107), (45, 45119), (46, 45125), (47, 45326), (58, 45707), (65, 45860), (68,

45929), (72, 45956), (77, 46037), (81, 46079), (83, 46115), (84, 46127), (92, 46184), (94, 46217), (114, 46262), (117, 46280), (123, 46325), (127, 46373), (129, 46406), (132, 46430), (139, 46484), (142, 46511), (144, 46532), (149, 46580), (151, 46601), (164, 46727), (169, 46778), (172, 46799), (173, 46811), (184, 46853), (194, 47003), (197, 47036), (198, 47039), (203, 47090), (207, 47135), (208, 47141), (211, 47183), (216, 47246), (223, 47324), (226, 47381), (227, 47399), (230, 47432), (231, 47435), (234, 47474), (235, 47477), (238, 47558), (239, 47561), (242, 47621), (244, 47645), (247, 47696), (250, 47720), (253, 47744), (264, 47996), (267, 48053), (281, 48311), (283, 48380), (289, 48428), (296, 48515), (298, 48548), (300, 48551),

Gene: Napoleon13\_93 Start: 42879, Stop: 46991, Start Num: 3

Candidate Starts for Napoleon13\_93:

(Start: 3 @42879 has 184 MA's), (13, 42990), (15, 43014), (28, 43278), (29, 43284), (33, 43350), (36, 43386), (41, 43467), (43, 43503), (45, 43515), (46, 43521), (47, 43722), (58, 44103), (65, 44256), (68, 44325), (72, 44352), (77, 44433), (81, 44475), (83, 44511), (84, 44523), (92, 44580), (94, 44613), (114, 44658), (117, 44676), (123, 44721), (127, 44769), (129, 44802), (132, 44826), (139, 44880), (142, 44907), (144, 44928), (149, 44976), (151, 44997), (164, 45123), (169, 45174), (172, 45195), (173, 45207), (184, 45249), (194, 45399), (197, 45432), (198, 45435), (203, 45486), (207, 45531), (208, 45537), (211, 45579), (216, 45642), (223, 45720), (226, 45777), (227, 45795), (230, 45828), (231, 45831), (234, 45870), (235, 45873), (238, 45954), (239, 45957), (242, 46017), (244, 46041), (247, 46092), (250, 46116), (253, 46140), (264, 46392), (267, 46449), (281, 46707), (283, 46776), (289, 46824), (296, 46911), (298, 46944), (300, 46947),

Gene: Nappy\_100 Start: 46245, Stop: 50108, Start Num: 3

Candidate Starts for Nappy\_100:

(Start: 3 @46245 has 184 MA's), (13, 46356), (15, 46380), (28, 46644), (29, 46650), (33, 46716), (36, 46752), (41, 46833), (43, 46869), (45, 46881), (46, 46887), (60, 47208), (62, 47229), (64, 47265), (67, 47385), (70, 47403), (77, 47499), (80, 47532), (81, 47541), (85, 47637), (89, 47655), (94, 47730), (97, 47775), (102, 47793), (105, 47838), (110, 47886), (113, 47919), (122, 47943), (129, 47997), (138, 48024), (144, 48045), (149, 48093), (151, 48114), (164, 48240), (169, 48291), (172, 48312), (173, 48324), (184, 48366), (194, 48516), (197, 48549), (198, 48552), (203, 48603), (207, 48648), (208, 48654), (211, 48696), (216, 48759), (223, 48837), (226, 48894), (227, 48912), (230, 48945), (231, 48948), (234, 48987), (235, 48990), (238, 49071), (239, 49074), (242, 49134), (244, 49158), (247, 49209), (250, 49233), (253, 49257), (264, 49509), (267, 49566), (281, 49824), (283, 49893), (289, 49941), (296, 50028), (298, 50061), (300, 50064),

Gene: Naval22\_105 Start: 46675, Stop: 50535, Start Num: 3

Candidate Starts for Naval22\_105:

(Start: 3 @46675 has 184 MA's), (13, 46786), (15, 46810), (28, 47074), (29, 47080), (33, 47146), (36, 47182), (41, 47263), (43, 47299), (45, 47311), (46, 47317), (62, 47659), (64, 47695), (67, 47815), (70, 47833), (77, 47929), (80, 47962), (81, 47971), (85, 48067), (89, 48085), (94, 48157), (97, 48202), (102, 48220), (105, 48265), (110, 48313), (113, 48346), (122, 48370), (129, 48424), (138, 48451), (144, 48472), (149, 48520), (151, 48541), (164, 48667), (169, 48718), (172, 48739), (173, 48751), (184, 48793), (194, 48943), (197, 48976), (198, 48979), (203, 49030), (207, 49075), (208, 49081), (211, 49123), (216, 49186), (223, 49264), (226, 49321), (227, 49339), (230, 49372), (231, 49375), (234, 49414), (235, 49417), (238, 49498), (239, 49501), (242, 49561), (244, 49585), (247, 49636), (250, 49660), (253, 49684), (264, 49936), (267, 49993), (281, 50251), (283, 50320), (289, 50368), (296, 50455), (298, 50488), (300, 50491),

Gene: NedWong\_98 Start: 45071, Stop: 49180, Start Num: 3

Candidate Starts for NedWong\_98:

(Start: 3 @45071 has 184 MA's), (13, 45182), (15, 45206), (28, 45470), (29, 45476), (33, 45542), (36, 45578), (41, 45659), (43, 45695), (45, 45707), (46, 45713), (47, 45914), (48, 45974), (58, 46292), (65, 46445), (68, 46514), (72, 46541), (77, 46622), (81, 46664), (83, 46700), (84, 46712), (92, 46769), (94,

46802), (114, 46847), (117, 46865), (123, 46910), (127, 46958), (129, 46991), (139, 47069), (142, 47096), (149, 47165), (151, 47186), (164, 47312), (169, 47363), (172, 47384), (173, 47396), (184, 47438), (194, 47588), (197, 47621), (198, 47624), (203, 47675), (207, 47720), (208, 47726), (211, 47768), (216, 47831), (223, 47909), (226, 47966), (227, 47984), (230, 48017), (231, 48020), (234, 48059), (235, 48062), (238, 48143), (239, 48146), (242, 48206), (244, 48230), (247, 48281), (250, 48305), (253, 48329), (264, 48581), (267, 48638), (281, 48896), (283, 48965), (289, 49013), (296, 49100), (298, 49133), (300, 49136),

Gene: Ngannou\_94 Start: 43465, Stop: 47577, Start Num: 3

Candidate Starts for Ngannou\_94:

(Start: 3 @43465 has 184 MA's), (13, 43576), (15, 43600), (28, 43864), (29, 43870), (33, 43936), (36, 43972), (41, 44053), (43, 44089), (45, 44101), (46, 44107), (47, 44308), (58, 44689), (65, 44842), (68, 44911), (72, 44938), (77, 45019), (81, 45061), (83, 45097), (84, 45109), (92, 45166), (94, 45199), (114, 45244), (117, 45262), (123, 45307), (127, 45355), (129, 45388), (132, 45412), (139, 45466), (142, 45493), (144, 45514), (149, 45562), (151, 45583), (164, 45709), (169, 45760), (172, 45781), (173, 45793), (184, 45835), (194, 45985), (197, 46018), (198, 46021), (203, 46072), (207, 46117), (208, 46123), (211, 46165), (216, 46228), (223, 46306), (226, 46363), (227, 46381), (230, 46414), (231, 46417), (234, 46456), (235, 46459), (238, 46540), (239, 46543), (242, 46603), (244, 46627), (247, 46678), (250, 46702), (253, 46726), (264, 46978), (267, 47035), (281, 47293), (283, 47362), (289, 47410), (296, 47497), (298, 47530), (300, 47533),

Gene: Nidhogg\_98 Start: 45059, Stop: 48919, Start Num: 3

Candidate Starts for Nidhogg\_98:

(Start: 3 @45059 has 184 MA's), (13, 45170), (15, 45194), (28, 45458), (29, 45464), (33, 45530), (36, 45566), (41, 45647), (43, 45683), (45, 45695), (46, 45701), (60, 46022), (62, 46043), (64, 46079), (67, 46199), (77, 46313), (80, 46346), (81, 46355), (85, 46451), (89, 46469), (94, 46541), (97, 46586), (102, 46604), (105, 46649), (110, 46697), (113, 46730), (122, 46754), (129, 46808), (138, 46835), (144, 46856), (149, 46904), (151, 46925), (164, 47051), (169, 47102), (172, 47123), (173, 47135), (184, 47177), (194, 47327), (197, 47360), (198, 47363), (203, 47414), (207, 47459), (208, 47465), (211, 47507), (216, 47570), (223, 47648), (226, 47705), (227, 47723), (230, 47756), (231, 47759), (234, 47798), (235, 47801), (238, 47882), (239, 47885), (242, 47945), (244, 47969), (247, 48020), (250, 48044), (253, 48068), (264, 48320), (267, 48377), (281, 48635), (283, 48704), (289, 48752), (296, 48839), (298, 48872), (300, 48875),

Gene: NoodleTree\_105 Start: 46281, Stop: 50393, Start Num: 3

Candidate Starts for NoodleTree\_105:

(Start: 3 @46281 has 184 MA's), (13, 46392), (15, 46416), (28, 46680), (29, 46686), (33, 46752), (36, 46788), (41, 46869), (43, 46905), (45, 46917), (46, 46923), (47, 47124), (58, 47505), (65, 47658), (68, 47727), (72, 47754), (77, 47835), (81, 47877), (83, 47913), (84, 47925), (92, 47982), (94, 48015), (114, 48060), (117, 48078), (123, 48123), (127, 48171), (129, 48204), (132, 48228), (139, 48282), (142, 48309), (144, 48330), (149, 48378), (151, 48399), (164, 48525), (169, 48576), (172, 48597), (173, 48609), (184, 48651), (194, 48801), (197, 48834), (198, 48837), (203, 48888), (207, 48933), (208, 48939), (211, 48981), (216, 49044), (223, 49122), (226, 49179), (227, 49197), (230, 49230), (231, 49233), (234, 49272), (235, 49275), (238, 49356), (239, 49359), (242, 49419), (244, 49443), (247, 49494), (250, 49518), (253, 49542), (264, 49794), (267, 49851), (281, 50109), (283, 50178), (289, 50226), (296, 50313), (298, 50346), (300, 50349),

Gene: Norm\_98 Start: 45844, Stop: 49956, Start Num: 3

Candidate Starts for Norm\_98:

(Start: 3 @45844 has 184 MA's), (13, 45955), (15, 45979), (28, 46243), (29, 46249), (33, 46315), (36, 46351), (41, 46432), (43, 46468), (45, 46480), (46, 46486), (47, 46687), (58, 47068), (65, 47221), (68, 47290), (72, 47317), (77, 47398), (81, 47440), (83, 47476), (84, 47488), (92, 47545), (94, 47578), (114, 47623), (117, 47641), (123, 47686), (127, 47734), (129, 47767), (132, 47791), (139, 47845), (142,

47872), (144, 47893), (149, 47941), (151, 47962), (164, 48088), (169, 48139), (172, 48160), (173, 48172), (184, 48214), (194, 48364), (197, 48397), (198, 48400), (203, 48451), (207, 48496), (208, 48502), (211, 48544), (216, 48607), (223, 48685), (226, 48742), (227, 48760), (230, 48793), (231, 48796), (234, 48835), (235, 48838), (238, 48919), (239, 48922), (242, 48982), (244, 49006), (247, 49057), (250, 49081), (253, 49105), (264, 49357), (267, 49414), (281, 49672), (283, 49741), (289, 49789), (296, 49876), (298, 49909), (300, 49912),

Gene: NuevoMundo\_103 Start: 47196, Stop: 51308, Start Num: 3

Candidate Starts for NuevoMundo\_103:

(Start: 3 @47196 has 184 MA's), (13, 47307), (15, 47331), (28, 47595), (29, 47601), (33, 47667), (36, 47703), (41, 47784), (43, 47820), (45, 47832), (46, 47838), (47, 48039), (58, 48420), (65, 48573), (68, 48642), (72, 48669), (77, 48750), (81, 48792), (83, 48828), (84, 48840), (92, 48897), (94, 48930), (114, 48975), (117, 48993), (123, 49038), (127, 49086), (129, 49119), (132, 49143), (139, 49197), (142, 49224), (144, 49245), (149, 49293), (151, 49314), (164, 49440), (169, 49491), (172, 49512), (173, 49524), (184, 49566), (194, 49716), (197, 49749), (198, 49752), (203, 49803), (207, 49848), (208, 49854), (211, 49896), (216, 49959), (223, 50037), (226, 50094), (227, 50112), (230, 50145), (231, 50148), (234, 50187), (235, 50190), (238, 50271), (239, 50274), (242, 50334), (244, 50358), (247, 50409), (250, 50433), (253, 50457), (264, 50709), (267, 50766), (281, 51024), (283, 51093), (289, 51141), (296, 51228), (298, 51261), (300, 51264),

Gene: OrediggerDelux\_95 Start: 45841, Stop: 49950, Start Num: 3

Candidate Starts for OrediggerDelux\_95:

(Start: 3 @45841 has 184 MA's), (13, 45952), (15, 45976), (28, 46240), (29, 46246), (33, 46312), (36, 46348), (41, 46429), (43, 46465), (45, 46477), (46, 46483), (47, 46684), (48, 46744), (58, 47062), (65, 47215), (68, 47284), (72, 47311), (77, 47392), (81, 47434), (83, 47470), (84, 47482), (92, 47539), (94, 47572), (114, 47617), (117, 47635), (123, 47680), (127, 47728), (129, 47761), (132, 47785), (139, 47839), (142, 47866), (144, 47887), (149, 47935), (151, 47956), (164, 48082), (169, 48133), (172, 48154), (173, 48166), (184, 48208), (194, 48358), (197, 48391), (198, 48394), (203, 48445), (207, 48490), (208, 48496), (211, 48538), (216, 48601), (223, 48679), (226, 48736), (227, 48754), (230, 48787), (231, 48790), (234, 48829), (235, 48832), (238, 48913), (239, 48916), (242, 48976), (244, 49000), (247, 49051), (250, 49075), (253, 49099), (264, 49351), (267, 49408), (281, 49666), (283, 49735), (289, 49783), (296, 49870), (298, 49903), (300, 49906),

Gene: ParkTD\_98 Start: 45067, Stop: 49176, Start Num: 3

Candidate Starts for ParkTD\_98:

(Start: 3 @45067 has 184 MA's), (13, 45178), (15, 45202), (28, 45466), (29, 45472), (33, 45538), (36, 45574), (41, 45655), (43, 45691), (45, 45703), (46, 45709), (47, 45910), (48, 45970), (58, 46288), (65, 46441), (68, 46510), (72, 46537), (77, 46618), (81, 46660), (83, 46696), (84, 46708), (92, 46765), (94, 46798), (114, 46843), (117, 46861), (123, 46906), (127, 46954), (129, 46987), (139, 47065), (142, 47092), (149, 47161), (151, 47182), (164, 47308), (169, 47359), (172, 47380), (173, 47392), (184, 47434), (194, 47584), (197, 47617), (198, 47620), (203, 47671), (207, 47716), (208, 47722), (211, 47764), (216, 47827), (223, 47905), (226, 47962), (227, 47980), (230, 48013), (231, 48016), (234, 48055), (235, 48058), (238, 48139), (239, 48142), (242, 48202), (244, 48226), (247, 48277), (250, 48301), (253, 48325), (264, 48577), (267, 48634), (281, 48892), (283, 48961), (289, 49009), (296, 49096), (298, 49129), (300, 49132),

Gene: Patter\_98 Start: 44500, Stop: 48612, Start Num: 3

Candidate Starts for Patter\_98:

(Start: 3 @44500 has 184 MA's), (13, 44611), (15, 44635), (28, 44899), (29, 44905), (33, 44971), (36, 45007), (41, 45088), (43, 45124), (45, 45136), (46, 45142), (47, 45343), (58, 45724), (65, 45877), (68, 45946), (72, 45973), (77, 46054), (81, 46096), (83, 46132), (84, 46144), (92, 46201), (94, 46234), (114, 46279), (117, 46297), (123, 46342), (127, 46390), (129, 46423), (132, 46447), (139, 46501), (142, 46528), (144, 46549), (149, 46597), (151, 46618), (164, 46744), (169, 46795), (172, 46816), (173,

46828), (184, 46870), (194, 47020), (197, 47053), (198, 47056), (203, 47107), (207, 47152), (208, 47158), (211, 47200), (216, 47263), (223, 47341), (226, 47398), (227, 47416), (230, 47449), (231, 47452), (234, 47491), (235, 47494), (238, 47575), (239, 47578), (242, 47638), (244, 47662), (247, 47713), (250, 47737), (253, 47761), (264, 48013), (267, 48070), (281, 48328), (283, 48397), (289, 48445), (296, 48532), (298, 48565), (300, 48568),

Gene: Phabba\_102 Start: 45879, Stop: 49508, Start Num: 3

Candidate Starts for Phabba\_102:

(Start: 3 @45879 has 184 MA's), (7, 45903), (15, 46014), (19, 46098), (21, 46155), (22, 46158), (29, 46284), (32, 46341), (33, 46350), (38, 46416), (46, 46521), (49, 46545), (52, 46584), (53, 46587), (59, 46671), (64, 46725), (67, 46839), (70, 46857), (74, 46905), (77, 46953), (80, 46986), (81, 46995), (121, 47172), (134, 47316), (135, 47325), (136, 47328), (140, 47355), (146, 47424), (149, 47445), (160, 47547), (171, 47640), (173, 47661), (189, 47802), (191, 47850), (195, 47886), (201, 47937), (203, 47970), (209, 48033), (210, 48039), (215, 48090), (216, 48114), (226, 48246), (227, 48264), (228, 48282), (235, 48336), (241, 48471), (264, 48906), (267, 48954), (269, 48969), (281, 49206), (283, 49275), (286, 49293), (290, 49326), (293, 49401), (302, 49497),

Gene: PharkleMinkus\_102 Start: 46523, Stop: 50635, Start Num: 3

Candidate Starts for PharkleMinkus\_102:

(Start: 3 @46523 has 184 MA's), (13, 46634), (15, 46658), (28, 46922), (29, 46928), (33, 46994), (36, 47030), (41, 47111), (43, 47147), (45, 47159), (46, 47165), (47, 47366), (58, 47747), (65, 47900), (68, 47969), (72, 47996), (77, 48077), (81, 48119), (83, 48155), (84, 48167), (92, 48224), (94, 48257), (114, 48302), (117, 48320), (123, 48365), (127, 48413), (129, 48446), (132, 48470), (139, 48524), (142, 48551), (144, 48572), (149, 48620), (151, 48641), (164, 48767), (169, 48818), (172, 48839), (173, 48851), (184, 48893), (194, 49043), (197, 49076), (198, 49079), (203, 49130), (207, 49175), (208, 49181), (211, 49223), (216, 49286), (223, 49364), (226, 49421), (227, 49439), (230, 49472), (231, 49475), (234, 49514), (235, 49517), (238, 49598), (239, 49601), (242, 49661), (244, 49685), (247, 49736), (250, 49760), (253, 49784), (264, 50036), (267, 50093), (281, 50351), (283, 50420), (289, 50468), (296, 50555), (298, 50588), (300, 50591),

Gene: Phlegm\_100 Start: 44483, Stop: 48595, Start Num: 3

Candidate Starts for Phlegm\_100:

(Start: 3 @44483 has 184 MA's), (13, 44594), (15, 44618), (28, 44882), (29, 44888), (33, 44954), (36, 44990), (41, 45071), (43, 45107), (45, 45119), (46, 45125), (47, 45326), (58, 45707), (65, 45860), (68, 45929), (72, 45956), (77, 46037), (81, 46079), (83, 46115), (84, 46127), (92, 46184), (94, 46217), (114, 46262), (117, 46280), (123, 46325), (127, 46373), (129, 46406), (132, 46430), (139, 46484), (142, 46511), (144, 46532), (149, 46580), (151, 46601), (164, 46727), (169, 46778), (172, 46799), (173, 46811), (184, 46853), (194, 47003), (197, 47036), (198, 47039), (203, 47090), (207, 47135), (208, 47141), (211, 47183), (216, 47246), (223, 47324), (226, 47381), (227, 47399), (230, 47432), (231, 47435), (234, 47474), (235, 47477), (238, 47558), (239, 47561), (242, 47621), (244, 47645), (247, 47696), (250, 47720), (253, 47744), (264, 47996), (267, 48053), (281, 48311), (283, 48380), (289, 48428), (296, 48515), (298, 48548), (300, 48551),

Gene: Phox\_94 Start: 44924, Stop: 49459, Start Num: 3

Candidate Starts for Phox\_94:

(Start: 3 @44924 has 184 MA's), (13, 45035), (15, 45059), (28, 45323), (29, 45329), (33, 45395), (36, 45431), (41, 45512), (43, 45548), (45, 45560), (46, 45566), (47, 45767), (48, 45827), (62, 46217), (64, 46253), (67, 46373), (70, 46391), (77, 46487), (80, 46520), (81, 46529), (85, 46625), (89, 46643), (94, 46715), (98, 46835), (100, 46898), (101, 46934), (104, 46982), (106, 47033), (107, 47039), (109, 47042), (111, 47078), (114, 47126), (117, 47144), (123, 47189), (127, 47237), (129, 47270), (139, 47348), (142, 47375), (149, 47444), (151, 47465), (164, 47591), (169, 47642), (172, 47663), (173, 47675), (184, 47717), (194, 47867), (197, 47900), (198, 47903), (203, 47954), (207, 47999), (208, 48005), (211, 48047), (216, 48110), (223, 48188), (226, 48245), (227, 48263), (230, 48296), (231,

48299), (234, 48338), (235, 48341), (238, 48422), (239, 48425), (242, 48485), (244, 48509), (247, 48560), (250, 48584), (253, 48608), (264, 48860), (267, 48917), (281, 49175), (283, 49244), (289, 49292), (296, 49379), (298, 49412), (300, 49415),

Gene: Phrappuccino\_53 Start: 34080, Stop: 36638, Start Num: 119

Candidate Starts for Phrappuccino\_53:

(Start: 119 @34080 has 2 MA's), (121, 34092), (128, 34179), (133, 34224), (137, 34245), (143, 34305), (146, 34344), (148, 34365), (149, 34368), (154, 34419), (161, 34491), (162, 34497), (169, 34569), (177, 34722), (178, 34725), (179, 34746), (190, 34917), (199, 35013), (202, 35040), (206, 35115), (222, 35340), (232, 35472), (236, 35523), (241, 35637), (243, 35652), (245, 35691), (249, 35760), (265, 36114), (272, 36168), (273, 36174), (275, 36186), (278, 36345), (283, 36435), (285, 36447), (288, 36480),

Gene: Phusco\_98 Start: 45248, Stop: 49360, Start Num: 3

Candidate Starts for Phusco\_98:

(Start: 3 @45248 has 184 MA's), (13, 45359), (15, 45383), (28, 45647), (29, 45653), (33, 45719), (36, 45755), (41, 45836), (43, 45872), (45, 45884), (46, 45890), (47, 46091), (58, 46472), (65, 46625), (68, 46694), (72, 46721), (77, 46802), (81, 46844), (83, 46880), (84, 46892), (92, 46949), (94, 46982), (114, 47027), (117, 47045), (123, 47090), (127, 47138), (129, 47171), (132, 47195), (139, 47249), (142, 47276), (144, 47297), (149, 47345), (151, 47366), (164, 47492), (169, 47543), (172, 47564), (173, 47576), (184, 47618), (194, 47768), (197, 47801), (198, 47804), (203, 47855), (207, 47900), (208, 47906), (211, 47948), (216, 48011), (223, 48089), (226, 48146), (227, 48164), (230, 48197), (231, 48200), (234, 48239), (235, 48242), (238, 48323), (239, 48326), (242, 48386), (244, 48410), (247, 48461), (250, 48485), (253, 48509), (264, 48761), (267, 48818), (281, 49076), (283, 49145), (289, 49193), (296, 49280), (298, 49313), (300, 49316),

Gene: Pier\_101 Start: 46081, Stop: 49803, Start Num: 3

Candidate Starts for Pier\_101:

(Start: 3 @46081 has 184 MA's), (8, 46120), (13, 46192), (15, 46216), (28, 46480), (29, 46486), (33, 46552), (36, 46588), (41, 46669), (43, 46705), (45, 46717), (46, 46723), (60, 46906), (62, 46927), (64, 46963), (67, 47083), (70, 47101), (77, 47197), (80, 47230), (81, 47239), (85, 47335), (89, 47353), (94, 47425), (97, 47470), (102, 47488), (105, 47533), (110, 47581), (113, 47614), (122, 47638), (129, 47692), (138, 47719), (144, 47740), (149, 47788), (151, 47809), (164, 47935), (169, 47986), (172, 48007), (173, 48019), (184, 48061), (194, 48211), (197, 48244), (198, 48247), (203, 48298), (207, 48343), (208, 48349), (211, 48391), (216, 48454), (223, 48532), (226, 48589), (227, 48607), (230, 48640), (231, 48643), (234, 48682), (235, 48685), (238, 48766), (239, 48769), (242, 48829), (244, 48853), (247, 48904), (250, 48928), (253, 48952), (264, 49204), (267, 49261), (281, 49519), (283, 49588), (289, 49636), (296, 49723), (298, 49756), (300, 49759),

Gene: Pinkcreek\_88 Start: 42010, Stop: 46119, Start Num: 3

Candidate Starts for Pinkcreek\_88:

(Start: 3 @42010 has 184 MA's), (12, 42088), (13, 42121), (15, 42145), (28, 42409), (29, 42415), (33, 42481), (36, 42517), (41, 42598), (43, 42634), (45, 42646), (46, 42652), (47, 42853), (48, 42913), (58, 43231), (65, 43384), (68, 43453), (72, 43480), (77, 43561), (81, 43603), (83, 43639), (84, 43651), (92, 43708), (94, 43741), (114, 43786), (117, 43804), (123, 43849), (127, 43897), (129, 43930), (139, 44008), (142, 44035), (149, 44104), (151, 44125), (164, 44251), (169, 44302), (172, 44323), (173, 44335), (184, 44377), (194, 44527), (197, 44560), (198, 44563), (203, 44614), (207, 44659), (208, 44665), (211, 44707), (216, 44770), (223, 44848), (226, 44905), (227, 44923), (230, 44956), (231, 44959), (234, 44998), (235, 45001), (238, 45082), (239, 45085), (242, 45145), (244, 45169), (247, 45220), (250, 45244), (253, 45268), (264, 45520), (267, 45577), (281, 45835), (283, 45904), (289, 45952), (296, 46039), (298, 46072), (300, 46075),

Gene: Pio\_101 Start: 46807, Stop: 50919, Start Num: 3

Candidate Starts for Pio\_101:

(Start: 3 @46807 has 184 MA's), (13, 46918), (15, 46942), (28, 47206), (29, 47212), (33, 47278), (36, 47314), (41, 47395), (43, 47431), (45, 47443), (46, 47449), (47, 47650), (58, 48031), (65, 48184), (68, 48253), (72, 48280), (77, 48361), (81, 48403), (83, 48439), (84, 48451), (92, 48508), (94, 48541), (114, 48586), (117, 48604), (123, 48649), (127, 48697), (129, 48730), (132, 48754), (139, 48808), (142, 48835), (144, 48856), (149, 48904), (151, 48925), (164, 49051), (169, 49102), (172, 49123), (173, 49135), (184, 49177), (194, 49327), (197, 49360), (198, 49363), (203, 49414), (207, 49459), (208, 49465), (211, 49507), (216, 49570), (223, 49648), (226, 49705), (227, 49723), (230, 49756), (231, 49759), (234, 49798), (235, 49801), (238, 49882), (239, 49885), (242, 49945), (244, 49969), (247, 50020), (250, 50044), (253, 50068), (264, 50320), (267, 50377), (281, 50635), (283, 50704), (289, 50752), (296, 50839), (298, 50872), (300, 50875),

Gene: Pivoine\_97 Start: 44483, Stop: 48595, Start Num: 3

Candidate Starts for Pivoine\_97:

(Start: 3 @44483 has 184 MA's), (13, 44594), (15, 44618), (28, 44882), (29, 44888), (33, 44954), (36, 44990), (41, 45071), (43, 45107), (45, 45119), (46, 45125), (47, 45326), (58, 45707), (65, 45860), (68, 45929), (72, 45956), (77, 46037), (81, 46079), (83, 46115), (84, 46127), (92, 46184), (94, 46217), (114, 46262), (117, 46280), (123, 46325), (127, 46373), (129, 46406), (132, 46430), (139, 46484), (142, 46511), (144, 46532), (149, 46580), (151, 46601), (164, 46727), (169, 46778), (172, 46799), (173, 46811), (184, 46853), (194, 47003), (197, 47036), (198, 47039), (203, 47090), (207, 47135), (208, 47141), (211, 47183), (216, 47246), (223, 47324), (226, 47381), (227, 47399), (230, 47432), (231, 47435), (234, 47474), (235, 47477), (238, 47558), (239, 47561), (242, 47621), (244, 47645), (247, 47696), (250, 47720), (253, 47744), (264, 47996), (267, 48053), (281, 48311), (283, 48380), (289, 48428), (296, 48515), (298, 48548), (300, 48551),

Gene: Pleione\_100 Start: 45085, Stop: 49194, Start Num: 3

Candidate Starts for Pleione\_100:

(Start: 3 @45085 has 184 MA's), (13, 45196), (15, 45220), (28, 45484), (29, 45490), (33, 45556), (36, 45592), (41, 45673), (43, 45709), (45, 45721), (46, 45727), (47, 45928), (48, 45988), (58, 46306), (65, 46459), (68, 46528), (72, 46555), (77, 46636), (81, 46678), (83, 46714), (84, 46726), (92, 46783), (94, 46816), (114, 46861), (117, 46879), (123, 46924), (127, 46972), (129, 47005), (132, 47029), (139, 47083), (142, 47110), (144, 47131), (149, 47179), (151, 47200), (164, 47326), (169, 47377), (172, 47398), (173, 47410), (184, 47452), (194, 47602), (197, 47635), (198, 47638), (203, 47689), (207, 47734), (208, 47740), (211, 47782), (216, 47845), (223, 47923), (226, 47980), (227, 47998), (230, 48031), (231, 48034), (234, 48073), (235, 48076), (238, 48157), (239, 48160), (242, 48220), (244, 48244), (247, 48295), (250, 48319), (253, 48343), (264, 48595), (267, 48652), (281, 48910), (283, 48979), (289, 49027), (296, 49114), (298, 49147), (300, 49150),

Gene: Primadonna\_91 Start: 43965, Stop: 48077, Start Num: 3

Candidate Starts for Primadonna\_91:

(Start: 3 @43965 has 184 MA's), (13, 44076), (15, 44100), (28, 44364), (29, 44370), (33, 44436), (36, 44472), (41, 44553), (43, 44589), (45, 44601), (46, 44607), (47, 44808), (58, 45189), (65, 45342), (68, 45411), (72, 45438), (77, 45519), (81, 45561), (83, 45597), (84, 45609), (92, 45666), (94, 45699), (114, 45744), (117, 45762), (123, 45807), (127, 45855), (129, 45888), (132, 45912), (139, 45966), (142, 45993), (144, 46014), (149, 46062), (151, 46083), (164, 46209), (169, 46260), (172, 46281), (173, 46293), (184, 46335), (194, 46485), (197, 46518), (198, 46521), (203, 46572), (207, 46617), (208, 46623), (211, 46665), (216, 46728), (223, 46806), (226, 46863), (227, 46881), (230, 46914), (231, 46917), (234, 46956), (235, 46959), (238, 47040), (239, 47043), (242, 47103), (244, 47127), (247, 47178), (250, 47202), (253, 47226), (264, 47478), (267, 47535), (281, 47793), (283, 47862), (289, 47910), (296, 47997), (298, 48030), (300, 48033),

Gene: Pupper\_94 Start: 43847, Stop: 47095, Start Num: 1

Candidate Starts for Pupper\_94:

(Start: 1 @43847 has 4 MA's), (9, 43928), (15, 44003), (16, 44006), (18, 44063), (19, 44087), (23, 44150), (26, 44231), (27, 44246), (29, 44273), (35, 44357), (38, 44405), (43, 44492), (46, 44510), (51, 44549), (57, 44597), (71, 44786), (78, 44867), (92, 44972), (93, 44993), (94, 44999), (146, 45209), (147, 45227), (156, 45251), (165, 45338), (172, 45377), (184, 45440), (205, 45659), (208, 45704), (212, 45722), (218, 45803), (227, 45926), (241, 46136), (242, 46145), (251, 46241), (252, 46244), (256, 46304), (258, 46352), (262, 46478), (263, 46496), (266, 46550), (277, 46712), (279, 46796), (283, 46877), (295, 47012), (300, 47051), (301, 47081),

Gene: Pupusa\_104 Start: 47330, Stop: 51442, Start Num: 3

Candidate Starts for Pupusa\_104:

(Start: 3 @47330 has 184 MA's), (13, 47441), (15, 47465), (28, 47729), (29, 47735), (33, 47801), (36, 47837), (41, 47918), (43, 47954), (45, 47966), (46, 47972), (47, 48173), (58, 48554), (65, 48707), (68, 48776), (72, 48803), (77, 48884), (81, 48926), (83, 48962), (84, 48974), (92, 49031), (94, 49064), (114, 49109), (117, 49127), (123, 49172), (127, 49220), (129, 49253), (132, 49277), (139, 49331), (142, 49358), (144, 49379), (149, 49427), (151, 49448), (164, 49574), (169, 49625), (172, 49646), (173, 49658), (184, 49700), (194, 49850), (197, 49883), (198, 49886), (203, 49937), (207, 49982), (208, 49988), (211, 50030), (216, 50093), (223, 50171), (226, 50228), (227, 50246), (230, 50279), (231, 50282), (234, 50321), (235, 50324), (238, 50405), (239, 50408), (242, 50468), (244, 50492), (247, 50543), (250, 50567), (253, 50591), (264, 50843), (267, 50900), (281, 51158), (283, 51227), (289, 51275), (296, 51362), (298, 51395), (300, 51398),

Gene: PurduePete\_97 Start: 45279, Stop: 49448, Start Num: 3

Candidate Starts for PurduePete\_97:

(Start: 3 @45279 has 184 MA's), (13, 45390), (15, 45414), (28, 45678), (29, 45684), (33, 45750), (36, 45786), (41, 45867), (43, 45903), (45, 45915), (46, 45921), (47, 46122), (48, 46182), (60, 46551), (62, 46572), (64, 46608), (67, 46728), (77, 46842), (80, 46875), (81, 46884), (85, 46980), (89, 46998), (94, 47070), (114, 47115), (117, 47133), (123, 47178), (127, 47226), (129, 47259), (132, 47283), (139, 47337), (142, 47364), (144, 47385), (149, 47433), (151, 47454), (164, 47580), (169, 47631), (172, 47652), (173, 47664), (184, 47706), (194, 47856), (197, 47889), (198, 47892), (203, 47943), (207, 47988), (208, 47994), (211, 48036), (216, 48099), (223, 48177), (226, 48234), (227, 48252), (230, 48285), (231, 48288), (234, 48327), (235, 48330), (238, 48411), (239, 48414), (242, 48474), (244, 48498), (247, 48549), (250, 48573), (253, 48597), (264, 48849), (267, 48906), (281, 49164), (283, 49233), (289, 49281), (296, 49368), (298, 49401), (300, 49404),

Gene: QBert\_91 Start: 44601, Stop: 48461, Start Num: 3

Candidate Starts for QBert\_91:

(Start: 3 @44601 has 184 MA's), (13, 44712), (15, 44736), (28, 45000), (29, 45006), (33, 45072), (36, 45108), (41, 45189), (43, 45225), (45, 45237), (46, 45243), (60, 45564), (62, 45585), (64, 45621), (67, 45741), (77, 45855), (80, 45888), (81, 45897), (85, 45993), (89, 46011), (94, 46083), (97, 46128), (102, 46146), (105, 46191), (110, 46239), (113, 46272), (122, 46296), (129, 46350), (138, 46377), (144, 46398), (149, 46446), (151, 46467), (164, 46593), (169, 46644), (172, 46665), (173, 46677), (184, 46719), (194, 46869), (197, 46902), (198, 46905), (203, 46956), (207, 47001), (208, 47007), (211, 47049), (216, 47112), (223, 47190), (226, 47247), (227, 47265), (230, 47298), (231, 47301), (234, 47340), (235, 47343), (238, 47424), (239, 47427), (242, 47487), (244, 47511), (247, 47562), (250, 47586), (253, 47610), (264, 47862), (267, 47919), (281, 48177), (283, 48246), (289, 48294), (296, 48381), (298, 48414), (300, 48417),

Gene: Quasimodo\_98 Start: 45028, Stop: 49137, Start Num: 3

Candidate Starts for Quasimodo\_98:

(Start: 3 @45028 has 184 MA's), (13, 45139), (15, 45163), (28, 45427), (29, 45433), (33, 45499), (36, 45535), (41, 45616), (43, 45652), (45, 45664), (46, 45670), (47, 45871), (48, 45931), (58, 46249), (65, 46402), (68, 46471), (72, 46498), (77, 46579), (81, 46621), (83, 46657), (84, 46669), (92, 46726), (94, 46759), (114, 46804), (117, 46822), (123, 46867), (127, 46915), (129, 46948), (139, 47026), (142,

47053), (149, 47122), (151, 47143), (164, 47269), (169, 47320), (172, 47341), (173, 47353), (184, 47395), (194, 47545), (197, 47578), (198, 47581), (203, 47632), (207, 47677), (208, 47683), (211, 47725), (216, 47788), (223, 47866), (226, 47923), (227, 47941), (230, 47974), (231, 47977), (234, 48016), (235, 48019), (238, 48100), (239, 48103), (242, 48163), (244, 48187), (247, 48238), (250, 48262), (253, 48286), (264, 48538), (267, 48595), (281, 48853), (283, 48922), (289, 48970), (296, 49057), (298, 49090), (300, 49093),

Gene: Rabinovish\_94 Start: 45095, Stop: 49204, Start Num: 3

Candidate Starts for Rabinovish\_94:

(Start: 3 @45095 has 184 MA's), (11, 45158), (13, 45206), (15, 45230), (28, 45494), (29, 45500), (33, 45566), (36, 45602), (41, 45683), (43, 45719), (45, 45731), (46, 45737), (47, 45938), (48, 45998), (58, 46316), (65, 46469), (68, 46538), (72, 46565), (77, 46646), (81, 46688), (83, 46724), (84, 46736), (92, 46793), (94, 46826), (114, 46871), (117, 46889), (123, 46934), (127, 46982), (129, 47015), (139, 47093), (142, 47120), (149, 47189), (151, 47210), (164, 47336), (169, 47387), (172, 47408), (173, 47420), (184, 47462), (194, 47612), (197, 47645), (198, 47648), (203, 47699), (207, 47744), (208, 47750), (211, 47792), (216, 47855), (223, 47933), (226, 47990), (227, 48008), (230, 48041), (231, 48044), (234, 48083), (235, 48086), (238, 48167), (239, 48170), (242, 48230), (244, 48254), (247, 48305), (250, 48329), (253, 48353), (264, 48605), (267, 48662), (281, 48920), (283, 48989), (289, 49037), (296, 49124), (298, 49157), (300, 49160),

Gene: Rahel\_97 Start: 44840, Stop: 48952, Start Num: 3

Candidate Starts for Rahel\_97:

(Start: 3 @44840 has 184 MA's), (13, 44951), (15, 44975), (28, 45239), (29, 45245), (33, 45311), (36, 45347), (41, 45428), (43, 45464), (45, 45476), (46, 45482), (47, 45683), (58, 46064), (65, 46217), (68, 46286), (72, 46313), (77, 46394), (81, 46436), (83, 46472), (84, 46484), (92, 46541), (94, 46574), (114, 46619), (117, 46637), (123, 46682), (127, 46730), (129, 46763), (132, 46787), (139, 46841), (142, 46868), (144, 46889), (149, 46937), (151, 46958), (164, 47084), (169, 47135), (172, 47156), (173, 47168), (184, 47210), (194, 47360), (197, 47393), (198, 47396), (203, 47447), (207, 47492), (208, 47498), (211, 47540), (216, 47603), (223, 47681), (226, 47738), (227, 47756), (230, 47789), (231, 47792), (234, 47831), (235, 47834), (238, 47915), (239, 47918), (242, 47978), (244, 48002), (247, 48053), (250, 48077), (253, 48101), (264, 48353), (267, 48410), (281, 48668), (283, 48737), (289, 48785), (296, 48872), (298, 48905), (300, 48908),

Gene: RedWattleHog\_13 Start: 15163, Stop: 18432, Start Num: 2

Candidate Starts for RedWattleHog\_13:

(Start: 2 @15163 has 3 MA's), (8, 15208), (15, 15301), (17, 15325), (20, 15397), (28, 15565), (29, 15571), (31, 15616), (32, 15628), (33, 15637), (34, 15649), (39, 15706), (42, 15757), (44, 15787), (46, 15802), (66, 16048), (73, 16117), (77, 16171), (79, 16195), (86, 16240), (122, 16321), (124, 16348), (147, 16486), (158, 16561), (159, 16579), (164, 16636), (187, 16831), (188, 16837), (195, 16927), (196, 16930), (203, 16978), (216, 17119), (221, 17185), (235, 17362), (257, 17695), (259, 17737), (268, 17905), (270, 17920), (271, 17926), (272, 17947), (281, 18154), (288, 18262), (295, 18349), (297, 18364), (299, 18382),

Gene: Rizal\_94 Start: 43988, Stop: 48100, Start Num: 3

Candidate Starts for Rizal\_94:

(Start: 3 @43988 has 184 MA's), (13, 44099), (15, 44123), (28, 44387), (29, 44393), (33, 44459), (36, 44495), (41, 44576), (43, 44612), (45, 44624), (46, 44630), (47, 44831), (58, 45212), (65, 45365), (68, 45434), (72, 45461), (77, 45542), (81, 45584), (83, 45620), (84, 45632), (92, 45689), (94, 45722), (114, 45767), (117, 45785), (123, 45830), (127, 45878), (129, 45911), (132, 45935), (139, 45989), (142, 46016), (144, 46037), (149, 46085), (151, 46106), (164, 46232), (169, 46283), (172, 46304), (173, 46316), (184, 46358), (194, 46508), (197, 46541), (198, 46544), (203, 46595), (207, 46640), (208, 46646), (211, 46688), (216, 46751), (223, 46829), (226, 46886), (227, 46904), (230, 46937), (231, 46940), (234, 46979), (235, 46982), (238, 47063), (239, 47066), (242, 47126), (244, 47150), (247,

47201), (250, 47225), (253, 47249), (264, 47501), (267, 47558), (281, 47816), (283, 47885), (289, 47933), (296, 48020), (298, 48053), (300, 48056),

Gene: RoMag\_92 Start: 44442, Stop: 48302, Start Num: 3

Candidate Starts for RoMag\_92:

(Start: 3 @44442 has 184 MA's), (13, 44553), (15, 44577), (28, 44841), (29, 44847), (33, 44913), (36, 44949), (41, 45030), (43, 45066), (45, 45078), (46, 45084), (60, 45405), (62, 45426), (64, 45462), (67, 45582), (77, 45696), (80, 45729), (81, 45738), (85, 45834), (89, 45852), (94, 45924), (97, 45969), (102, 45987), (105, 46032), (110, 46080), (113, 46113), (122, 46137), (129, 46191), (138, 46218), (144, 46239), (149, 46287), (151, 46308), (164, 46434), (169, 46485), (172, 46506), (173, 46518), (184, 46560), (194, 46710), (197, 46743), (198, 46746), (203, 46797), (207, 46842), (208, 46848), (211, 46890), (216, 46953), (223, 47031), (226, 47088), (227, 47106), (230, 47139), (231, 47142), (234, 47181), (235, 47184), (238, 47265), (239, 47268), (242, 47328), (244, 47352), (247, 47403), (250, 47427), (253, 47451), (264, 47703), (267, 47760), (281, 48018), (283, 48087), (289, 48135), (296, 48222), (298, 48255), (300, 48258),

Gene: Rocha\_96 Start: 44513, Stop: 48625, Start Num: 3

Candidate Starts for Rocha\_96:

(Start: 3 @44513 has 184 MA's), (13, 44624), (15, 44648), (28, 44912), (29, 44918), (33, 44984), (36, 45020), (41, 45101), (43, 45137), (45, 45149), (46, 45155), (47, 45356), (58, 45737), (65, 45890), (68, 45959), (72, 45986), (77, 46067), (81, 46109), (83, 46145), (84, 46157), (92, 46214), (94, 46247), (114, 46292), (117, 46310), (123, 46355), (127, 46403), (129, 46436), (132, 46460), (139, 46514), (142, 46541), (144, 46562), (149, 46610), (151, 46631), (164, 46757), (169, 46808), (172, 46829), (173, 46841), (184, 46883), (194, 47033), (197, 47066), (198, 47069), (203, 47120), (207, 47165), (208, 47171), (211, 47213), (216, 47276), (223, 47354), (226, 47411), (227, 47429), (230, 47462), (231, 47465), (234, 47504), (235, 47507), (238, 47588), (239, 47591), (242, 47651), (244, 47675), (247, 47726), (250, 47750), (253, 47774), (264, 48026), (267, 48083), (281, 48341), (283, 48410), (289, 48458), (296, 48545), (298, 48578), (300, 48581),

Gene: Ronan\_91 Start: 42329, Stop: 46189, Start Num: 3

Candidate Starts for Ronan\_91:

(Start: 3 @42329 has 184 MA's), (13, 42440), (15, 42464), (28, 42728), (29, 42734), (33, 42800), (36, 42836), (41, 42917), (43, 42953), (45, 42965), (46, 42971), (60, 43292), (62, 43313), (64, 43349), (67, 43469), (77, 43583), (80, 43616), (81, 43625), (85, 43721), (89, 43739), (94, 43811), (97, 43856), (102, 43874), (105, 43919), (110, 43967), (113, 44000), (122, 44024), (129, 44078), (138, 44105), (144, 44126), (149, 44174), (151, 44195), (164, 44321), (169, 44372), (172, 44393), (173, 44405), (184, 44447), (194, 44597), (197, 44630), (198, 44633), (203, 44684), (207, 44729), (208, 44735), (211, 44777), (216, 44840), (223, 44918), (226, 44975), (227, 44993), (230, 45026), (231, 45029), (234, 45068), (235, 45071), (238, 45152), (239, 45155), (242, 45215), (244, 45239), (247, 45290), (250, 45314), (253, 45338), (264, 45590), (267, 45647), (281, 45905), (283, 45974), (289, 46022), (296, 46109), (298, 46142), (300, 46145),

Gene: Roots515\_96 Start: 45264, Stop: 49373, Start Num: 3

Candidate Starts for Roots515\_96:

(Start: 3 @45264 has 184 MA's), (13, 45375), (15, 45399), (28, 45663), (29, 45669), (33, 45735), (36, 45771), (41, 45852), (43, 45888), (45, 45900), (46, 45906), (47, 46107), (48, 46167), (58, 46485), (65, 46638), (68, 46707), (72, 46734), (77, 46815), (81, 46857), (83, 46893), (84, 46905), (92, 46962), (94, 46995), (114, 47040), (117, 47058), (123, 47103), (127, 47151), (129, 47184), (139, 47262), (142, 47289), (149, 47358), (151, 47379), (164, 47505), (169, 47556), (172, 47577), (173, 47589), (184, 47631), (194, 47781), (197, 47814), (198, 47817), (203, 47868), (207, 47913), (208, 47919), (211, 47961), (216, 48024), (223, 48102), (226, 48159), (227, 48177), (230, 48210), (231, 48213), (234, 48252), (235, 48255), (238, 48336), (239, 48339), (242, 48399), (244, 48423), (247, 48474), (250, 48498), (253, 48522), (264, 48774), (267, 48831), (281, 49089), (283, 49158), (289, 49206), (296,

49293), (298, 49326), (300, 49329),

Gene: SCentae\_93 Start: 43993, Stop: 47241, Start Num: 1

Candidate Starts for SCentae\_93:

(Start: 1 @43993 has 4 MA's), (9, 44074), (15, 44149), (16, 44152), (18, 44209), (19, 44233), (23, 44296), (26, 44377), (27, 44392), (29, 44419), (35, 44503), (38, 44551), (43, 44638), (46, 44656), (51, 44695), (57, 44743), (71, 44932), (78, 45013), (92, 45118), (93, 45139), (94, 45145), (146, 45355), (147, 45373), (156, 45397), (165, 45484), (172, 45523), (184, 45586), (205, 45805), (208, 45850), (212, 45868), (218, 45949), (227, 46072), (241, 46282), (242, 46291), (251, 46387), (252, 46390), (256, 46450), (258, 46498), (262, 46624), (263, 46642), (266, 46696), (277, 46858), (279, 46942), (283, 47023), (295, 47158), (300, 47197), (301, 47227),

Gene: SVoro\_95 Start: 45229, Stop: 49398, Start Num: 3

Candidate Starts for SVoro\_95:

(Start: 3 @45229 has 184 MA's), (13, 45340), (15, 45364), (28, 45628), (29, 45634), (33, 45700), (36, 45736), (41, 45817), (43, 45853), (45, 45865), (46, 45871), (47, 46072), (48, 46132), (60, 46501), (62, 46522), (64, 46558), (67, 46678), (77, 46792), (80, 46825), (81, 46834), (85, 46930), (89, 46948), (94, 47020), (114, 47065), (117, 47083), (123, 47128), (127, 47176), (129, 47209), (132, 47233), (139, 47287), (142, 47314), (144, 47335), (149, 47383), (151, 47404), (164, 47530), (169, 47581), (172, 47602), (173, 47614), (184, 47656), (194, 47806), (197, 47839), (198, 47842), (203, 47893), (207, 47938), (208, 47944), (211, 47986), (216, 48049), (223, 48127), (226, 48184), (227, 48202), (230, 48235), (231, 48238), (234, 48277), (235, 48280), (238, 48361), (239, 48364), (242, 48424), (244, 48448), (247, 48499), (250, 48523), (253, 48547), (264, 48799), (267, 48856), (281, 49114), (283, 49183), (289, 49231), (296, 49318), (298, 49351), (300, 49354),

Gene: Salacia\_101 Start: 45319, Stop: 49431, Start Num: 3

Candidate Starts for Salacia\_101:

(Start: 3 @45319 has 184 MA's), (13, 45430), (15, 45454), (28, 45718), (29, 45724), (33, 45790), (36, 45826), (41, 45907), (43, 45943), (45, 45955), (46, 45961), (47, 46162), (58, 46543), (65, 46696), (68, 46765), (72, 46792), (77, 46873), (81, 46915), (83, 46951), (84, 46963), (92, 47020), (94, 47053), (114, 47098), (117, 47116), (123, 47161), (127, 47209), (129, 47242), (132, 47266), (139, 47320), (142, 47347), (144, 47368), (149, 47416), (151, 47437), (164, 47563), (169, 47614), (172, 47635), (173, 47647), (184, 47689), (194, 47839), (197, 47872), (198, 47875), (203, 47926), (207, 47971), (208, 47977), (211, 48019), (216, 48082), (223, 48160), (226, 48217), (227, 48235), (230, 48268), (231, 48271), (234, 48310), (235, 48313), (238, 48394), (239, 48397), (242, 48457), (244, 48481), (247, 48532), (250, 48556), (253, 48580), (264, 48832), (267, 48889), (281, 49147), (283, 49216), (289, 49264), (296, 49351), (298, 49384), (300, 49387),

Gene: Sauce\_98 Start: 44368, Stop: 48228, Start Num: 3

Candidate Starts for Sauce\_98:

(Start: 3 @44368 has 184 MA's), (13, 44479), (15, 44503), (28, 44767), (29, 44773), (33, 44839), (36, 44875), (41, 44956), (43, 44992), (45, 45004), (46, 45010), (60, 45331), (62, 45352), (64, 45388), (67, 45508), (77, 45622), (80, 45655), (81, 45664), (85, 45760), (89, 45778), (94, 45850), (97, 45895), (102, 45913), (105, 45958), (110, 46006), (113, 46039), (122, 46063), (129, 46117), (138, 46144), (144, 46165), (149, 46213), (151, 46234), (164, 46360), (169, 46411), (172, 46432), (173, 46444), (184, 46486), (194, 46636), (197, 46669), (198, 46672), (203, 46723), (207, 46768), (208, 46774), (211, 46816), (216, 46879), (223, 46957), (226, 47014), (227, 47032), (230, 47065), (231, 47068), (234, 47107), (235, 47110), (238, 47191), (239, 47194), (242, 47254), (244, 47278), (247, 47329), (250, 47353), (253, 47377), (264, 47629), (267, 47686), (281, 47944), (283, 48013), (289, 48061), (296, 48148), (298, 48181), (300, 48184),

Gene: ScoobyDoobyDoo\_90 Start: 42672, Stop: 46445, Start Num: 3

Candidate Starts for ScoobyDoobyDoo\_90:

(Start: 3 @42672 has 184 MA's), (15, 42807), (17, 42831), (19, 42891), (20, 42903), (21, 42948), (22, 42951), (23, 42954), (29, 43077), (32, 43134), (33, 43143), (38, 43209), (41, 43260), (42, 43269), (43, 43296), (46, 43314), (54, 43374), (59, 43449), (64, 43509), (67, 43623), (77, 43737), (80, 43770), (81, 43779), (87, 43839), (88, 43845), (90, 43851), (96, 43944), (131, 44250), (134, 44265), (136, 44277), (140, 44304), (141, 44325), (146, 44373), (149, 44394), (171, 44592), (186, 44730), (189, 44754), (193, 44817), (195, 44838), (201, 44889), (203, 44916), (210, 44979), (213, 45018), (217, 45078), (226, 45186), (227, 45204), (228, 45219), (240, 45360), (241, 45408), (252, 45555), (255, 45633), (262, 45819), (267, 45891), (269, 45906), (272, 45939), (274, 45954), (277, 46050), (281, 46143), (283, 46212), (290, 46263), (293, 46338),

Gene: ScottMcG\_94 Start: 44239, Stop: 48348, Start Num: 3

Candidate Starts for ScottMcG\_94:

(Start: 3 @44239 has 184 MA's), (13, 44350), (15, 44374), (28, 44638), (29, 44644), (33, 44710), (36, 44746), (41, 44827), (43, 44863), (45, 44875), (46, 44881), (47, 45082), (48, 45142), (58, 45460), (65, 45613), (68, 45682), (72, 45709), (77, 45790), (81, 45832), (83, 45868), (84, 45880), (92, 45937), (94, 45970), (114, 46015), (117, 46033), (123, 46078), (127, 46126), (129, 46159), (139, 46237), (142, 46264), (149, 46333), (151, 46354), (164, 46480), (169, 46531), (172, 46552), (173, 46564), (184, 46606), (194, 46756), (197, 46789), (198, 46792), (203, 46843), (207, 46888), (208, 46894), (211, 46936), (216, 46999), (223, 47077), (226, 47134), (227, 47152), (230, 47185), (231, 47188), (234, 47227), (235, 47230), (238, 47311), (239, 47314), (242, 47374), (244, 47398), (247, 47449), (250, 47473), (253, 47497), (264, 47749), (267, 47806), (281, 48064), (283, 48133), (289, 48181), (296, 48268), (298, 48301), (300, 48304),

Gene: Sebata\_99 Start: 45968, Stop: 49828, Start Num: 3

Candidate Starts for Sebata\_99:

(Start: 3 @45968 has 184 MA's), (13, 46079), (15, 46103), (28, 46367), (29, 46373), (33, 46439), (36, 46475), (41, 46556), (43, 46592), (45, 46604), (46, 46610), (60, 46931), (62, 46952), (64, 46988), (67, 47108), (77, 47222), (80, 47255), (81, 47264), (85, 47360), (89, 47378), (94, 47450), (97, 47495), (102, 47513), (105, 47558), (110, 47606), (113, 47639), (122, 47663), (129, 47717), (138, 47744), (144, 47765), (149, 47813), (151, 47834), (164, 47960), (169, 48011), (172, 48032), (173, 48044), (184, 48086), (194, 48236), (197, 48269), (198, 48272), (203, 48323), (207, 48368), (208, 48374), (211, 48416), (216, 48479), (223, 48557), (226, 48614), (227, 48632), (230, 48665), (231, 48668), (234, 48707), (235, 48710), (238, 48791), (239, 48794), (242, 48854), (244, 48878), (247, 48929), (250, 48953), (253, 48977), (264, 49229), (267, 49286), (281, 49544), (283, 49613), (289, 49661), (296, 49748), (298, 49781), (300, 49784),

Gene: Settecandela\_53 Start: 34080, Stop: 36638, Start Num: 119

Candidate Starts for Settecandela\_53:

(Start: 119 @34080 has 2 MA's), (121, 34092), (128, 34179), (133, 34224), (137, 34245), (143, 34305), (146, 34344), (148, 34365), (149, 34368), (154, 34419), (161, 34491), (162, 34497), (169, 34569), (177, 34722), (178, 34725), (179, 34746), (190, 34917), (199, 35013), (202, 35040), (206, 35115), (222, 35340), (232, 35472), (236, 35523), (241, 35637), (243, 35652), (245, 35691), (249, 35760), (265, 36114), (272, 36168), (273, 36174), (275, 36186), (278, 36345), (283, 36435), (285, 36447), (288, 36480),

Gene: Shaqnato\_90 Start: 43243, Stop: 47103, Start Num: 3

Candidate Starts for Shaqnato\_90:

(Start: 3 @43243 has 184 MA's), (13, 43354), (15, 43378), (28, 43642), (29, 43648), (33, 43714), (36, 43750), (41, 43831), (43, 43867), (45, 43879), (46, 43885), (60, 44206), (62, 44227), (64, 44263), (67, 44383), (77, 44497), (80, 44530), (81, 44539), (85, 44635), (89, 44653), (94, 44725), (97, 44770), (102, 44788), (105, 44833), (110, 44881), (113, 44914), (122, 44938), (129, 44992), (138, 45019), (144, 45040), (149, 45088), (151, 45109), (164, 45235), (169, 45286), (172, 45307), (173, 45319), (184, 45361), (194, 45511), (197, 45544), (198, 45547), (203, 45598), (207, 45643), (208, 45649), (211,

45691), (216, 45754), (223, 45832), (226, 45889), (227, 45907), (230, 45940), (231, 45943), (234, 45982), (235, 45985), (238, 46066), (239, 46069), (242, 46129), (244, 46153), (247, 46204), (250, 46228), (253, 46252), (264, 46504), (267, 46561), (281, 46819), (283, 46888), (289, 46936), (296, 47023), (298, 47056), (300, 47059),

Gene: Shelob\_99 Start: 46063, Stop: 50172, Start Num: 3

Candidate Starts for Shelob\_99:

(Start: 3 @46063 has 184 MA's), (13, 46174), (15, 46198), (28, 46462), (29, 46468), (33, 46534), (36, 46570), (41, 46651), (43, 46687), (45, 46699), (46, 46705), (47, 46906), (48, 46966), (58, 47284), (65, 47437), (68, 47506), (72, 47533), (77, 47614), (81, 47656), (83, 47692), (84, 47704), (92, 47761), (94, 47794), (114, 47839), (117, 47857), (123, 47902), (127, 47950), (129, 47983), (139, 48061), (142, 48088), (149, 48157), (151, 48178), (164, 48304), (169, 48355), (172, 48376), (173, 48388), (184, 48430), (194, 48580), (197, 48613), (198, 48616), (203, 48667), (207, 48712), (208, 48718), (211, 48760), (216, 48823), (223, 48901), (226, 48958), (227, 48976), (230, 49009), (231, 49012), (234, 49051), (235, 49054), (238, 49135), (239, 49138), (242, 49198), (244, 49222), (247, 49273), (250, 49297), (253, 49321), (264, 49573), (267, 49630), (281, 49888), (283, 49957), (289, 50005), (296, 50092), (298, 50125), (300, 50128),

Gene: ShiaLabeouf\_97 Start: 45275, Stop: 49387, Start Num: 3

Candidate Starts for ShiaLabeouf\_97:

(Start: 3 @45275 has 184 MA's), (13, 45386), (15, 45410), (28, 45674), (29, 45680), (33, 45746), (36, 45782), (41, 45863), (43, 45899), (45, 45911), (46, 45917), (47, 46118), (58, 46499), (65, 46652), (68, 46721), (72, 46748), (77, 46829), (81, 46871), (83, 46907), (84, 46919), (92, 46976), (94, 47009), (114, 47054), (117, 47072), (123, 47117), (127, 47165), (129, 47198), (132, 47222), (139, 47276), (142, 47303), (144, 47324), (149, 47372), (151, 47393), (164, 47519), (169, 47570), (172, 47591), (173, 47603), (184, 47645), (194, 47795), (197, 47828), (198, 47831), (203, 47882), (207, 47927), (208, 47933), (211, 47975), (216, 48038), (223, 48116), (226, 48173), (227, 48191), (230, 48224), (231, 48227), (234, 48266), (235, 48269), (238, 48350), (239, 48353), (242, 48413), (244, 48437), (247, 48488), (250, 48512), (253, 48536), (264, 48788), (267, 48845), (281, 49103), (283, 49172), (289, 49220), (296, 49307), (298, 49340), (300, 49343),

Gene: Shifa\_86 Start: 42697, Stop: 47232, Start Num: 3

Candidate Starts for Shifa\_86:

(Start: 3 @42697 has 184 MA's), (13, 42808), (15, 42832), (26, 43060), (28, 43096), (29, 43102), (33, 43168), (36, 43204), (41, 43285), (43, 43321), (45, 43333), (46, 43339), (47, 43540), (48, 43600), (62, 43990), (64, 44026), (67, 44146), (70, 44164), (77, 44260), (80, 44293), (81, 44302), (85, 44398), (89, 44416), (94, 44488), (98, 44608), (100, 44671), (101, 44707), (104, 44755), (106, 44806), (107, 44812), (109, 44815), (111, 44851), (114, 44899), (117, 44917), (123, 44962), (127, 45010), (129, 45043), (139, 45121), (142, 45148), (149, 45217), (151, 45238), (164, 45364), (169, 45415), (172, 45436), (173, 45448), (184, 45490), (194, 45640), (197, 45673), (198, 45676), (203, 45727), (207, 45772), (208, 45778), (211, 45820), (216, 45883), (223, 45961), (226, 46018), (227, 46036), (230, 46069), (231, 46072), (234, 46111), (235, 46114), (238, 46195), (239, 46198), (242, 46258), (244, 46282), (247, 46333), (250, 46357), (253, 46381), (264, 46633), (267, 46690), (281, 46948), (283, 47017), (289, 47065), (296, 47152), (298, 47185), (300, 47188),

Gene: Shnickers\_98 Start: 45239, Stop: 49351, Start Num: 3

Candidate Starts for Shnickers\_98:

(Start: 3 @45239 has 184 MA's), (13, 45350), (15, 45374), (28, 45638), (29, 45644), (33, 45710), (36, 45746), (41, 45827), (43, 45863), (45, 45875), (46, 45881), (47, 46082), (58, 46463), (65, 46616), (68, 46685), (72, 46712), (77, 46793), (81, 46835), (83, 46871), (84, 46883), (92, 46940), (94, 46973), (114, 47018), (117, 47036), (123, 47081), (127, 47129), (129, 47162), (132, 47186), (139, 47240), (142, 47267), (144, 47288), (149, 47336), (151, 47357), (164, 47483), (169, 47534), (172, 47555), (173, 47567), (184, 47609), (194, 47759), (197, 47792), (198, 47795), (203, 47846), (207, 47891), (208,

47897), (211, 47939), (216, 48002), (223, 48080), (226, 48137), (227, 48155), (230, 48188), (231, 48191), (234, 48230), (235, 48233), (238, 48314), (239, 48317), (242, 48377), (244, 48401), (247, 48452), (250, 48476), (253, 48500), (264, 48752), (267, 48809), (281, 49067), (283, 49136), (289, 49184), (296, 49271), (298, 49304), (300, 49307),

Gene: Shrimp\_97 Start: 45075, Stop: 49184, Start Num: 3

Candidate Starts for Shrimp\_97:

(Start: 3 @45075 has 184 MA's), (13, 45186), (15, 45210), (28, 45474), (29, 45480), (33, 45546), (36, 45582), (41, 45663), (43, 45699), (45, 45711), (46, 45717), (47, 45918), (48, 45978), (58, 46296), (65, 46449), (68, 46518), (72, 46545), (77, 46626), (81, 46668), (83, 46704), (84, 46716), (92, 46773), (94, 46806), (114, 46851), (117, 46869), (123, 46914), (127, 46962), (129, 46995), (139, 47073), (142, 47100), (149, 47169), (151, 47190), (164, 47316), (169, 47367), (172, 47388), (173, 47400), (184, 47442), (194, 47592), (197, 47625), (198, 47628), (203, 47679), (207, 47724), (208, 47730), (211, 47772), (216, 47835), (223, 47913), (226, 47970), (227, 47988), (230, 48021), (231, 48024), (234, 48063), (235, 48066), (238, 48147), (239, 48150), (242, 48210), (244, 48234), (247, 48285), (250, 48309), (253, 48333), (264, 48585), (267, 48642), (281, 48900), (283, 48969), (289, 49017), (296, 49104), (298, 49137), (300, 49140),

Gene: SilverDipper\_99 Start: 44483, Stop: 48595, Start Num: 3

Candidate Starts for SilverDipper\_99:

(Start: 3 @44483 has 184 MA's), (13, 44594), (15, 44618), (28, 44882), (29, 44888), (33, 44954), (36, 44990), (41, 45071), (43, 45107), (45, 45119), (46, 45125), (47, 45326), (58, 45707), (65, 45860), (68, 45929), (72, 45956), (77, 46037), (81, 46079), (83, 46115), (84, 46127), (92, 46184), (94, 46217), (114, 46262), (117, 46280), (123, 46325), (127, 46373), (129, 46406), (132, 46430), (139, 46484), (142, 46511), (144, 46532), (149, 46580), (151, 46601), (164, 46727), (169, 46778), (172, 46799), (173, 46811), (184, 46853), (194, 47003), (197, 47036), (198, 47039), (203, 47090), (207, 47135), (208, 47141), (211, 47183), (216, 47246), (223, 47324), (226, 47381), (227, 47399), (230, 47432), (231, 47435), (234, 47474), (235, 47477), (238, 47558), (239, 47561), (242, 47621), (244, 47645), (247, 47696), (250, 47720), (253, 47744), (264, 47996), (267, 48053), (281, 48311), (283, 48380), (289, 48428), (296, 48515), (298, 48548), (300, 48551),

Gene: Skog\_157 Start: 73546, Stop: 76794, Start Num: 1

Candidate Starts for Skog\_157:

(Start: 1 @73546 has 4 MA's), (15, 73705), (16, 73708), (23, 73852), (28, 73969), (29, 73975), (35, 74059), (43, 74194), (45, 74206), (46, 74212), (51, 74251), (56, 74290), (57, 74299), (63, 74380), (71, 74488), (74, 74527), (78, 74569), (92, 74674), (93, 74695), (94, 74701), (125, 74788), (146, 74911), (147, 74929), (156, 74953), (165, 75040), (172, 75079), (184, 75145), (208, 75406), (214, 75436), (218, 75508), (220, 75526), (221, 75535), (224, 75556), (227, 75631), (238, 75787), (244, 75874), (251, 75946), (258, 76057), (262, 76183), (263, 76201), (266, 76255), (276, 76369), (279, 76501), (283, 76582), (285, 76594), (292, 76678), (295, 76717), (300, 76750), (302, 76783),

Gene: SmallFry\_98 Start: 44464, Stop: 48576, Start Num: 3

Candidate Starts for SmallFry\_98:

(Start: 3 @44464 has 184 MA's), (13, 44575), (15, 44599), (28, 44863), (29, 44869), (33, 44935), (36, 44971), (41, 45052), (43, 45088), (45, 45100), (46, 45106), (47, 45307), (58, 45688), (65, 45841), (68, 45910), (72, 45937), (77, 46018), (81, 46060), (83, 46096), (84, 46108), (92, 46165), (94, 46198), (114, 46243), (117, 46261), (123, 46306), (127, 46354), (129, 46387), (132, 46411), (139, 46465), (142, 46492), (144, 46513), (149, 46561), (151, 46582), (164, 46708), (169, 46759), (172, 46780), (173, 46792), (184, 46834), (194, 46984), (197, 47017), (198, 47020), (203, 47071), (207, 47116), (208, 47122), (211, 47164), (216, 47227), (223, 47305), (226, 47362), (227, 47380), (230, 47413), (231, 47416), (234, 47455), (235, 47458), (238, 47539), (239, 47542), (242, 47602), (244, 47626), (247, 47677), (250, 47701), (253, 47725), (264, 47977), (267, 48034), (281, 48292), (283, 48361), (289, 48409), (296, 48496), (298, 48529), (300, 48532),

Gene: SoilZilla\_93 Start: 44359, Stop: 48468, Start Num: 3

Candidate Starts for SoilZilla\_93:

(Start: 3 @44359 has 184 MA's), (13, 44470), (15, 44494), (28, 44758), (29, 44764), (33, 44830), (36, 44866), (41, 44947), (43, 44983), (45, 44995), (46, 45001), (47, 45202), (48, 45262), (58, 45580), (65, 45733), (68, 45802), (72, 45829), (77, 45910), (81, 45952), (83, 45988), (84, 46000), (92, 46057), (94, 46090), (114, 46135), (117, 46153), (123, 46198), (127, 46246), (129, 46279), (139, 46357), (142, 46384), (149, 46453), (151, 46474), (164, 46600), (169, 46651), (172, 46672), (173, 46684), (184, 46726), (194, 46876), (197, 46909), (198, 46912), (203, 46963), (207, 47008), (208, 47014), (211, 47056), (216, 47119), (223, 47197), (226, 47254), (227, 47272), (230, 47305), (231, 47308), (234, 47347), (235, 47350), (238, 47431), (239, 47434), (242, 47494), (244, 47518), (247, 47569), (250, 47593), (253, 47617), (264, 47869), (267, 47926), (281, 48184), (283, 48253), (289, 48301), (296, 48388), (298, 48421), (300, 48424),

Gene: Spec\_94 Start: 45004, Stop: 49116, Start Num: 3

Candidate Starts for Spec\_94:

(Start: 3 @45004 has 184 MA's), (13, 45115), (15, 45139), (28, 45403), (29, 45409), (33, 45475), (36, 45511), (41, 45592), (43, 45628), (45, 45640), (46, 45646), (47, 45847), (58, 46228), (65, 46381), (68, 46450), (72, 46477), (77, 46558), (81, 46600), (83, 46636), (84, 46648), (92, 46705), (94, 46738), (114, 46783), (117, 46801), (123, 46846), (127, 46894), (129, 46927), (132, 46951), (139, 47005), (142, 47032), (144, 47053), (149, 47101), (151, 47122), (164, 47248), (169, 47299), (172, 47320), (173, 47332), (184, 47374), (194, 47524), (197, 47557), (198, 47560), (203, 47611), (207, 47656), (208, 47662), (211, 47704), (216, 47767), (223, 47845), (226, 47902), (227, 47920), (230, 47953), (231, 47956), (234, 47995), (235, 47998), (238, 48079), (239, 48082), (242, 48142), (244, 48166), (247, 48217), (250, 48241), (253, 48265), (264, 48517), (267, 48574), (281, 48832), (283, 48901), (289, 48949), (296, 49036), (298, 49069), (300, 49072),

Gene: Specks\_103 Start: 47138, Stop: 51250, Start Num: 3

Candidate Starts for Specks\_103:

(Start: 3 @47138 has 184 MA's), (13, 47249), (15, 47273), (28, 47537), (29, 47543), (33, 47609), (36, 47645), (41, 47726), (43, 47762), (45, 47774), (46, 47780), (47, 47981), (58, 48362), (65, 48515), (68, 48584), (72, 48611), (77, 48692), (81, 48734), (83, 48770), (84, 48782), (92, 48839), (94, 48872), (114, 48917), (117, 48935), (123, 48980), (127, 49028), (129, 49061), (132, 49085), (139, 49139), (142, 49166), (144, 49187), (149, 49235), (151, 49256), (164, 49382), (169, 49433), (172, 49454), (173, 49466), (184, 49508), (194, 49658), (197, 49691), (198, 49694), (203, 49745), (207, 49790), (208, 49796), (211, 49838), (216, 49901), (223, 49979), (226, 50036), (227, 50054), (230, 50087), (231, 50090), (234, 50129), (235, 50132), (238, 50213), (239, 50216), (242, 50276), (244, 50300), (247, 50351), (250, 50375), (253, 50399), (264, 50651), (267, 50708), (281, 50966), (283, 51035), (289, 51083), (296, 51170), (298, 51203), (300, 51206),

Gene: Sprinklers\_93 Start: 43740, Stop: 47600, Start Num: 3

Candidate Starts for Sprinklers\_93:

(Start: 3 @43740 has 184 MA's), (13, 43851), (15, 43875), (28, 44139), (29, 44145), (33, 44211), (36, 44247), (41, 44328), (43, 44364), (45, 44376), (46, 44382), (60, 44703), (62, 44724), (64, 44760), (67, 44880), (77, 44994), (80, 45027), (81, 45036), (85, 45132), (89, 45150), (94, 45222), (97, 45267), (102, 45285), (105, 45330), (110, 45378), (113, 45411), (122, 45435), (129, 45489), (138, 45516), (144, 45537), (149, 45585), (151, 45606), (164, 45732), (169, 45783), (172, 45804), (173, 45816), (184, 45858), (194, 46008), (197, 46041), (198, 46044), (203, 46095), (207, 46140), (208, 46146), (211, 46188), (216, 46251), (223, 46329), (226, 46386), (227, 46404), (230, 46437), (231, 46440), (234, 46479), (235, 46482), (238, 46563), (239, 46566), (242, 46626), (244, 46650), (247, 46701), (250, 46725), (253, 46749), (264, 47001), (267, 47058), (281, 47316), (283, 47385), (289, 47433), (296, 47520), (298, 47553), (300, 47556),

Gene: Spud\_97 Start: 45003, Stop: 49112, Start Num: 3

Candidate Starts for Spud\_97:

(Start: 3 @45003 has 184 MA's), (13, 45114), (15, 45138), (28, 45402), (29, 45408), (33, 45474), (36, 45510), (41, 45591), (43, 45627), (45, 45639), (46, 45645), (47, 45846), (48, 45906), (58, 46224), (65, 46377), (68, 46446), (72, 46473), (77, 46554), (81, 46596), (83, 46632), (84, 46644), (92, 46701), (94, 46734), (114, 46779), (117, 46797), (123, 46842), (127, 46890), (129, 46923), (139, 47001), (142, 47028), (149, 47097), (151, 47118), (164, 47244), (169, 47295), (172, 47316), (173, 47328), (184, 47370), (194, 47520), (197, 47553), (198, 47556), (203, 47607), (207, 47652), (208, 47658), (211, 47700), (216, 47763), (223, 47841), (226, 47898), (227, 47916), (230, 47949), (231, 47952), (234, 47991), (235, 47994), (238, 48075), (239, 48078), (242, 48138), (244, 48162), (247, 48213), (250, 48237), (253, 48261), (264, 48513), (267, 48570), (281, 48828), (283, 48897), (289, 48945), (296, 49032), (298, 49065), (300, 49068),

Gene: SrishMeg2525\_96 Start: 45178, Stop: 49287, Start Num: 3

Candidate Starts for SrishMeg2525\_96:

(Start: 3 @45178 has 184 MA's), (13, 45289), (15, 45313), (28, 45577), (29, 45583), (33, 45649), (36, 45685), (41, 45766), (43, 45802), (45, 45814), (46, 45820), (47, 46021), (48, 46081), (58, 46399), (65, 46552), (68, 46621), (72, 46648), (77, 46729), (81, 46771), (83, 46807), (84, 46819), (92, 46876), (94, 46909), (114, 46954), (117, 46972), (123, 47017), (127, 47065), (129, 47098), (139, 47176), (142, 47203), (149, 47272), (151, 47293), (164, 47419), (169, 47470), (172, 47491), (173, 47503), (184, 47545), (194, 47695), (197, 47728), (198, 47731), (203, 47782), (207, 47827), (208, 47833), (211, 47875), (216, 47938), (223, 48016), (226, 48073), (227, 48091), (230, 48124), (231, 48127), (234, 48166), (235, 48169), (238, 48250), (239, 48253), (242, 48313), (244, 48337), (247, 48388), (250, 48412), (253, 48436), (264, 48688), (267, 48745), (281, 49003), (283, 49072), (289, 49120), (296, 49207), (298, 49240), (300, 49243),

Gene: StephanieG\_96 Start: 45902, Stop: 50071, Start Num: 3

Candidate Starts for StephanieG\_96:

(Start: 3 @45902 has 184 MA's), (13, 46013), (15, 46037), (28, 46301), (29, 46307), (33, 46373), (36, 46409), (41, 46490), (43, 46526), (45, 46538), (46, 46544), (47, 46745), (48, 46805), (62, 47195), (64, 47231), (67, 47351), (70, 47369), (77, 47465), (80, 47498), (81, 47507), (85, 47603), (89, 47621), (94, 47693), (114, 47738), (117, 47756), (123, 47801), (127, 47849), (129, 47882), (132, 47906), (139, 47960), (142, 47987), (144, 48008), (149, 48056), (151, 48077), (164, 48203), (169, 48254), (172, 48275), (173, 48287), (184, 48329), (194, 48479), (197, 48512), (198, 48515), (203, 48566), (207, 48611), (208, 48617), (211, 48659), (216, 48722), (223, 48800), (226, 48857), (227, 48875), (230, 48908), (231, 48911), (234, 48950), (235, 48953), (238, 49034), (239, 49037), (242, 49097), (244, 49121), (247, 49172), (250, 49196), (253, 49220), (264, 49472), (267, 49529), (281, 49787), (283, 49856), (289, 49904), (296, 49991), (298, 50024), (300, 50027),

Gene: Stormageddon\_13 Start: 15160, Stop: 18429, Start Num: 2

Candidate Starts for Stormageddon\_13:

(Start: 2 @15160 has 3 MA's), (8, 15205), (15, 15298), (17, 15322), (20, 15394), (28, 15562), (29, 15568), (31, 15613), (32, 15625), (33, 15634), (34, 15646), (39, 15703), (42, 15754), (44, 15784), (46, 15799), (66, 16045), (73, 16114), (77, 16168), (79, 16192), (86, 16237), (122, 16318), (124, 16345), (147, 16483), (158, 16558), (159, 16576), (164, 16633), (187, 16828), (188, 16834), (195, 16924), (196, 16927), (203, 16975), (216, 17116), (221, 17182), (235, 17359), (257, 17692), (259, 17734), (268, 17902), (270, 17917), (271, 17923), (272, 17944), (281, 18151), (288, 18259), (295, 18346), (297, 18361), (299, 18379),

Gene: Stubby\_90 Start: 43088, Stop: 47623, Start Num: 3

Candidate Starts for Stubby\_90:

(Start: 3 @43088 has 184 MA's), (13, 43199), (15, 43223), (28, 43487), (29, 43493), (33, 43559), (36, 43595), (41, 43676), (43, 43712), (45, 43724), (46, 43730), (47, 43931), (48, 43991), (62, 44381), (64,

44417), (67, 44537), (70, 44555), (77, 44651), (80, 44684), (81, 44693), (85, 44789), (89, 44807), (94, 44879), (98, 44999), (100, 45062), (101, 45098), (104, 45146), (106, 45197), (107, 45203), (109, 45206), (111, 45242), (114, 45290), (117, 45308), (123, 45353), (127, 45401), (129, 45434), (139, 45512), (142, 45539), (149, 45608), (151, 45629), (164, 45755), (169, 45806), (172, 45827), (173, 45839), (184, 45881), (194, 46031), (197, 46064), (198, 46067), (203, 46118), (207, 46163), (208, 46169), (211, 46211), (216, 46274), (223, 46352), (226, 46409), (227, 46427), (230, 46460), (231, 46463), (234, 46502), (235, 46505), (238, 46586), (239, 46589), (242, 46649), (244, 46673), (247, 46724), (250, 46748), (253, 46772), (264, 47024), (267, 47081), (281, 47339), (283, 47408), (289, 47456), (296, 47543), (298, 47576), (300, 47579),

Gene: StubbySaigey\_100 Start: 43771, Stop: 47883, Start Num: 3

Candidate Starts for StubbySaigey\_100:

(Start: 3 @43771 has 184 MA's), (13, 43882), (15, 43906), (28, 44170), (29, 44176), (33, 44242), (36, 44278), (41, 44359), (43, 44395), (45, 44407), (46, 44413), (47, 44614), (58, 44995), (65, 45148), (68, 45217), (72, 45244), (77, 45325), (81, 45367), (83, 45403), (84, 45415), (92, 45472), (94, 45505), (114, 45550), (117, 45568), (123, 45613), (127, 45661), (129, 45694), (132, 45718), (139, 45772), (142, 45799), (144, 45820), (149, 45868), (151, 45889), (164, 46015), (169, 46066), (172, 46087), (173, 46099), (184, 46141), (194, 46291), (197, 46324), (198, 46327), (203, 46378), (207, 46423), (208, 46429), (211, 46471), (216, 46534), (223, 46612), (226, 46669), (227, 46687), (230, 46720), (231, 46723), (234, 46762), (235, 46765), (238, 46846), (239, 46849), (242, 46909), (244, 46933), (247, 46984), (250, 47008), (253, 47032), (264, 47284), (267, 47341), (281, 47599), (283, 47668), (289, 47716), (296, 47803), (298, 47836), (300, 47839),

Gene: Substance289\_96 Start: 44757, Stop: 48869, Start Num: 3

Candidate Starts for Substance289\_96:

(Start: 3 @44757 has 184 MA's), (13, 44868), (15, 44892), (28, 45156), (29, 45162), (33, 45228), (36, 45264), (41, 45345), (43, 45381), (45, 45393), (46, 45399), (47, 45600), (58, 45981), (65, 46134), (68, 46203), (72, 46230), (77, 46311), (81, 46353), (83, 46389), (84, 46401), (92, 46458), (94, 46491), (114, 46536), (117, 46554), (123, 46599), (127, 46647), (129, 46680), (132, 46704), (139, 46758), (142, 46785), (144, 46806), (149, 46854), (151, 46875), (164, 47001), (169, 47052), (172, 47073), (173, 47085), (184, 47127), (194, 47277), (197, 47310), (198, 47313), (203, 47364), (207, 47409), (208, 47415), (211, 47457), (216, 47520), (223, 47598), (226, 47655), (227, 47673), (230, 47706), (231, 47709), (234, 47748), (235, 47751), (238, 47832), (239, 47835), (242, 47895), (244, 47919), (247, 47970), (250, 47994), (253, 48018), (264, 48270), (267, 48327), (281, 48585), (283, 48654), (289, 48702), (296, 48789), (298, 48822), (300, 48825),

Gene: Tainan\_102 Start: 46461, Stop: 50573, Start Num: 3

Candidate Starts for Tainan\_102:

(Start: 3 @46461 has 184 MA's), (13, 46572), (15, 46596), (28, 46860), (29, 46866), (33, 46932), (36, 46968), (41, 47049), (43, 47085), (45, 47097), (46, 47103), (47, 47304), (58, 47685), (65, 47838), (68, 47907), (72, 47934), (77, 48015), (81, 48057), (83, 48093), (84, 48105), (92, 48162), (94, 48195), (114, 48240), (117, 48258), (123, 48303), (127, 48351), (129, 48384), (132, 48408), (139, 48462), (142, 48489), (144, 48510), (149, 48558), (151, 48579), (164, 48705), (169, 48756), (172, 48777), (173, 48789), (184, 48831), (194, 48981), (197, 49014), (198, 49017), (203, 49068), (207, 49113), (208, 49119), (211, 49161), (216, 49224), (223, 49302), (226, 49359), (227, 49377), (230, 49410), (231, 49413), (234, 49452), (235, 49455), (238, 49536), (239, 49539), (242, 49599), (244, 49623), (247, 49674), (250, 49698), (253, 49722), (264, 49974), (267, 50031), (281, 50289), (283, 50358), (289, 50406), (296, 50493), (298, 50526), (300, 50529),

Gene: Teardrop\_97 Start: 44462, Stop: 48574, Start Num: 3

Candidate Starts for Teardrop\_97:

(Start: 3 @44462 has 184 MA's), (13, 44573), (15, 44597), (28, 44861), (29, 44867), (33, 44933), (36, 44969), (41, 45050), (43, 45086), (45, 45098), (46, 45104), (47, 45305), (58, 45686), (65, 45839), (68,

45908), (72, 45935), (77, 46016), (81, 46058), (83, 46094), (84, 46106), (92, 46163), (94, 46196), (114, 46241), (117, 46259), (123, 46304), (127, 46352), (129, 46385), (132, 46409), (139, 46463), (142, 46490), (144, 46511), (149, 46559), (151, 46580), (164, 46706), (169, 46757), (172, 46778), (173, 46790), (184, 46832), (194, 46982), (197, 47015), (198, 47018), (203, 47069), (207, 47114), (208, 47120), (211, 47162), (216, 47225), (223, 47303), (226, 47360), (227, 47378), (230, 47411), (231, 47414), (234, 47453), (235, 47456), (238, 47537), (239, 47540), (242, 47600), (244, 47624), (247, 47675), (250, 47699), (253, 47723), (264, 47975), (267, 48032), (281, 48290), (283, 48359), (289, 48407), (296, 48494), (298, 48527), (300, 48530),

Gene: TinyTim\_97 Start: 45071, Stop: 49180, Start Num: 3

Candidate Starts for TinyTim\_97:

(Start: 3 @45071 has 184 MA's), (13, 45182), (15, 45206), (28, 45470), (29, 45476), (33, 45542), (36, 45578), (41, 45659), (43, 45695), (45, 45707), (46, 45713), (47, 45914), (48, 45974), (58, 46292), (65, 46445), (68, 46514), (72, 46541), (77, 46622), (81, 46664), (83, 46700), (84, 46712), (92, 46769), (94, 46802), (114, 46847), (117, 46865), (123, 46910), (127, 46958), (129, 46991), (139, 47069), (142, 47096), (149, 47165), (151, 47186), (164, 47312), (169, 47363), (172, 47384), (173, 47396), (184, 47438), (194, 47588), (197, 47621), (198, 47624), (203, 47675), (207, 47720), (208, 47726), (211, 47768), (216, 47831), (223, 47909), (226, 47966), (227, 47984), (230, 48017), (231, 48020), (234, 48059), (235, 48062), (238, 48143), (239, 48146), (242, 48206), (244, 48230), (247, 48281), (250, 48305), (253, 48329), (264, 48581), (267, 48638), (281, 48896), (283, 48965), (289, 49013), (296, 49100), (298, 49133), (300, 49136),

Gene: Tonenili\_111 Start: 49216, Stop: 52926, Start Num: 3

Candidate Starts for Tonenili\_111:

(Start: 3 @49216 has 184 MA's), (4, 49231), (13, 49327), (15, 49351), (28, 49615), (29, 49621), (36, 49723), (41, 49804), (42, 49813), (43, 49840), (46, 49858), (62, 50062), (64, 50098), (67, 50218), (70, 50236), (77, 50332), (80, 50365), (81, 50374), (89, 50488), (94, 50560), (114, 50605), (117, 50623), (123, 50668), (127, 50716), (129, 50749), (139, 50827), (142, 50854), (149, 50923), (151, 50944), (152, 50956), (164, 51070), (169, 51121), (173, 51154), (184, 51196), (192, 51334), (197, 51385), (198, 51388), (203, 51424), (207, 51472), (208, 51478), (216, 51577), (223, 51655), (227, 51730), (230, 51763), (231, 51766), (234, 51805), (235, 51808), (238, 51889), (239, 51892), (242, 51952), (244, 51976), (250, 52051), (264, 52327), (267, 52384), (281, 52642), (283, 52711), (289, 52759), (298, 52879), (300, 52882),

Gene: Tortoise16\_95 Start: 45063, Stop: 49175, Start Num: 3

Candidate Starts for Tortoise16\_95:

(Start: 3 @45063 has 184 MA's), (13, 45174), (15, 45198), (28, 45462), (29, 45468), (33, 45534), (36, 45570), (41, 45651), (43, 45687), (45, 45699), (46, 45705), (47, 45906), (58, 46287), (65, 46440), (68, 46509), (72, 46536), (77, 46617), (81, 46659), (83, 46695), (84, 46707), (92, 46764), (94, 46797), (114, 46842), (117, 46860), (123, 46905), (127, 46953), (129, 46986), (132, 47010), (139, 47064), (142, 47091), (144, 47112), (149, 47160), (151, 47181), (164, 47307), (169, 47358), (172, 47379), (173, 47391), (184, 47433), (194, 47583), (197, 47616), (198, 47619), (203, 47670), (207, 47715), (208, 47721), (211, 47763), (216, 47826), (223, 47904), (226, 47961), (227, 47979), (230, 48012), (231, 48015), (234, 48054), (235, 48057), (238, 48138), (239, 48141), (242, 48201), (244, 48225), (247, 48276), (250, 48300), (253, 48324), (264, 48576), (267, 48633), (281, 48891), (283, 48960), (289, 49008), (296, 49095), (298, 49128), (300, 49131),

Gene: Trinitium\_94 Start: 43509, Stop: 47621, Start Num: 3

Candidate Starts for Trinitium\_94:

(Start: 3 @43509 has 184 MA's), (13, 43620), (15, 43644), (28, 43908), (29, 43914), (33, 43980), (36, 44016), (41, 44097), (43, 44133), (45, 44145), (46, 44151), (47, 44352), (58, 44733), (65, 44886), (68, 44955), (72, 44982), (77, 45063), (81, 45105), (83, 45141), (84, 45153), (92, 45210), (94, 45243), (114, 45288), (117, 45306), (123, 45351), (127, 45399), (129, 45432), (132, 45456), (139, 45510), (142,

45537), (144, 45558), (149, 45606), (151, 45627), (164, 45753), (169, 45804), (172, 45825), (173, 45837), (184, 45879), (194, 46029), (197, 46062), (198, 46065), (203, 46116), (207, 46161), (208, 46167), (211, 46209), (216, 46272), (223, 46350), (226, 46407), (227, 46425), (230, 46458), (231, 46461), (234, 46500), (235, 46503), (238, 46584), (239, 46587), (242, 46647), (244, 46671), (247, 46722), (250, 46746), (253, 46770), (264, 47022), (267, 47079), (281, 47337), (283, 47406), (289, 47454), (296, 47541), (298, 47574), (300, 47577),

Gene: Turret\_92 Start: 42951, Stop: 47060, Start Num: 3

Candidate Starts for Turret\_92:

(Start: 3 @42951 has 184 MA's), (13, 43062), (15, 43086), (28, 43350), (29, 43356), (33, 43422), (36, 43458), (41, 43539), (43, 43575), (45, 43587), (46, 43593), (47, 43794), (48, 43854), (58, 44172), (65, 44325), (68, 44394), (72, 44421), (77, 44502), (81, 44544), (83, 44580), (84, 44592), (92, 44649), (94, 44682), (114, 44727), (117, 44745), (123, 44790), (127, 44838), (129, 44871), (139, 44949), (142, 44976), (149, 45045), (151, 45066), (164, 45192), (169, 45243), (172, 45264), (173, 45276), (184, 45318), (194, 45468), (197, 45501), (198, 45504), (203, 45555), (207, 45600), (208, 45606), (211, 45648), (216, 45711), (223, 45789), (226, 45846), (227, 45864), (230, 45897), (231, 45900), (234, 45939), (235, 45942), (238, 46023), (239, 46026), (242, 46086), (244, 46110), (247, 46161), (250, 46185), (253, 46209), (264, 46461), (267, 46518), (281, 46776), (283, 46845), (289, 46893), (296, 46980), (298, 47013), (300, 47016),

Gene: Tyke\_99 Start: 46604, Stop: 50716, Start Num: 3

Candidate Starts for Tyke\_99:

(Start: 3 @46604 has 184 MA's), (13, 46715), (15, 46739), (28, 47003), (29, 47009), (33, 47075), (36, 47111), (41, 47192), (43, 47228), (45, 47240), (46, 47246), (47, 47447), (58, 47828), (65, 47981), (68, 48050), (72, 48077), (77, 48158), (81, 48200), (83, 48236), (84, 48248), (92, 48305), (94, 48338), (114, 48383), (117, 48401), (123, 48446), (127, 48494), (129, 48527), (132, 48551), (139, 48605), (142, 48632), (144, 48653), (149, 48701), (151, 48722), (164, 48848), (169, 48899), (172, 48920), (173, 48932), (184, 48974), (194, 49124), (197, 49157), (198, 49160), (203, 49211), (207, 49256), (208, 49262), (211, 49304), (216, 49367), (223, 49445), (226, 49502), (227, 49520), (230, 49553), (231, 49556), (234, 49595), (235, 49598), (238, 49679), (239, 49682), (242, 49742), (244, 49766), (247, 49817), (250, 49841), (253, 49865), (264, 50117), (267, 50174), (281, 50432), (283, 50501), (289, 50549), (296, 50636), (298, 50669), (300, 50672),

Gene: ValleyTerrace\_98 Start: 44483, Stop: 48595, Start Num: 3

Candidate Starts for ValleyTerrace\_98:

(Start: 3 @44483 has 184 MA's), (13, 44594), (15, 44618), (28, 44882), (29, 44888), (33, 44954), (36, 44990), (41, 45071), (43, 45107), (45, 45119), (46, 45125), (47, 45326), (58, 45707), (65, 45860), (68, 45929), (72, 45956), (77, 46037), (81, 46079), (83, 46115), (84, 46127), (92, 46184), (94, 46217), (114, 46262), (117, 46280), (123, 46325), (127, 46373), (129, 46406), (132, 46430), (139, 46484), (142, 46511), (144, 46532), (149, 46580), (151, 46601), (164, 46727), (169, 46778), (172, 46799), (173, 46811), (184, 46853), (194, 47003), (197, 47036), (198, 47039), (203, 47090), (207, 47135), (208, 47141), (211, 47183), (216, 47246), (223, 47324), (226, 47381), (227, 47399), (230, 47432), (231, 47435), (234, 47474), (235, 47477), (238, 47558), (239, 47561), (242, 47621), (244, 47645), (247, 47696), (250, 47720), (253, 47744), (264, 47996), (267, 48053), (281, 48311), (283, 48380), (289, 48428), (296, 48515), (298, 48548), (300, 48551),

Gene: Vortrix\_112 Start: 48622, Stop: 52911, Start Num: 3

Candidate Starts for Vortrix\_112:

(Start: 3 @48622 has 184 MA's), (4, 48637), (12, 48700), (13, 48733), (15, 48757), (28, 49021), (29, 49027), (36, 49129), (41, 49210), (42, 49219), (43, 49246), (46, 49264), (62, 49468), (64, 49504), (67, 49624), (70, 49642), (77, 49738), (80, 49771), (81, 49780), (85, 49876), (89, 49894), (94, 49966), (98, 50086), (100, 50149), (101, 50185), (104, 50233), (106, 50284), (107, 50290), (109, 50293), (111, 50329), (114, 50377), (117, 50395), (123, 50440), (127, 50488), (129, 50521), (139, 50599), (142,

50626), (149, 50695), (151, 50716), (152, 50728), (164, 50842), (169, 50893), (176, 51043), (181, 51121), (184, 51181), (185, 51190), (192, 51319), (197, 51370), (198, 51373), (203, 51409), (207, 51457), (208, 51463), (216, 51562), (223, 51640), (227, 51715), (230, 51748), (231, 51751), (234, 51790), (235, 51793), (238, 51874), (239, 51877), (242, 51937), (244, 51961), (247, 52012), (250, 52036), (264, 52312), (267, 52369), (281, 52627), (283, 52696), (289, 52744), (298, 52864), (300, 52867),

Gene: Wally\_96 Start: 43611, Stop: 47723, Start Num: 3

Candidate Starts for Wally\_96:

(Start: 3 @43611 has 184 MA's), (13, 43722), (15, 43746), (28, 44010), (29, 44016), (33, 44082), (36, 44118), (41, 44199), (43, 44235), (45, 44247), (46, 44253), (47, 44454), (58, 44835), (65, 44988), (68, 45057), (72, 45084), (77, 45165), (81, 45207), (83, 45243), (84, 45255), (92, 45312), (94, 45345), (114, 45390), (117, 45408), (123, 45453), (127, 45501), (129, 45534), (132, 45558), (139, 45612), (142, 45639), (144, 45660), (149, 45708), (151, 45729), (164, 45855), (169, 45906), (172, 45927), (173, 45939), (184, 45981), (194, 46131), (197, 46164), (198, 46167), (203, 46218), (207, 46263), (208, 46269), (211, 46311), (216, 46374), (223, 46452), (226, 46509), (227, 46527), (230, 46560), (231, 46563), (234, 46602), (235, 46605), (238, 46686), (239, 46689), (242, 46749), (244, 46773), (247, 46824), (250, 46848), (253, 46872), (264, 47124), (267, 47181), (281, 47439), (283, 47508), (289, 47556), (296, 47643), (298, 47676), (300, 47679),

Gene: Willis\_98 Start: 44966, Stop: 49075, Start Num: 3

Candidate Starts for Willis\_98:

(Start: 3 @44966 has 184 MA's), (13, 45077), (15, 45101), (28, 45365), (29, 45371), (33, 45437), (36, 45473), (41, 45554), (43, 45590), (45, 45602), (46, 45608), (47, 45809), (48, 45869), (58, 46187), (65, 46340), (68, 46409), (72, 46436), (77, 46517), (81, 46559), (83, 46595), (84, 46607), (92, 46664), (94, 46697), (114, 46742), (117, 46760), (123, 46805), (127, 46853), (129, 46886), (139, 46964), (142, 46991), (149, 47060), (151, 47081), (164, 47207), (169, 47258), (172, 47279), (173, 47291), (184, 47333), (194, 47483), (197, 47516), (198, 47519), (203, 47570), (207, 47615), (208, 47621), (211, 47663), (216, 47726), (223, 47804), (226, 47861), (227, 47879), (230, 47912), (231, 47915), (234, 47954), (235, 47957), (238, 48038), (239, 48041), (242, 48101), (244, 48125), (247, 48176), (250, 48200), (253, 48224), (264, 48476), (267, 48533), (281, 48791), (283, 48860), (289, 48908), (296, 48995), (298, 49028), (300, 49031),

Gene: Yassified\_94 Start: 43787, Stop: 47647, Start Num: 3

Candidate Starts for Yassified\_94:

(Start: 3 @43787 has 184 MA's), (13, 43898), (15, 43922), (28, 44186), (29, 44192), (33, 44258), (36, 44294), (41, 44375), (43, 44411), (45, 44423), (46, 44429), (60, 44750), (62, 44771), (64, 44807), (67, 44927), (77, 45041), (80, 45074), (81, 45083), (85, 45179), (89, 45197), (94, 45269), (97, 45314), (102, 45332), (105, 45377), (110, 45425), (113, 45458), (122, 45482), (129, 45536), (138, 45563), (144, 45584), (149, 45632), (151, 45653), (164, 45779), (169, 45830), (172, 45851), (173, 45863), (184, 45905), (194, 46055), (197, 46088), (198, 46091), (203, 46142), (207, 46187), (208, 46193), (211, 46235), (216, 46298), (223, 46376), (226, 46433), (227, 46451), (230, 46484), (231, 46487), (234, 46526), (235, 46529), (238, 46610), (239, 46613), (242, 46673), (244, 46697), (247, 46748), (250, 46772), (253, 46796), (264, 47048), (267, 47105), (281, 47363), (283, 47432), (289, 47480), (296, 47567), (298, 47600), (300, 47603),

Gene: YemiJoy2021\_98 Start: 45068, Stop: 49177, Start Num: 3

Candidate Starts for YemiJoy2021\_98:

(Start: 3 @45068 has 184 MA's), (13, 45179), (15, 45203), (28, 45467), (29, 45473), (33, 45539), (36, 45575), (41, 45656), (43, 45692), (45, 45704), (46, 45710), (47, 45911), (48, 45971), (58, 46289), (65, 46442), (68, 46511), (72, 46538), (77, 46619), (81, 46661), (83, 46697), (84, 46709), (92, 46766), (94, 46799), (114, 46844), (117, 46862), (123, 46907), (127, 46955), (129, 46988), (139, 47066), (142, 47093), (149, 47162), (151, 47183), (164, 47309), (169, 47360), (172, 47381), (173, 47393), (184,

47435), (194, 47585), (197, 47618), (198, 47621), (203, 47672), (207, 47717), (208, 47723), (211, 47765), (216, 47828), (223, 47906), (226, 47963), (227, 47981), (230, 48014), (231, 48017), (234, 48056), (235, 48059), (238, 48140), (239, 48143), (242, 48203), (244, 48227), (247, 48278), (250, 48302), (253, 48326), (264, 48578), (267, 48635), (281, 48893), (283, 48962), (289, 49010), (296, 49097), (298, 49130), (300, 49133),

Gene: YoungMoneyMata\_98 Start: 44234, Stop: 48346, Start Num: 3

Candidate Starts for YoungMoneyMata\_98:

(Start: 3 @44234 has 184 MA's), (13, 44345), (15, 44369), (28, 44633), (29, 44639), (33, 44705), (36, 44741), (41, 44822), (43, 44858), (45, 44870), (46, 44876), (47, 45077), (58, 45458), (65, 45611), (68, 45680), (72, 45707), (77, 45788), (81, 45830), (83, 45866), (84, 45878), (92, 45935), (94, 45968), (114, 46013), (117, 46031), (123, 46076), (127, 46124), (129, 46157), (132, 46181), (139, 46235), (142, 46262), (144, 46283), (149, 46331), (151, 46352), (164, 46478), (169, 46529), (172, 46550), (173, 46562), (184, 46604), (194, 46754), (197, 46787), (198, 46790), (203, 46841), (207, 46886), (208, 46892), (211, 46934), (216, 46997), (223, 47075), (226, 47132), (227, 47150), (230, 47183), (231, 47186), (234, 47225), (235, 47228), (238, 47309), (239, 47312), (242, 47372), (244, 47396), (247, 47447), (250, 47471), (253, 47495), (264, 47747), (267, 47804), (281, 48062), (283, 48131), (289, 48179), (296, 48266), (298, 48299), (300, 48302),

Gene: Yucca\_97 Start: 44990, Stop: 49099, Start Num: 3

Candidate Starts for Yucca\_97:

(Start: 3 @44990 has 184 MA's), (13, 45101), (15, 45125), (28, 45389), (29, 45395), (33, 45461), (36, 45497), (41, 45578), (43, 45614), (45, 45626), (46, 45632), (47, 45833), (48, 45893), (58, 46211), (65, 46364), (68, 46433), (72, 46460), (77, 46541), (81, 46583), (83, 46619), (84, 46631), (92, 46688), (94, 46721), (114, 46766), (117, 46784), (123, 46829), (127, 46877), (129, 46910), (132, 46934), (139, 46988), (142, 47015), (144, 47036), (149, 47084), (151, 47105), (164, 47231), (169, 47282), (172, 47303), (173, 47315), (184, 47357), (194, 47507), (197, 47540), (198, 47543), (203, 47594), (207, 47639), (208, 47645), (211, 47687), (216, 47750), (223, 47828), (226, 47885), (227, 47903), (230, 47936), (231, 47939), (234, 47978), (235, 47981), (238, 48062), (239, 48065), (242, 48125), (244, 48149), (247, 48200), (250, 48224), (253, 48248), (264, 48500), (267, 48557), (281, 48815), (283, 48884), (289, 48932), (296, 49019), (298, 49052), (300, 49055),

Gene: Zalkecks\_98 Start: 44756, Stop: 48865, Start Num: 3

Candidate Starts for Zalkecks\_98:

(Start: 3 @44756 has 184 MA's), (13, 44867), (15, 44891), (28, 45155), (29, 45161), (33, 45227), (36, 45263), (41, 45344), (43, 45380), (45, 45392), (46, 45398), (47, 45599), (48, 45659), (58, 45977), (65, 46130), (68, 46199), (72, 46226), (77, 46307), (81, 46349), (83, 46385), (84, 46397), (92, 46454), (94, 46487), (114, 46532), (117, 46550), (123, 46595), (127, 46643), (129, 46676), (139, 46754), (142, 46781), (149, 46850), (151, 46871), (164, 46997), (169, 47048), (172, 47069), (173, 47081), (184, 47123), (194, 47273), (197, 47306), (198, 47309), (203, 47360), (207, 47405), (208, 47411), (211, 47453), (216, 47516), (223, 47594), (226, 47651), (227, 47669), (230, 47702), (231, 47705), (234, 47744), (235, 47747), (238, 47828), (239, 47831), (242, 47891), (244, 47915), (247, 47966), (250, 47990), (253, 48014), (264, 48266), (267, 48323), (281, 48581), (283, 48650), (289, 48698), (296, 48785), (298, 48818), (300, 48821),

Gene: Zeenon\_99 Start: 44686, Stop: 48798, Start Num: 3

Candidate Starts for Zeenon\_99:

(Start: 3 @44686 has 184 MA's), (13, 44797), (15, 44821), (28, 45085), (29, 45091), (33, 45157), (36, 45193), (41, 45274), (43, 45310), (45, 45322), (46, 45328), (47, 45529), (48, 45589), (58, 45910), (65, 46063), (68, 46132), (72, 46159), (77, 46240), (81, 46282), (83, 46318), (84, 46330), (92, 46387), (94, 46420), (114, 46465), (117, 46483), (123, 46528), (127, 46576), (129, 46609), (139, 46687), (142, 46714), (149, 46783), (151, 46804), (164, 46930), (169, 46981), (172, 47002), (173, 47014), (184, 47056), (194, 47206), (197, 47239), (198, 47242), (203, 47293), (207, 47338), (208, 47344), (211,

47386), (216, 47449), (223, 47527), (226, 47584), (227, 47602), (230, 47635), (231, 47638), (234, 47677), (235, 47680), (238, 47761), (239, 47764), (242, 47824), (244, 47848), (247, 47899), (250, 47923), (253, 47947), (264, 48199), (267, 48256), (281, 48514), (283, 48583), (289, 48631), (296, 48718), (298, 48751), (300, 48754),

Gene: ZygoTaiga\_96 Start: 45843, Stop: 49952, Start Num: 3

Candidate Starts for ZygoTaiga\_96:

(Start: 3 @45843 has 184 MA's), (13, 45954), (15, 45978), (28, 46242), (29, 46248), (33, 46314), (36, 46350), (41, 46431), (43, 46467), (45, 46479), (46, 46485), (47, 46686), (48, 46746), (58, 47064), (65, 47217), (68, 47286), (72, 47313), (77, 47394), (81, 47436), (83, 47472), (84, 47484), (92, 47541), (94, 47574), (114, 47619), (117, 47637), (123, 47682), (127, 47730), (129, 47763), (139, 47841), (142, 47868), (149, 47937), (151, 47958), (164, 48084), (169, 48135), (172, 48156), (173, 48168), (184, 48210), (194, 48360), (197, 48393), (198, 48396), (203, 48447), (207, 48492), (208, 48498), (211, 48540), (216, 48603), (223, 48681), (226, 48738), (227, 48756), (230, 48789), (231, 48792), (234, 48831), (235, 48834), (238, 48915), (239, 48918), (242, 48978), (244, 49002), (247, 49053), (250, 49077), (253, 49101), (264, 49353), (267, 49410), (281, 49668), (283, 49737), (289, 49785), (296, 49872), (298, 49905), (300, 49908),