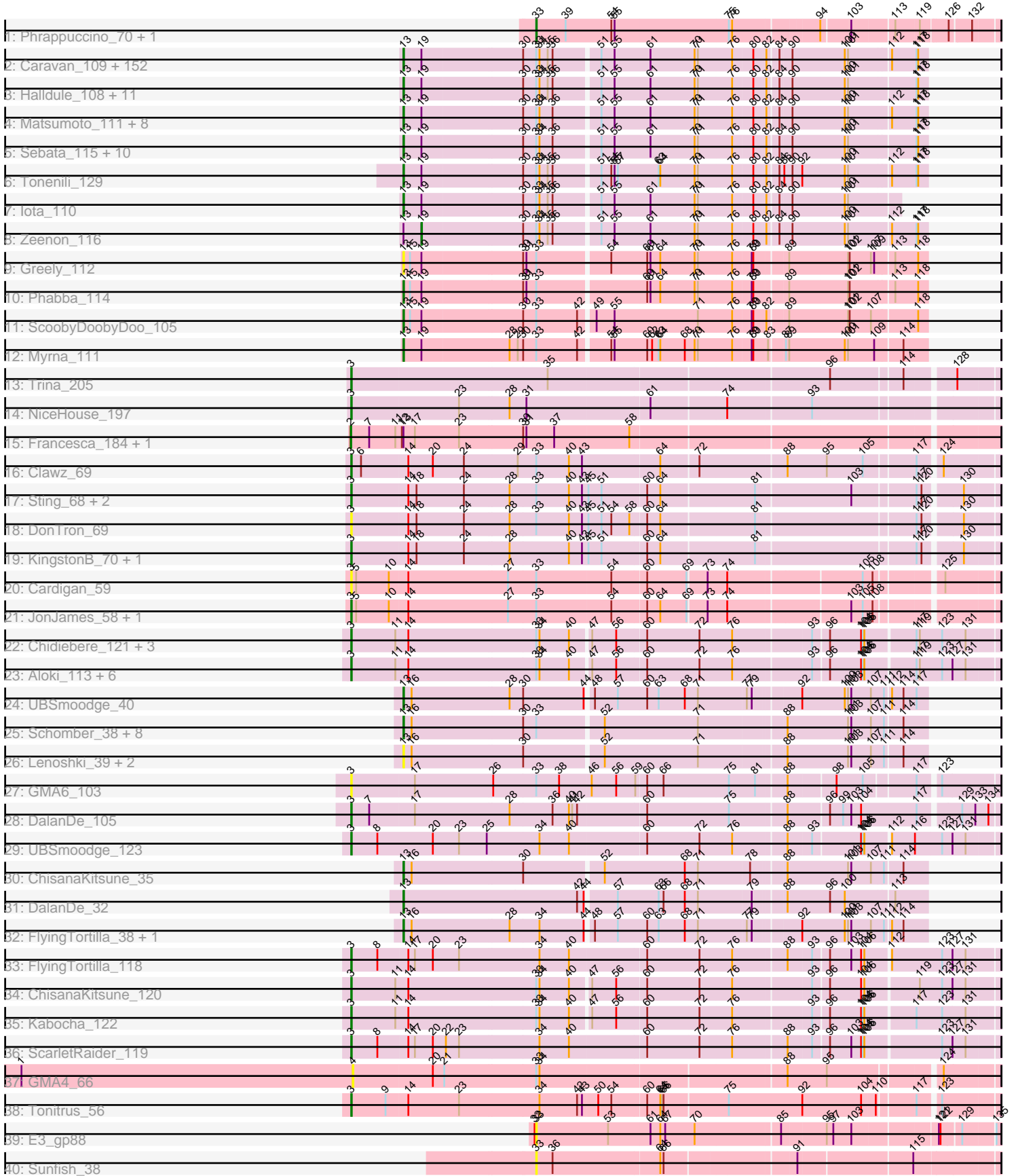


Pham 177446



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 177446 Report

This analysis was run 11/02/24 on database version 579.

Pham number 177446 has 247 members, 42 are drafts.

Phages represented in each track:

- Track 1 : Phrappuccino\_70, Settecandela\_70
- Track 2 : Caravan\_109, I3\_120, FoxtrotP1\_115, EmmaElysia\_115, Pivoine\_114, Essence\_112, BadAgartude\_111, LordLeafolot\_118, Naval22\_119, Darko\_115, SilverDipper\_116, LRRHood\_108, Audrick\_117, Drazdys\_113, SrishMeg2525\_114, JigglyPuff\_122, InterFolia\_121, Rizal\_110, Ghost\_113, JayJay\_115, Spud\_114, ValleyTerrace\_115, Melpomini\_109, Shaqnato\_108, Koguma\_112, CharlieB\_111, Naija\_114, Dietrick\_107, Grasshills\_121, YemiJoy2021\_116, ShiaLabeouf\_114, Delylah\_118, ChaylaJr\_110, FrayBell\_120, CindyLou\_116, Rahel\_114, Mangeria\_115, Bigswole\_118, Colt\_106, Delilah\_115, ArcherS7\_114, Amataga\_115, EggyFarm\_122, Maby2021\_115, Momo\_114, ET08\_103, TinyTim\_115, Nappy\_117, Loanshark\_114, Issimir\_113, Gizmo\_119, Breeniome\_114, Burrough\_115, Jedediah\_118, Mikro\_112, Tainan\_118, Derek\_114, Atlantean\_114, Erdmann\_115, BackyardAgain\_112, Jemmno\_115, MikeLiesIn\_116, Megamind\_114, Cane17\_105, Cali\_110, Pier\_119, Capablanca\_117, Napoleon13\_111, Trinitium\_112, Izajani\_115, RoMag\_110, ZygoTaiga\_113, DrPhinkDaddy\_114, SmallFry\_115, Shnickers\_115, LolaVinca\_115, Ava3\_116, Bread\_114, Latch\_115, Astraea\_111, ChickenPhender\_111, ScottMcG\_111, Shrimp\_115, Blubba\_105, Ading\_115, Janiyra\_117, Norm\_116, JustHall\_112, Flabslab\_109, Kamryn\_115, Phlegm\_117, MoMoMixon\_115, Phusco\_115, ParkTD\_116, StephanieG\_113, Ngannou\_111, Zalkecks\_116, Adlitam\_115, Lee7\_112, BananaFence\_114, Guwapp\_114, Sauce\_115, EmToTheThree\_117, YoungMoneyMata\_116, Salacia\_119, Turret\_110, NedWong\_116, Gabriel\_115, Asterius\_111, Ewok\_116, Blackbrain\_110, Phox\_112, Catera\_111, McWolfish\_113, NuevoMundo\_120, Grungle\_102, BeanWater\_107, Willis\_116, StubbySaigey\_118, Yucca\_114, Pio\_119, LifeSavor\_113, InigoMontoya\_116, BigCity\_122, Domi\_108, Wally\_114, NoodleTree\_122, Pleione\_118, Bxz1\_112, Roots515\_113, DirtMonster\_109, Demodog\_121, Spec\_110, Bonray\_115, Concombre\_120, Tortoise16\_112, Cactojaque\_110, Bipolarisk\_114, Tyke\_115, Patter\_115, Littleton\_115, Gamgam\_115, Daffodil\_120, PurduePete\_115, JPickles\_112, Nidhogg\_116, Chomp\_114, Bangla1971\_116, Morizzled23\_115, Babyland\_116, Ronan\_109, Khaleesi\_114, Quasimodo\_116
- Track 3 : Halldule\_108, DTDevon\_115, Jessibeth14\_114, Kboogie\_119, EasyJones\_117, Alice\_107, Shelob\_117, Pinkcreek\_106, Specks\_120, Jaygup\_115, Stubby\_107, Teardrop\_114
- Track 4 : Matsumoto\_111, Blackdragon\_110, Sprinklers\_111, QBert\_109, Lukilu\_105, Rabinovish\_112, IkeLoa\_108, JulietS\_109, FudgeTart\_113
- Track 5 : Sebata\_115, ErnieJ\_109, Yassified\_112, Basquiat\_111, Shifa\_103, Chargie21\_111, McGee\_117, Dandelion\_120, Fludd\_115, LinStu\_113, HyRo\_105

- Track 6 : Tonenili\_129
- Track 7 : Iota\_110
- Track 8 : Zeenon\_116
- Track 9 : Greely\_112
- Track 10 : Phabba\_114
- Track 11 : ScoobyDoobyDoo\_105
- Track 12 : Myrna\_111
- Track 13 : Trina\_205
- Track 14 : NiceHouse\_197
- Track 15 : Francesca\_184, Dorin\_182
- Track 16 : Clawz\_69
- Track 17 : Sting\_68, ColdSoup\_70, Jollymon\_70
- Track 18 : DonTron\_69
- Track 19 : KingstonB\_70, Soos\_65
- Track 20 : Cardigan\_59
- Track 21 : JonJames\_58, Yvonnetastic\_56
- Track 22 : Chidiebere\_121, Oogie\_116, Lenoshki\_117, Beted\_117
- Track 23 : Alok\_113, Twin\_116, Schomber\_119, Hanem\_120, Gray\_118, MintFritos\_118, Pakusa\_115
- Track 24 : UBSmoodge\_40
- Track 25 : Schomber\_38, Hanem\_39, Gray\_39, Twin\_37, Alok\_37, Chidiebere\_39, Pakusa\_37, MintFritos\_37, Kabocha\_40
- Track 26 : Lenoshki\_39, Oogie\_39, Beted\_39
- Track 27 : GMA6\_103
- Track 28 : DalanDe\_105
- Track 29 : UBSmoodge\_123
- Track 30 : ChisanaKitsune\_35
- Track 31 : DalanDe\_32
- Track 32 : FlyingTortilla\_38, ScarletRaider\_38
- Track 33 : FlyingTortilla\_118
- Track 34 : ChisanaKitsune\_120
- Track 35 : Kabocha\_122
- Track 36 : ScarletRaider\_119
- Track 37 : GMA4\_66
- Track 38 : Tonitrus\_56
- Track 39 : E3\_gp88
- Track 40 : Sunfish\_38

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

The start number called the most often in the published annotations is 13, it was called in 182 of the 205 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Ading\_115, Adlitam\_115, Alice\_107, Alok\_37, Amataga\_115, ArcherS7\_114, Asterius\_111, Astraea\_111, Atlantean\_114, Audrick\_117, Ava3\_116, Babyland\_116, BackyardAgain\_112, BadAgartude\_111, BananaFence\_114, Bangla1971\_116, Basquiat\_111, BeanWater\_107, Beted\_39, BigCity\_122, Bigswole\_118, Bipolarisk\_114, Blackbrain\_110, Blackdragon\_110, Blubba\_105, Bonray\_115, Bread\_114, Breeniome\_114, Burrough\_115, Bxz1\_112, Cactojaque\_110, Cali\_110,

Cane17\_105, Capablanca\_117, Caravan\_109, Catera\_111, Chargie21\_111, CharlieB\_111, ChaylaJr\_110, ChickenPhender\_111, Chidiebere\_39, ChisanaKitsune\_35, Chomp\_114, CindyLou\_116, Colt\_106, Concombre\_120, DTDevon\_115, Daffodil\_120, DalanDe\_32, Dandelion\_120, Darko\_115, Delilah\_115, Delylah\_118, Demodog\_121, Derek\_114, Dietrick\_107, DirtMonster\_109, Domi\_108, DrPhinkDaddy\_114, Drazdys\_113, ET08\_103, EasyJones\_117, EggyFarm\_122, EmToTheThree\_117, EmmaElysia\_115, Erdmann\_115, ErnieJ\_109, Essence\_112, Ewok\_116, Flabslab\_109, Fludd\_115, FlyingTortilla\_38, FoxtrotP1\_115, FrayBell\_120, FudgeTart\_113, Gabriel\_115, Gamgam\_115, Ghost\_113, Gizmo\_119, Grasshills\_121, Gray\_39, Greely\_112, Grungle\_102, Guwapp\_114, Halldule\_108, Hanem\_39, HyRo\_105, I3\_120, IkeLoa\_108, InigoMontoya\_116, InterFolia\_121, Iota\_110, Issimir\_113, Izajani\_115, JPickles\_112, Janiyra\_117, JayJay\_115, Jaygup\_115, Jedediah\_118, Jemmno\_115, Jessibeth14\_114, JigglyPuff\_122, JulietS\_109, JustHall\_112, Kabocha\_40, Kamryn\_115, Kboogie\_119, Khaleesi\_114, Koguma\_112, LRRHood\_108, Latch\_115, Lee7\_112, Lenoshki\_39, LifeSavor\_113, LinStu\_113, Littleton\_115, Loanshark\_114, LolaVinca\_115, LordLeafolot\_118, Lukilu\_105, Maby2021\_115, Mangeria\_115, Matsumoto\_111, McGee\_117, McWolfish\_113, Megamind\_114, Melpomini\_109, MikeLiesIn\_116, Mikro\_112, MintFritos\_37, MoMoMixon\_115, Momo\_114, Morizzled23\_115, Myrna\_111, Naija\_114, Napoleon13\_111, Nappy\_117, Naval22\_119, NedWong\_116, Ngannou\_111, Nidhogg\_116, NoodleTree\_122, Norm\_116, NuevoMundo\_120, Oogie\_39, Pakusa\_37, ParkTD\_116, Patter\_115, Phabba\_114, Phlegm\_117, Phox\_112, Phusco\_115, Pier\_119, Pinkcreek\_106, Pio\_119, Pivoine\_114, Pleione\_118, PurduePete\_115, QBert\_109, Quasimodo\_116, Rabinovish\_112, Rahel\_114, Rizal\_110, RoMag\_110, Ronan\_109, Roots515\_113, Salacia\_119, Sauce\_115, ScarletRaider\_38, Schomber\_38, ScoobyDoobyDoo\_105, ScottMcG\_111, Sebata\_115, Shaqnato\_108, Shelob\_117, ShiaLabeouf\_114, Shifa\_103, Shnickers\_115, Shrimp\_115, SilverDipper\_116, SmallFry\_115, Spec\_110, Specks\_120, Sprinklers\_111, Spud\_114, SrishMeg2525\_114, StephanieG\_113, StubbySaigey\_118, Stubby\_107, Tainan\_118, Teardrop\_114, TinyTim\_115, Tonenili\_129, Tortoise16\_112, Trinitium\_112, Turret\_110, Twin\_37, Tyke\_115, UBSmoodge\_40, ValleyTerrace\_115, Wally\_114, Willis\_116, Yassified\_112, YemiJoy2021\_116, YoungMoneyMata\_116, Yucca\_114, Zalkecks\_116, ZygoTaiga\_113,

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

- Dorin\_182, Francesca\_184, Zeenon\_116,

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

- Alok\_113, Beted\_117, Cardigan\_59, Chidiebere\_121, ChisanaKitsune\_120, Clawz\_69, ColdSoup\_70, DalanDe\_105, DonTron\_69, E3\_gp88, FlyingTortilla\_118, GMA4\_66, GMA6\_103, Gray\_118, Hanem\_120, Jollymon\_70, JonJames\_58, Kabocha\_122, KingstonB\_70, Lenoshki\_117, MintFritos\_118, NiceHouse\_197, Oogie\_116, Pakusa\_115, Phrappuccino\_70, ScarletRaider\_119, Schomber\_119, Settecandela\_70, Soos\_65, Sting\_68, Sunfish\_38, Tonitrus\_56, Trina\_205, Twin\_116, UBSmoodge\_123, Yvonnetastic\_56,

### Summary by start number:

Start 2:

- Found in 2 of 247 ( 0.8% ) of genes in pham
- Manual Annotations of this start: 2 of 205
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Dorin\_182 (CG), Francesca\_184 (CG),

#### Start 3:

- Found in 31 of 247 ( 12.6% ) of genes in pham
- Manual Annotations of this start: 18 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aloki\_113 (DQ), Beted\_117 (DQ), Cardigan\_59 (DD), Chidiebere\_121 (DQ), ChisanaKitsune\_120 (DQ), Clawz\_69 (CP), ColdSoup\_70 (CP), DalanDe\_105 (DQ), DonTron\_69 (CP), FlyingTortilla\_118 (DQ), GMA6\_103 (DQ), Gray\_118 (DQ), Hanem\_120 (DQ), Jollymon\_70 (CP), JonJames\_58 (DD), Kabocha\_122 (DQ), KingstonB\_70 (CP), Lenoshki\_117 (DQ), MintFritos\_118 (DQ), NiceHouse\_197 (CE), Oogie\_116 (DQ), Pakusa\_115 (DQ), ScarletRaider\_119 (DQ), Schomber\_119 (DQ), Soos\_65 (CP), Sting\_68 (CP), Tonitrus\_56 (singleton), Trina\_205 (CE), Twin\_116 (DQ), UBSmoodge\_123 (DQ), Yvonnestic\_56 (DD),

#### Start 4:

- Found in 1 of 247 ( 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: GMA4\_66 (singleton),

#### Start 13:

- Found in 211 of 247 ( 85.4% ) of genes in pham
- Manual Annotations of this start: 182 of 205
- Called 98.6% of time when present
- Phage (with cluster) where this start called: Ading\_115 (C1), Adlitam\_115 (C1), Alice\_107 (C1), Aloki\_37 (DQ), Amataga\_115 (C1), ArcherS7\_114 (C1), Asterius\_111 (C1), Astraea\_111 (C1), Atlantean\_114 (C1), Audrick\_117 (C1), Ava3\_116 (C1), Babyland\_116 (C1), BackyardAgain\_112 (C1), BadAgartude\_111 (C1), BananaFence\_114 (C1), Bangla1971\_116 (C1), Basquiat\_111 (C1), BeanWater\_107 (C1), Beted\_39 (DQ), BigCity\_122 (C1), Bigswole\_118 (C1), Bipolarisk\_114 (C1), Blackbrain\_110 (C1), Blackdragon\_110 (C1), Blubba\_105 (C1), Bonray\_115 (C1), Bread\_114 (C1), Breeniome\_114 (C1), Burrough\_115 (C1), Bxz1\_112 (C1), Cactojaque\_110 (C1), Cali\_110 (C1), Cane17\_105 (C1), Capablanca\_117 (C1), Caravan\_109 (C1), Catera\_111 (C1), Chargie21\_111 (C1), CharlieB\_111 (C1), ChaylaJr\_110 (C1), ChickenPhender\_111 (C1), Chidiebere\_39 (DQ), ChisanaKitsune\_35 (DQ), Chomp\_114 (C1), CindyLou\_116 (C1), Colt\_106 (C1), Concombre\_120 (C1), DTDevon\_115 (C1), Daffodil\_120 (C1), DalanDe\_32 (DQ), Dandelion\_120 (C1), Darko\_115 (C1), Delilah\_115 (C1), Delylah\_118 (C1), Demodog\_121 (C1), Derek\_114 (C1), Dietrick\_107 (C1), DirtMonster\_109 (C1), Domi\_108 (C1), DrPhinkDaddy\_114 (C1), Drazdys\_113 (C1), ET08\_103 (C1), EasyJones\_117 (C1), EggyFarm\_122 (C1), EmToTheThree\_117 (C1), EmmaElysia\_115 (C1), Erdmann\_115 (C1), ErnieJ\_109 (C1), Essence\_112 (C1), Ewok\_116 (C1), Flabslab\_109 (C1), Fludd\_115 (C1), FlyingTortilla\_38 (DQ), FoxtrotP1\_115 (C1), FrayBell\_120 (C1), FudgeTart\_113 (C1), Gabriel\_115 (C1), Gamgam\_115 (C1), Ghost\_113 (C1), Gizmo\_119 (C1), Grasshills\_121 (C1), Gray\_39 (DQ), Greely\_112 (C2), Grungle\_102 (C1), Guwapp\_114 (C1), Halldule\_108 (C1), Hanem\_39 (DQ), HyRo\_105 (C1), I3\_120 (C1), IkeLoa\_108 (C1), InigoMontoya\_116 (C1), InterFolia\_121 (C1), Iota\_110 (C1), Issimir\_113 (C1), Izajani\_115 (C1), JPickles\_112 (C1), Janiyra\_117 (C1), JayJay\_115 (C1), Jaygup\_115 (C1), Jedediah\_118 (C1), Jemmno\_115 (C1), Jessibeth14\_114 (C1), JigglyPuff\_122 (C1), JulietS\_109 (C1), JustHall\_112 (C1), Kabocha\_40 (DQ), Kamryn\_115 (C1),

Kboogie\_119 (C1), Khaleesi\_114 (C1), Koguma\_112 (C1), LRRHood\_108 (C1), Latch\_115 (C1), Lee7\_112 (C1), Lenoshki\_39 (DQ), LifeSavor\_113 (C1), LinStu\_113 (C1), Littleton\_115 (C1), Loanshark\_114 (C1), LolaVinca\_115 (C1), LordLeafolot\_118 (C1), Lukilu\_105 (C1), Maby2021\_115 (C1), Mangeria\_115 (C1), Matsumoto\_111 (C1), McGee\_117 (C1), McWolfish\_113 (C1), Megamind\_114 (C1), Melpomini\_109 (C1), MikeLiesIn\_116 (C1), Mikro\_112 (C1), MintFritos\_37 (DQ), MoMoMixon\_115 (C1), Momo\_114 (C1), Morizzled23\_115 (C1), Myrna\_111 (C2), Naija\_114 (C1), Napoleon13\_111 (C1), Nappy\_117 (C1), Naval22\_119 (C1), NedWong\_116 (C1), Ngannou\_111 (C1), Nidhogg\_116 (C1), NoodleTree\_122 (C1), Norm\_116 (C1), NuevoMundo\_120 (C1), Oogie\_39 (DQ), Pakusa\_37 (DQ), ParkTD\_116 (C1), Patter\_115 (C1), Phabba\_114 (C2), Phlegm\_117 (C1), Phox\_112 (C1), Phusco\_115 (C1), Pier\_119 (C1), Pinkcreek\_106 (C1), Pio\_119 (C1), Pivoine\_114 (C1), Pleione\_118 (C1), PurduePete\_115 (C1), QBert\_109 (C1), Quasimodo\_116 (C1), Rabinovich\_112 (C1), Rahel\_114 (C1), Rizal\_110 (C1), RoMag\_110 (C1), Ronan\_109 (C1), Roots515\_113 (C1), Salacia\_119 (C1), Sauce\_115 (C1), ScarletRaider\_38 (DQ), Schomber\_38 (DQ), ScoobyDoobyDoo\_105 (C2), ScottMcG\_111 (C1), Sebata\_115 (C1), Shaqnato\_108 (C1), Shelob\_117 (C1), ShiaLabeouf\_114 (C1), Shifa\_103 (C1), Shnickers\_115 (C1), Shrimp\_115 (C1), SilverDipper\_116 (C1), SmallFry\_115 (C1), Spec\_110 (C1), Specks\_120 (C1), Sprinklers\_111 (C1), Spud\_114 (C1), SrishMeg2525\_114 (C1), StephanieG\_113 (C1), StubbySaigey\_118 (C1), Stubby\_107 (C1), Tainan\_118 (C1), Teardrop\_114 (C1), TinyTim\_115 (C1), Tonenili\_129 (C1), Tortoise16\_112 (C1), Trinitium\_112 (C1), Turret\_110 (C1), Twin\_37 (DQ), Tyke\_115 (C1), UBSmoodge\_40 (DQ), ValleyTerrace\_115 (C1), Wally\_114 (C1), Willis\_116 (C1), Yassified\_112 (C1), YemiJoy2021\_116 (C1), YoungMoneyMata\_116 (C1), Yucca\_114 (C1), Zalkecks\_116 (C1), ZygoTaiga\_113 (C1),

Start 19:

- Found in 192 of 247 ( 77.7% ) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 0.5% of time when present
- Phage (with cluster) where this start called: Zeenon\_116 (C1),

Start 33:

- Found in 228 of 247 ( 92.3% ) of genes in pham
- Manual Annotations of this start: 2 of 205
- Called 1.8% of time when present
- Phage (with cluster) where this start called: E3\_gp88 (singleton), Phrappuccino\_70 (AA), Settecandela\_70 (AA), Sunfish\_38 (singleton),

### Summary by clusters:

There are 9 clusters represented in this pham: AA, singleton, DD, CG, CE, C2, C1, CP, DQ,

Info for manual annotations of cluster AA:

- Start number 33 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster C1:

- Start number 13 was manually annotated 169 times for cluster C1.
- Start number 19 was manually annotated 1 time for cluster C1.

Info for manual annotations of cluster C2:

- Start number 13 was manually annotated 3 times for cluster C2.

Info for manual annotations of cluster CE:

- Start number 3 was manually annotated 2 times for cluster CE.

Info for manual annotations of cluster CG:

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

Info for manual annotations of cluster CP:

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

Info for manual annotations of cluster DD:

- Start number 3 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DQ:

- Start number 3 was manually annotated 10 times for cluster DQ.

- Start number 13 was manually annotated 10 times for cluster DQ.

### **Gene Information:**

Gene: Ading\_115 Start: 58375, Stop: 59280, Start Num: 13

Candidate Starts for Ading\_115:

(Start: 13 @58375 has 182 MA's), (Start: 19 @58408 has 1 MA's), (30, 58588), (Start: 33 @58609 has 2 MA's), (34, 58615), (35, 58630), (36, 58639), (51, 58717), (55, 58741), (61, 58804), (70, 58885), (71, 58891), (76, 58951), (80, 58987), (82, 59005), (84, 59023), (90, 59044), (100, 59137), (101, 59143), (112, 59215), (117, 59260), (118, 59263),

Gene: Adlitam\_115 Start: 58392, Stop: 59297, Start Num: 13

Candidate Starts for Adlitam\_115:

(Start: 13 @58392 has 182 MA's), (Start: 19 @58425 has 1 MA's), (30, 58605), (Start: 33 @58626 has 2 MA's), (34, 58632), (35, 58647), (36, 58656), (51, 58734), (55, 58758), (61, 58821), (70, 58902), (71, 58908), (76, 58968), (80, 59004), (82, 59022), (84, 59040), (90, 59061), (100, 59154), (101, 59160), (112, 59232), (117, 59277), (118, 59280),

Gene: Alice\_107 Start: 57670, Stop: 58575, Start Num: 13

Candidate Starts for Alice\_107:

(Start: 13 @57670 has 182 MA's), (Start: 19 @57703 has 1 MA's), (30, 57883), (Start: 33 @57904 has 2 MA's), (34, 57910), (35, 57925), (36, 57934), (51, 58012), (55, 58036), (61, 58099), (70, 58180), (71, 58186), (76, 58246), (80, 58282), (82, 58300), (84, 58318), (90, 58339), (100, 58432), (101, 58438), (117, 58555), (118, 58558),

Gene: Alok\_113 Start: 83632, Stop: 84753, Start Num: 3

Candidate Starts for Alok\_113:

(Start: 3 @83632 has 18 MA's), (11, 83713), (14, 83737), (Start: 33 @83965 has 2 MA's), (34, 83971), (40, 84025), (47, 84058), (56, 84100), (60, 84148), (72, 84241), (76, 84298), (93, 84433), (96, 84460), (104, 84517), (105, 84520), (106, 84523), (117, 84610), (119, 84616), (123, 84655), (127, 84673), (131, 84697),

Gene: Alok\_37 Start: 27700, Stop: 28608, Start Num: 13

Candidate Starts for Alok\_37:

(Start: 13 @27700 has 182 MA's), (16, 27715), (30, 27916), (Start: 33 @27937 has 2 MA's), (52, 28051), (71, 28216), (88, 28363), (101, 28471), (103, 28477), (107, 28513), (111, 28534), (114, 28564),

Gene: Amataga\_115 Start: 57637, Stop: 58542, Start Num: 13

Candidate Starts for Amataga\_115:

(Start: 13 @57637 has 182 MA's), (Start: 19 @57670 has 1 MA's), (30, 57850), (Start: 33 @57871 has 2 MA's), (34, 57877), (35, 57892), (36, 57901), (51, 57979), (55, 58003), (61, 58066), (70, 58147), (71, 58153), (76, 58213), (80, 58249), (82, 58267), (84, 58285), (90, 58306), (100, 58399), (101, 58405), (112, 58477), (117, 58522), (118, 58525),

Gene: ArcherS7\_114 Start: 57955, Stop: 58860, Start Num: 13

Candidate Starts for ArcherS7\_114:

(Start: 13 @57955 has 182 MA's), (Start: 19 @57988 has 1 MA's), (30, 58168), (Start: 33 @58189 has 2 MA's), (34, 58195), (35, 58210), (36, 58219), (51, 58297), (55, 58321), (61, 58384), (70, 58465), (71, 58471), (76, 58531), (80, 58567), (82, 58585), (84, 58603), (90, 58624), (100, 58717), (101, 58723), (112, 58795), (117, 58840), (118, 58843),

Gene: Asterius\_111 Start: 58631, Stop: 59536, Start Num: 13

Candidate Starts for Asterius\_111:

(Start: 13 @58631 has 182 MA's), (Start: 19 @58664 has 1 MA's), (30, 58844), (Start: 33 @58865 has 2 MA's), (34, 58871), (35, 58886), (36, 58895), (51, 58973), (55, 58997), (61, 59060), (70, 59141), (71, 59147), (76, 59207), (80, 59243), (82, 59261), (84, 59279), (90, 59300), (100, 59393), (101, 59399), (112, 59471), (117, 59516), (118, 59519),

Gene: Astraea\_111 Start: 57406, Stop: 58311, Start Num: 13

Candidate Starts for Astraea\_111:

(Start: 13 @57406 has 182 MA's), (Start: 19 @57439 has 1 MA's), (30, 57619), (Start: 33 @57640 has 2 MA's), (34, 57646), (35, 57661), (36, 57670), (51, 57748), (55, 57772), (61, 57835), (70, 57916), (71, 57922), (76, 57982), (80, 58018), (82, 58036), (84, 58054), (90, 58075), (100, 58168), (101, 58174), (112, 58246), (117, 58291), (118, 58294),

Gene: Atlantean\_114 Start: 57637, Stop: 58542, Start Num: 13

Candidate Starts for Atlantean\_114:

(Start: 13 @57637 has 182 MA's), (Start: 19 @57670 has 1 MA's), (30, 57850), (Start: 33 @57871 has 2 MA's), (34, 57877), (35, 57892), (36, 57901), (51, 57979), (55, 58003), (61, 58066), (70, 58147), (71, 58153), (76, 58213), (80, 58249), (82, 58267), (84, 58285), (90, 58306), (100, 58399), (101, 58405), (112, 58477), (117, 58522), (118, 58525),

Gene: Audrick\_117 Start: 57616, Stop: 58521, Start Num: 13

Candidate Starts for Audrick\_117:

(Start: 13 @57616 has 182 MA's), (Start: 19 @57649 has 1 MA's), (30, 57829), (Start: 33 @57850 has 2 MA's), (34, 57856), (35, 57871), (36, 57880), (51, 57958), (55, 57982), (61, 58045), (70, 58126), (71, 58132), (76, 58192), (80, 58228), (82, 58246), (84, 58264), (90, 58285), (100, 58378), (101, 58384), (112, 58456), (117, 58501), (118, 58504),

Gene: Ava3\_116 Start: 58550, Stop: 59455, Start Num: 13

Candidate Starts for Ava3\_116:

(Start: 13 @58550 has 182 MA's), (Start: 19 @58583 has 1 MA's), (30, 58763), (Start: 33 @58784 has 2 MA's), (34, 58790), (35, 58805), (36, 58814), (51, 58892), (55, 58916), (61, 58979), (70, 59060), (71, 59066), (76, 59126), (80, 59162), (82, 59180), (84, 59198), (90, 59219), (100, 59312), (101, 59318), (112, 59390), (117, 59435), (118, 59438),



Gene: Babyland\_116 Start: 57725, Stop: 58630, Start Num: 13

Candidate Starts for Babyland\_116:

(Start: 13 @57725 has 182 MA's), (Start: 19 @57758 has 1 MA's), (30, 57938), (Start: 33 @57959 has 2 MA's), (34, 57965), (35, 57980), (36, 57989), (51, 58067), (55, 58091), (61, 58154), (70, 58235), (71, 58241), (76, 58301), (80, 58337), (82, 58355), (84, 58373), (90, 58394), (100, 58487), (101, 58493), (112, 58565), (117, 58610), (118, 58613),

Gene: BackyardAgain\_112 Start: 57553, Stop: 58458, Start Num: 13

Candidate Starts for BackyardAgain\_112:

(Start: 13 @57553 has 182 MA's), (Start: 19 @57586 has 1 MA's), (30, 57766), (Start: 33 @57787 has 2 MA's), (34, 57793), (35, 57808), (36, 57817), (51, 57895), (55, 57919), (61, 57982), (70, 58063), (71, 58069), (76, 58129), (80, 58165), (82, 58183), (84, 58201), (90, 58222), (100, 58315), (101, 58321), (112, 58393), (117, 58438), (118, 58441),

Gene: BadAgartude\_111 Start: 58842, Stop: 59747, Start Num: 13

Candidate Starts for BadAgartude\_111:

(Start: 13 @58842 has 182 MA's), (Start: 19 @58875 has 1 MA's), (30, 59055), (Start: 33 @59076 has 2 MA's), (34, 59082), (35, 59097), (36, 59106), (51, 59184), (55, 59208), (61, 59271), (70, 59352), (71, 59358), (76, 59418), (80, 59454), (82, 59472), (84, 59490), (90, 59511), (100, 59604), (101, 59610), (112, 59682), (117, 59727), (118, 59730),

Gene: BananaFence\_114 Start: 58806, Stop: 59711, Start Num: 13

Candidate Starts for BananaFence\_114:

(Start: 13 @58806 has 182 MA's), (Start: 19 @58839 has 1 MA's), (30, 59019), (Start: 33 @59040 has 2 MA's), (34, 59046), (35, 59061), (36, 59070), (51, 59148), (55, 59172), (61, 59235), (70, 59316), (71, 59322), (76, 59382), (80, 59418), (82, 59436), (84, 59454), (90, 59475), (100, 59568), (101, 59574), (112, 59646), (117, 59691), (118, 59694),

Gene: Bangla1971\_116 Start: 58085, Stop: 58990, Start Num: 13

Candidate Starts for Bangla1971\_116:

(Start: 13 @58085 has 182 MA's), (Start: 19 @58118 has 1 MA's), (30, 58298), (Start: 33 @58319 has 2 MA's), (34, 58325), (35, 58340), (36, 58349), (51, 58427), (55, 58451), (61, 58514), (70, 58595), (71, 58601), (76, 58661), (80, 58697), (82, 58715), (84, 58733), (90, 58754), (100, 58847), (101, 58853), (112, 58925), (117, 58970), (118, 58973),

Gene: Basquiat\_111 Start: 57269, Stop: 58174, Start Num: 13

Candidate Starts for Basquiat\_111:

(Start: 13 @57269 has 182 MA's), (Start: 19 @57302 has 1 MA's), (30, 57482), (Start: 33 @57503 has 2 MA's), (34, 57509), (36, 57533), (51, 57611), (55, 57635), (61, 57698), (70, 57779), (71, 57785), (76, 57845), (80, 57881), (82, 57899), (84, 57917), (90, 57938), (100, 58031), (101, 58037), (117, 58154), (118, 58157),

Gene: BeanWater\_107 Start: 58404, Stop: 59309, Start Num: 13

Candidate Starts for BeanWater\_107:

(Start: 13 @58404 has 182 MA's), (Start: 19 @58437 has 1 MA's), (30, 58617), (Start: 33 @58638 has 2 MA's), (34, 58644), (35, 58659), (36, 58668), (51, 58746), (55, 58770), (61, 58833), (70, 58914), (71, 58920), (76, 58980), (80, 59016), (82, 59034), (84, 59052), (90, 59073), (100, 59166), (101, 59172), (112, 59244), (117, 59289), (118, 59292),

Gene: Beted\_39 Start: 29380, Stop: 30288, Start Num: 13

Candidate Starts for Beted\_39:

(Start: 13 @29380 has 182 MA's), (16, 29395), (30, 29596), (52, 29731), (71, 29896), (88, 30043), (101, 30151), (103, 30157), (107, 30193), (111, 30214), (114, 30244),

Gene: Beted\_117 Start: 85545, Stop: 86666, Start Num: 3

Candidate Starts for Beted\_117:

(Start: 3 @85545 has 18 MA's), (11, 85626), (14, 85650), (Start: 33 @85878 has 2 MA's), (34, 85884), (40, 85938), (47, 85971), (56, 86013), (60, 86061), (72, 86154), (76, 86211), (93, 86346), (96, 86373), (104, 86430), (105, 86433), (106, 86436), (117, 86523), (119, 86529), (123, 86568), (131, 86610),

Gene: BigCity\_122 Start: 61066, Stop: 61971, Start Num: 13

Candidate Starts for BigCity\_122:

(Start: 13 @61066 has 182 MA's), (Start: 19 @61099 has 1 MA's), (30, 61279), (Start: 33 @61300 has 2 MA's), (34, 61306), (35, 61321), (36, 61330), (51, 61408), (55, 61432), (61, 61495), (70, 61576), (71, 61582), (76, 61642), (80, 61678), (82, 61696), (84, 61714), (90, 61735), (100, 61828), (101, 61834), (112, 61906), (117, 61951), (118, 61954),

Gene: Bigswole\_118 Start: 60351, Stop: 61256, Start Num: 13

Candidate Starts for Bigswole\_118:

(Start: 13 @60351 has 182 MA's), (Start: 19 @60384 has 1 MA's), (30, 60564), (Start: 33 @60585 has 2 MA's), (34, 60591), (35, 60606), (36, 60615), (51, 60693), (55, 60717), (61, 60780), (70, 60861), (71, 60867), (76, 60927), (80, 60963), (82, 60981), (84, 60999), (90, 61020), (100, 61113), (101, 61119), (112, 61191), (117, 61236), (118, 61239),

Gene: Bipolarisk\_114 Start: 58808, Stop: 59713, Start Num: 13

Candidate Starts for Bipolarisk\_114:

(Start: 13 @58808 has 182 MA's), (Start: 19 @58841 has 1 MA's), (30, 59021), (Start: 33 @59042 has 2 MA's), (34, 59048), (35, 59063), (36, 59072), (51, 59150), (55, 59174), (61, 59237), (70, 59318), (71, 59324), (76, 59384), (80, 59420), (82, 59438), (84, 59456), (90, 59477), (100, 59570), (101, 59576), (112, 59648), (117, 59693), (118, 59696),

Gene: Blackbrain\_110 Start: 57100, Stop: 58005, Start Num: 13

Candidate Starts for Blackbrain\_110:

(Start: 13 @57100 has 182 MA's), (Start: 19 @57133 has 1 MA's), (30, 57313), (Start: 33 @57334 has 2 MA's), (34, 57340), (35, 57355), (36, 57364), (51, 57442), (55, 57466), (61, 57529), (70, 57610), (71, 57616), (76, 57676), (80, 57712), (82, 57730), (84, 57748), (90, 57769), (100, 57862), (101, 57868), (112, 57940), (117, 57985), (118, 57988),

Gene: Blackdragon\_110 Start: 58233, Stop: 59138, Start Num: 13

Candidate Starts for Blackdragon\_110:

(Start: 13 @58233 has 182 MA's), (Start: 19 @58266 has 1 MA's), (30, 58446), (Start: 33 @58467 has 2 MA's), (34, 58473), (36, 58497), (51, 58575), (55, 58599), (61, 58662), (70, 58743), (71, 58749), (76, 58809), (80, 58845), (82, 58863), (84, 58881), (90, 58902), (100, 58995), (101, 59001), (112, 59073), (117, 59118), (118, 59121),

Gene: Blubba\_105 Start: 58839, Stop: 59744, Start Num: 13

Candidate Starts for Blubba\_105:

(Start: 13 @58839 has 182 MA's), (Start: 19 @58872 has 1 MA's), (30, 59052), (Start: 33 @59073 has 2 MA's), (34, 59079), (35, 59094), (36, 59103), (51, 59181), (55, 59205), (61, 59268), (70, 59349), (71, 59355), (76, 59415), (80, 59451), (82, 59469), (84, 59487), (90, 59508), (100, 59601), (101, 59607), (112, 59679), (117, 59724), (118, 59727),

Gene: Bonray\_115 Start: 58981, Stop: 59886, Start Num: 13

Candidate Starts for Bonray\_115:

(Start: 13 @58981 has 182 MA's), (Start: 19 @59014 has 1 MA's), (30, 59194), (Start: 33 @59215 has 2 MA's), (34, 59221), (35, 59236), (36, 59245), (51, 59323), (55, 59347), (61, 59410), (70, 59491), (71,

59497), (76, 59557), (80, 59593), (82, 59611), (84, 59629), (90, 59650), (100, 59743), (101, 59749), (112, 59821), (117, 59866), (118, 59869),

Gene: Bread\_114 Start: 58636, Stop: 59541, Start Num: 13

Candidate Starts for Bread\_114:

(Start: 13 @58636 has 182 MA's), (Start: 19 @58669 has 1 MA's), (30, 58849), (Start: 33 @58870 has 2 MA's), (34, 58876), (35, 58891), (36, 58900), (51, 58978), (55, 59002), (61, 59065), (70, 59146), (71, 59152), (76, 59212), (80, 59248), (82, 59266), (84, 59284), (90, 59305), (100, 59398), (101, 59404), (112, 59476), (117, 59521), (118, 59524),

Gene: Breeniome\_114 Start: 56984, Stop: 57889, Start Num: 13

Candidate Starts for Breeniome\_114:

(Start: 13 @56984 has 182 MA's), (Start: 19 @57017 has 1 MA's), (30, 57197), (Start: 33 @57218 has 2 MA's), (34, 57224), (35, 57239), (36, 57248), (51, 57326), (55, 57350), (61, 57413), (70, 57494), (71, 57500), (76, 57560), (80, 57596), (82, 57614), (84, 57632), (90, 57653), (100, 57746), (101, 57752), (112, 57824), (117, 57869), (118, 57872),

Gene: Burrough\_115 Start: 59135, Stop: 60040, Start Num: 13

Candidate Starts for Burrough\_115:

(Start: 13 @59135 has 182 MA's), (Start: 19 @59168 has 1 MA's), (30, 59348), (Start: 33 @59369 has 2 MA's), (34, 59375), (35, 59390), (36, 59399), (51, 59477), (55, 59501), (61, 59564), (70, 59645), (71, 59651), (76, 59711), (80, 59747), (82, 59765), (84, 59783), (90, 59804), (100, 59897), (101, 59903), (112, 59975), (117, 60020), (118, 60023),

Gene: Bxz1\_112 Start: 60338, Stop: 61243, Start Num: 13

Candidate Starts for Bxz1\_112:

(Start: 13 @60338 has 182 MA's), (Start: 19 @60371 has 1 MA's), (30, 60551), (Start: 33 @60572 has 2 MA's), (34, 60578), (35, 60593), (36, 60602), (51, 60680), (55, 60704), (61, 60767), (70, 60848), (71, 60854), (76, 60914), (80, 60950), (82, 60968), (84, 60986), (90, 61007), (100, 61100), (101, 61106), (112, 61178), (117, 61223), (118, 61226),

Gene: Cactojaque\_110 Start: 57207, Stop: 58112, Start Num: 13

Candidate Starts for Cactojaque\_110:

(Start: 13 @57207 has 182 MA's), (Start: 19 @57240 has 1 MA's), (30, 57420), (Start: 33 @57441 has 2 MA's), (34, 57447), (35, 57462), (36, 57471), (51, 57549), (55, 57573), (61, 57636), (70, 57717), (71, 57723), (76, 57783), (80, 57819), (82, 57837), (84, 57855), (90, 57876), (100, 57969), (101, 57975), (112, 58047), (117, 58092), (118, 58095),

Gene: Cali\_110 Start: 59137, Stop: 60042, Start Num: 13

Candidate Starts for Cali\_110:

(Start: 13 @59137 has 182 MA's), (Start: 19 @59170 has 1 MA's), (30, 59350), (Start: 33 @59371 has 2 MA's), (34, 59377), (35, 59392), (36, 59401), (51, 59479), (55, 59503), (61, 59566), (70, 59647), (71, 59653), (76, 59713), (80, 59749), (82, 59767), (84, 59785), (90, 59806), (100, 59899), (101, 59905), (112, 59977), (117, 60022), (118, 60025),

Gene: Cane17\_105 Start: 58897, Stop: 59802, Start Num: 13

Candidate Starts for Cane17\_105:

(Start: 13 @58897 has 182 MA's), (Start: 19 @58930 has 1 MA's), (30, 59110), (Start: 33 @59131 has 2 MA's), (34, 59137), (35, 59152), (36, 59161), (51, 59239), (55, 59263), (61, 59326), (70, 59407), (71, 59413), (76, 59473), (80, 59509), (82, 59527), (84, 59545), (90, 59566), (100, 59659), (101, 59665), (112, 59737), (117, 59782), (118, 59785),

Gene: Capablanca\_117 Start: 59387, Stop: 60292, Start Num: 13

Candidate Starts for Capablanca\_117:

(Start: 13 @59387 has 182 MA's), (Start: 19 @59420 has 1 MA's), (30, 59600), (Start: 33 @59621 has 2 MA's), (34, 59627), (35, 59642), (36, 59651), (51, 59729), (55, 59753), (61, 59816), (70, 59897), (71, 59903), (76, 59963), (80, 59999), (82, 60017), (84, 60035), (90, 60056), (100, 60149), (101, 60155), (112, 60227), (117, 60272), (118, 60275),

Gene: Caravan\_109 Start: 58494, Stop: 59399, Start Num: 13

Candidate Starts for Caravan\_109:

(Start: 13 @58494 has 182 MA's), (Start: 19 @58527 has 1 MA's), (30, 58707), (Start: 33 @58728 has 2 MA's), (34, 58734), (35, 58749), (36, 58758), (51, 58836), (55, 58860), (61, 58923), (70, 59004), (71, 59010), (76, 59070), (80, 59106), (82, 59124), (84, 59142), (90, 59163), (100, 59256), (101, 59262), (112, 59334), (117, 59379), (118, 59382),

Gene: Cardigan\_59 Start: 41819, Stop: 42925, Start Num: 3

Candidate Starts for Cardigan\_59:

(Start: 3 @41819 has 18 MA's), (5, 41828), (10, 41888), (14, 41921), (27, 42101), (Start: 33 @42149 has 2 MA's), (54, 42284), (60, 42341), (69, 42413), (73, 42446), (74, 42479), (105, 42710), (108, 42728), (125, 42833),

Gene: Catera\_111 Start: 57411, Stop: 58316, Start Num: 13

Candidate Starts for Catera\_111:

(Start: 13 @57411 has 182 MA's), (Start: 19 @57444 has 1 MA's), (30, 57624), (Start: 33 @57645 has 2 MA's), (34, 57651), (35, 57666), (36, 57675), (51, 57753), (55, 57777), (61, 57840), (70, 57921), (71, 57927), (76, 57987), (80, 58023), (82, 58041), (84, 58059), (90, 58080), (100, 58173), (101, 58179), (112, 58251), (117, 58296), (118, 58299),

Gene: Chargie21\_111 Start: 57269, Stop: 58174, Start Num: 13

Candidate Starts for Chargie21\_111:

(Start: 13 @57269 has 182 MA's), (Start: 19 @57302 has 1 MA's), (30, 57482), (Start: 33 @57503 has 2 MA's), (34, 57509), (36, 57533), (51, 57611), (55, 57635), (61, 57698), (70, 57779), (71, 57785), (76, 57845), (80, 57881), (82, 57899), (84, 57917), (90, 57938), (100, 58031), (101, 58037), (117, 58154), (118, 58157),

Gene: CharlieB\_111 Start: 57541, Stop: 58446, Start Num: 13

Candidate Starts for CharlieB\_111:

(Start: 13 @57541 has 182 MA's), (Start: 19 @57574 has 1 MA's), (30, 57754), (Start: 33 @57775 has 2 MA's), (34, 57781), (35, 57796), (36, 57805), (51, 57883), (55, 57907), (61, 57970), (70, 58051), (71, 58057), (76, 58117), (80, 58153), (82, 58171), (84, 58189), (90, 58210), (100, 58303), (101, 58309), (112, 58381), (117, 58426), (118, 58429),

Gene: ChaylaJr\_110 Start: 57033, Stop: 57938, Start Num: 13

Candidate Starts for ChaylaJr\_110:

(Start: 13 @57033 has 182 MA's), (Start: 19 @57066 has 1 MA's), (30, 57246), (Start: 33 @57267 has 2 MA's), (34, 57273), (35, 57288), (36, 57297), (51, 57375), (55, 57399), (61, 57462), (70, 57543), (71, 57549), (76, 57609), (80, 57645), (82, 57663), (84, 57681), (90, 57702), (100, 57795), (101, 57801), (112, 57873), (117, 57918), (118, 57921),

Gene: ChickenPhender\_111 Start: 57336, Stop: 58241, Start Num: 13

Candidate Starts for ChickenPhender\_111:

(Start: 13 @57336 has 182 MA's), (Start: 19 @57369 has 1 MA's), (30, 57549), (Start: 33 @57570 has 2 MA's), (34, 57576), (35, 57591), (36, 57600), (51, 57678), (55, 57702), (61, 57765), (70, 57846), (71, 57852), (76, 57912), (80, 57948), (82, 57966), (84, 57984), (90, 58005), (100, 58098), (101, 58104), (112, 58176), (117, 58221), (118, 58224),

Gene: Chidiebere\_121 Start: 84762, Stop: 85883, Start Num: 3

Candidate Starts for Chidiebere\_121:

(Start: 3 @84762 has 18 MA's), (11, 84843), (14, 84867), (Start: 33 @85095 has 2 MA's), (34, 85101), (40, 85155), (47, 85188), (56, 85230), (60, 85278), (72, 85371), (76, 85428), (93, 85563), (96, 85590), (104, 85647), (105, 85650), (106, 85653), (117, 85740), (119, 85746), (123, 85785), (131, 85827),

Gene: Chidiebere\_39 Start: 27700, Stop: 28608, Start Num: 13

Candidate Starts for Chidiebere\_39:

(Start: 13 @27700 has 182 MA's), (16, 27715), (30, 27916), (Start: 33 @27937 has 2 MA's), (52, 28051), (71, 28216), (88, 28363), (101, 28471), (103, 28477), (107, 28513), (111, 28534), (114, 28564),

Gene: ChisanaKitsune\_35 Start: 26493, Stop: 27401, Start Num: 13

Candidate Starts for ChisanaKitsune\_35:

(Start: 13 @26493 has 182 MA's), (16, 26508), (30, 26709), (52, 26844), (68, 26985), (71, 27009), (78, 27102), (88, 27156), (101, 27264), (103, 27270), (107, 27306), (111, 27327), (114, 27357),

Gene: ChisanaKitsune\_120 Start: 83778, Stop: 84899, Start Num: 3

Candidate Starts for ChisanaKitsune\_120:

(Start: 3 @83778 has 18 MA's), (11, 83859), (14, 83883), (Start: 33 @84111 has 2 MA's), (34, 84117), (40, 84171), (47, 84204), (56, 84246), (60, 84294), (72, 84387), (76, 84444), (93, 84579), (96, 84606), (104, 84663), (106, 84669), (119, 84762), (123, 84801), (127, 84819), (131, 84843),

Gene: Chomp\_114 Start: 58926, Stop: 59831, Start Num: 13

Candidate Starts for Chomp\_114:

(Start: 13 @58926 has 182 MA's), (Start: 19 @58959 has 1 MA's), (30, 59139), (Start: 33 @59160 has 2 MA's), (34, 59166), (35, 59181), (36, 59190), (51, 59268), (55, 59292), (61, 59355), (70, 59436), (71, 59442), (76, 59502), (80, 59538), (82, 59556), (84, 59574), (90, 59595), (100, 59688), (101, 59694), (112, 59766), (117, 59811), (118, 59814),

Gene: CindyLou\_116 Start: 58966, Stop: 59871, Start Num: 13

Candidate Starts for CindyLou\_116:

(Start: 13 @58966 has 182 MA's), (Start: 19 @58999 has 1 MA's), (30, 59179), (Start: 33 @59200 has 2 MA's), (34, 59206), (35, 59221), (36, 59230), (51, 59308), (55, 59332), (61, 59395), (70, 59476), (71, 59482), (76, 59542), (80, 59578), (82, 59596), (84, 59614), (90, 59635), (100, 59728), (101, 59734), (112, 59806), (117, 59851), (118, 59854),

Gene: Clawz\_69 Start: 45660, Stop: 46775, Start Num: 3

Candidate Starts for Clawz\_69:

(Start: 3 @45660 has 18 MA's), (6, 45678), (14, 45762), (20, 45807), (24, 45864), (29, 45960), (Start: 33 @45990 has 2 MA's), (40, 46050), (43, 46074), (64, 46206), (72, 46272), (88, 46422), (95, 46494), (105, 46560), (117, 46644), (124, 46680),

Gene: ColdSoup\_70 Start: 45855, Stop: 46970, Start Num: 3

Candidate Starts for ColdSoup\_70:

(Start: 3 @45855 has 18 MA's), (14, 45957), (18, 45972), (24, 46059), (28, 46140), (Start: 33 @46185 has 2 MA's), (40, 46245), (43, 46269), (45, 46278), (51, 46302), (60, 46377), (64, 46401), (81, 46566), (103, 46734), (117, 46839), (120, 46848), (130, 46911),

Gene: Colt\_106 Start: 59493, Stop: 60398, Start Num: 13

Candidate Starts for Colt\_106:

(Start: 13 @59493 has 182 MA's), (Start: 19 @59526 has 1 MA's), (30, 59706), (Start: 33 @59727 has 2 MA's), (34, 59733), (35, 59748), (36, 59757), (51, 59835), (55, 59859), (61, 59922), (70, 60003), (71, 60009), (76, 60069), (80, 60105), (82, 60123), (84, 60141), (90, 60162), (100, 60255), (101, 60261), (112, 60333), (117, 60378), (118, 60381),

Gene: Concombre\_120 Start: 61299, Stop: 62204, Start Num: 13

Candidate Starts for Concombre\_120:

(Start: 13 @61299 has 182 MA's), (Start: 19 @61332 has 1 MA's), (30, 61512), (Start: 33 @61533 has 2 MA's), (34, 61539), (35, 61554), (36, 61563), (51, 61641), (55, 61665), (61, 61728), (70, 61809), (71, 61815), (76, 61875), (80, 61911), (82, 61929), (84, 61947), (90, 61968), (100, 62061), (101, 62067), (112, 62139), (117, 62184), (118, 62187),

Gene: DTDevon\_115 Start: 59177, Stop: 60082, Start Num: 13

Candidate Starts for DTDevon\_115:

(Start: 13 @59177 has 182 MA's), (Start: 19 @59210 has 1 MA's), (30, 59390), (Start: 33 @59411 has 2 MA's), (34, 59417), (35, 59432), (36, 59441), (51, 59519), (55, 59543), (61, 59606), (70, 59687), (71, 59693), (76, 59753), (80, 59789), (82, 59807), (84, 59825), (90, 59846), (100, 59939), (101, 59945), (117, 60062), (118, 60065),

Gene: Daffodil\_120 Start: 59108, Stop: 60013, Start Num: 13

Candidate Starts for Daffodil\_120:

(Start: 13 @59108 has 182 MA's), (Start: 19 @59141 has 1 MA's), (30, 59321), (Start: 33 @59342 has 2 MA's), (34, 59348), (35, 59363), (36, 59372), (51, 59450), (55, 59474), (61, 59537), (70, 59618), (71, 59624), (76, 59684), (80, 59720), (82, 59738), (84, 59756), (90, 59777), (100, 59870), (101, 59876), (112, 59948), (117, 59993), (118, 59996),

Gene: DalanDe\_105 Start: 81662, Stop: 82789, Start Num: 3

Candidate Starts for DalanDe\_105:

(Start: 3 @81662 has 18 MA's), (7, 81695), (17, 81776), (28, 81947), (36, 82022), (40, 82052), (41, 82058), (42, 82067), (60, 82184), (75, 82328), (88, 82427), (96, 82499), (99, 82523), (103, 82538), (104, 82556), (117, 82658), (129, 82727), (133, 82751), (134, 82772),

Gene: DalanDe\_32 Start: 29932, Stop: 30849, Start Num: 13

Candidate Starts for DalanDe\_32:

(Start: 13 @29932 has 182 MA's), (42, 30250), (44, 30262), (57, 30313), (63, 30385), (66, 30394), (68, 30433), (71, 30457), (79, 30553), (88, 30604), (96, 30679), (100, 30706), (113, 30790),

Gene: Dandelion\_120 Start: 61290, Stop: 62195, Start Num: 13

Candidate Starts for Dandelion\_120:

(Start: 13 @61290 has 182 MA's), (Start: 19 @61323 has 1 MA's), (30, 61503), (Start: 33 @61524 has 2 MA's), (34, 61530), (36, 61554), (51, 61632), (55, 61656), (61, 61719), (70, 61800), (71, 61806), (76, 61866), (80, 61902), (82, 61920), (84, 61938), (90, 61959), (100, 62052), (101, 62058), (117, 62175), (118, 62178),

Gene: Darko\_115 Start: 58810, Stop: 59715, Start Num: 13

Candidate Starts for Darko\_115:

(Start: 13 @58810 has 182 MA's), (Start: 19 @58843 has 1 MA's), (30, 59023), (Start: 33 @59044 has 2 MA's), (34, 59050), (35, 59065), (36, 59074), (51, 59152), (55, 59176), (61, 59239), (70, 59320), (71, 59326), (76, 59386), (80, 59422), (82, 59440), (84, 59458), (90, 59479), (100, 59572), (101, 59578), (112, 59650), (117, 59695), (118, 59698),

Gene: Delilah\_115 Start: 59262, Stop: 60167, Start Num: 13

Candidate Starts for Delilah\_115:

(Start: 13 @59262 has 182 MA's), (Start: 19 @59295 has 1 MA's), (30, 59475), (Start: 33 @59496 has 2 MA's), (34, 59502), (35, 59517), (36, 59526), (51, 59604), (55, 59628), (61, 59691), (70, 59772), (71, 59778), (76, 59838), (80, 59874), (82, 59892), (84, 59910), (90, 59931), (100, 60024), (101, 60030), (112, 60102), (117, 60147), (118, 60150),

Gene: Delylah\_118 Start: 58801, Stop: 59706, Start Num: 13

Candidate Starts for Delylah\_118:

(Start: 13 @58801 has 182 MA's), (Start: 19 @58834 has 1 MA's), (30, 59014), (Start: 33 @59035 has 2 MA's), (34, 59041), (35, 59056), (36, 59065), (51, 59143), (55, 59167), (61, 59230), (70, 59311), (71, 59317), (76, 59377), (80, 59413), (82, 59431), (84, 59449), (90, 59470), (100, 59563), (101, 59569), (112, 59641), (117, 59686), (118, 59689),

Gene: Demodog\_121 Start: 61308, Stop: 62213, Start Num: 13

Candidate Starts for Demodog\_121:

(Start: 13 @61308 has 182 MA's), (Start: 19 @61341 has 1 MA's), (30, 61521), (Start: 33 @61542 has 2 MA's), (34, 61548), (35, 61563), (36, 61572), (51, 61650), (55, 61674), (61, 61737), (70, 61818), (71, 61824), (76, 61884), (80, 61920), (82, 61938), (84, 61956), (90, 61977), (100, 62070), (101, 62076), (112, 62148), (117, 62193), (118, 62196),

Gene: Derek\_114 Start: 58727, Stop: 59632, Start Num: 13

Candidate Starts for Derek\_114:

(Start: 13 @58727 has 182 MA's), (Start: 19 @58760 has 1 MA's), (30, 58940), (Start: 33 @58961 has 2 MA's), (34, 58967), (35, 58982), (36, 58991), (51, 59069), (55, 59093), (61, 59156), (70, 59237), (71, 59243), (76, 59303), (80, 59339), (82, 59357), (84, 59375), (90, 59396), (100, 59489), (101, 59495), (112, 59567), (117, 59612), (118, 59615),

Gene: Dietrick\_107 Start: 56803, Stop: 57708, Start Num: 13

Candidate Starts for Dietrick\_107:

(Start: 13 @56803 has 182 MA's), (Start: 19 @56836 has 1 MA's), (30, 57016), (Start: 33 @57037 has 2 MA's), (34, 57043), (35, 57058), (36, 57067), (51, 57145), (55, 57169), (61, 57232), (70, 57313), (71, 57319), (76, 57379), (80, 57415), (82, 57433), (84, 57451), (90, 57472), (100, 57565), (101, 57571), (112, 57643), (117, 57688), (118, 57691),

Gene: DirtMonster\_109 Start: 58061, Stop: 58966, Start Num: 13

Candidate Starts for DirtMonster\_109:

(Start: 13 @58061 has 182 MA's), (Start: 19 @58094 has 1 MA's), (30, 58274), (Start: 33 @58295 has 2 MA's), (34, 58301), (35, 58316), (36, 58325), (51, 58403), (55, 58427), (61, 58490), (70, 58571), (71, 58577), (76, 58637), (80, 58673), (82, 58691), (84, 58709), (90, 58730), (100, 58823), (101, 58829), (112, 58901), (117, 58946), (118, 58949),

Gene: Domi\_108 Start: 58149, Stop: 59054, Start Num: 13

Candidate Starts for Domi\_108:

(Start: 13 @58149 has 182 MA's), (Start: 19 @58182 has 1 MA's), (30, 58362), (Start: 33 @58383 has 2 MA's), (34, 58389), (35, 58404), (36, 58413), (51, 58491), (55, 58515), (61, 58578), (70, 58659), (71, 58665), (76, 58725), (80, 58761), (82, 58779), (84, 58797), (90, 58818), (100, 58911), (101, 58917), (112, 58989), (117, 59034), (118, 59037),

Gene: DonTron\_69 Start: 45892, Stop: 47007, Start Num: 3

Candidate Starts for DonTron\_69:

(Start: 3 @45892 has 18 MA's), (14, 45994), (18, 46009), (24, 46096), (28, 46177), (Start: 33 @46222 has 2 MA's), (40, 46282), (43, 46306), (45, 46315), (51, 46339), (54, 46357), (58, 46387), (60, 46414), (64, 46438), (81, 46603), (117, 46876), (120, 46885), (130, 46948),

Gene: Dorin\_182 Start: 102644, Stop: 101520, Start Num: 2

Candidate Starts for Dorin\_182:

(Start: 2 @102644 has 2 MA's), (7, 102611), (11, 102563), (12, 102554), (Start: 13 @102551 has 182 MA's), (17, 102530), (23, 102449), (30, 102335), (31, 102329), (37, 102281), (58, 102149),

Gene: DrPhinkDaddy\_114 Start: 59330, Stop: 60235, Start Num: 13

Candidate Starts for DrPhinkDaddy\_114:

(Start: 13 @59330 has 182 MA's), (Start: 19 @59363 has 1 MA's), (30, 59543), (Start: 33 @59564 has 2 MA's), (34, 59570), (35, 59585), (36, 59594), (51, 59672), (55, 59696), (61, 59759), (70, 59840), (71, 59846), (76, 59906), (80, 59942), (82, 59960), (84, 59978), (90, 59999), (100, 60092), (101, 60098), (112, 60170), (117, 60215), (118, 60218),

Gene: Drazdys\_113 Start: 57791, Stop: 58696, Start Num: 13

Candidate Starts for Drazdys\_113:

(Start: 13 @57791 has 182 MA's), (Start: 19 @57824 has 1 MA's), (30, 58004), (Start: 33 @58025 has 2 MA's), (34, 58031), (35, 58046), (36, 58055), (51, 58133), (55, 58157), (61, 58220), (70, 58301), (71, 58307), (76, 58367), (80, 58403), (82, 58421), (84, 58439), (90, 58460), (100, 58553), (101, 58559), (112, 58631), (117, 58676), (118, 58679),

Gene: E3\_gp88 Start: 49332, Stop: 50129, Start Num: 33

Candidate Starts for E3\_gp88:

(32, 49329), (Start: 33 @49332 has 2 MA's), (53, 49464), (61, 49536), (64, 49554), (67, 49563), (70, 49617), (85, 49764), (95, 49842), (97, 49854), (103, 49887), (121, 50031), (122, 50034), (129, 50067), (135, 50121),

Gene: ET08\_103 Start: 57791, Stop: 58696, Start Num: 13

Candidate Starts for ET08\_103:

(Start: 13 @57791 has 182 MA's), (Start: 19 @57824 has 1 MA's), (30, 58004), (Start: 33 @58025 has 2 MA's), (34, 58031), (35, 58046), (36, 58055), (51, 58133), (55, 58157), (61, 58220), (70, 58301), (71, 58307), (76, 58367), (80, 58403), (82, 58421), (84, 58439), (90, 58460), (100, 58553), (101, 58559), (112, 58631), (117, 58676), (118, 58679),

Gene: EasyJones\_117 Start: 57933, Stop: 58838, Start Num: 13

Candidate Starts for EasyJones\_117:

(Start: 13 @57933 has 182 MA's), (Start: 19 @57966 has 1 MA's), (30, 58146), (Start: 33 @58167 has 2 MA's), (34, 58173), (35, 58188), (36, 58197), (51, 58275), (55, 58299), (61, 58362), (70, 58443), (71, 58449), (76, 58509), (80, 58545), (82, 58563), (84, 58581), (90, 58602), (100, 58695), (101, 58701), (117, 58818), (118, 58821),

Gene: EggyFarm\_122 Start: 61066, Stop: 61971, Start Num: 13

Candidate Starts for EggyFarm\_122:

(Start: 13 @61066 has 182 MA's), (Start: 19 @61099 has 1 MA's), (30, 61279), (Start: 33 @61300 has 2 MA's), (34, 61306), (35, 61321), (36, 61330), (51, 61408), (55, 61432), (61, 61495), (70, 61576), (71, 61582), (76, 61642), (80, 61678), (82, 61696), (84, 61714), (90, 61735), (100, 61828), (101, 61834), (112, 61906), (117, 61951), (118, 61954),

Gene: EmToTheThree\_117 Start: 60070, Stop: 60975, Start Num: 13

Candidate Starts for EmToTheThree\_117:

(Start: 13 @60070 has 182 MA's), (Start: 19 @60103 has 1 MA's), (30, 60283), (Start: 33 @60304 has 2 MA's), (34, 60310), (35, 60325), (36, 60334), (51, 60412), (55, 60436), (61, 60499), (70, 60580), (71, 60586), (76, 60646), (80, 60682), (82, 60700), (84, 60718), (90, 60739), (100, 60832), (101, 60838), (112, 60910), (117, 60955), (118, 60958),



Gene: EmmaElysia\_115 Start: 57856, Stop: 58761, Start Num: 13

Candidate Starts for EmmaElysia\_115:

(Start: 13 @57856 has 182 MA's), (Start: 19 @57889 has 1 MA's), (30, 58069), (Start: 33 @58090 has 2 MA's), (34, 58096), (35, 58111), (36, 58120), (51, 58198), (55, 58222), (61, 58285), (70, 58366), (71, 58372), (76, 58432), (80, 58468), (82, 58486), (84, 58504), (90, 58525), (100, 58618), (101, 58624), (112, 58696), (117, 58741), (118, 58744),

Gene: Erdmann\_115 Start: 59109, Stop: 60014, Start Num: 13

Candidate Starts for Erdmann\_115:

(Start: 13 @59109 has 182 MA's), (Start: 19 @59142 has 1 MA's), (30, 59322), (Start: 33 @59343 has 2 MA's), (34, 59349), (35, 59364), (36, 59373), (51, 59451), (55, 59475), (61, 59538), (70, 59619), (71, 59625), (76, 59685), (80, 59721), (82, 59739), (84, 59757), (90, 59778), (100, 59871), (101, 59877), (112, 59949), (117, 59994), (118, 59997),

Gene: ErnieJ\_109 Start: 57064, Stop: 57969, Start Num: 13

Candidate Starts for ErnieJ\_109:

(Start: 13 @57064 has 182 MA's), (Start: 19 @57097 has 1 MA's), (30, 57277), (Start: 33 @57298 has 2 MA's), (34, 57304), (36, 57328), (51, 57406), (55, 57430), (61, 57493), (70, 57574), (71, 57580), (76, 57640), (80, 57676), (82, 57694), (84, 57712), (90, 57733), (100, 57826), (101, 57832), (117, 57949), (118, 57952),

Gene: Essence\_112 Start: 57957, Stop: 58862, Start Num: 13

Candidate Starts for Essence\_112:

(Start: 13 @57957 has 182 MA's), (Start: 19 @57990 has 1 MA's), (30, 58170), (Start: 33 @58191 has 2 MA's), (34, 58197), (35, 58212), (36, 58221), (51, 58299), (55, 58323), (61, 58386), (70, 58467), (71, 58473), (76, 58533), (80, 58569), (82, 58587), (84, 58605), (90, 58626), (100, 58719), (101, 58725), (112, 58797), (117, 58842), (118, 58845),

Gene: Ewok\_116 Start: 58496, Stop: 59401, Start Num: 13

Candidate Starts for Ewok\_116:

(Start: 13 @58496 has 182 MA's), (Start: 19 @58529 has 1 MA's), (30, 58709), (Start: 33 @58730 has 2 MA's), (34, 58736), (35, 58751), (36, 58760), (51, 58838), (55, 58862), (61, 58925), (70, 59006), (71, 59012), (76, 59072), (80, 59108), (82, 59126), (84, 59144), (90, 59165), (100, 59258), (101, 59264), (112, 59336), (117, 59381), (118, 59384),

Gene: Flabslab\_109 Start: 56188, Stop: 57093, Start Num: 13

Candidate Starts for Flabslab\_109:

(Start: 13 @56188 has 182 MA's), (Start: 19 @56221 has 1 MA's), (30, 56401), (Start: 33 @56422 has 2 MA's), (34, 56428), (35, 56443), (36, 56452), (51, 56530), (55, 56554), (61, 56617), (70, 56698), (71, 56704), (76, 56764), (80, 56800), (82, 56818), (84, 56836), (90, 56857), (100, 56950), (101, 56956), (112, 57028), (117, 57073), (118, 57076),

Gene: Fludd\_115 Start: 57704, Stop: 58609, Start Num: 13

Candidate Starts for Fludd\_115:

(Start: 13 @57704 has 182 MA's), (Start: 19 @57737 has 1 MA's), (30, 57917), (Start: 33 @57938 has 2 MA's), (34, 57944), (36, 57968), (51, 58046), (55, 58070), (61, 58133), (70, 58214), (71, 58220), (76, 58280), (80, 58316), (82, 58334), (84, 58352), (90, 58373), (100, 58466), (101, 58472), (117, 58589), (118, 58592),

Gene: FlyingTortilla\_38 Start: 30557, Stop: 31465, Start Num: 13

Candidate Starts for FlyingTortilla\_38:

(Start: 13 @30557 has 182 MA's), (16, 30572), (28, 30749), (34, 30800), (44, 30881), (48, 30890), (57, 30932), (60, 30980), (63, 31001), (68, 31049), (71, 31073), (77, 31160), (79, 31169), (92, 31247),

(100, 31322), (101, 31328), (103, 31334), (107, 31370), (111, 31391), (112, 31400), (114, 31421),

Gene: FlyingTortilla\_118 Start: 87580, Stop: 88707, Start Num: 3

Candidate Starts for FlyingTortilla\_118:

(Start: 3 @87580 has 18 MA's), (8, 87628), (14, 87682), (17, 87694), (20, 87727), (23, 87775), (34, 87916), (40, 87970), (60, 88102), (72, 88195), (76, 88252), (88, 88345), (93, 88387), (96, 88414), (103, 88453), (104, 88471), (106, 88477), (112, 88519), (123, 88609), (127, 88627), (131, 88651),

Gene: FoxtrotP1\_115 Start: 60279, Stop: 61184, Start Num: 13

Candidate Starts for FoxtrotP1\_115:

(Start: 13 @60279 has 182 MA's), (Start: 19 @60312 has 1 MA's), (30, 60492), (Start: 33 @60513 has 2 MA's), (34, 60519), (35, 60534), (36, 60543), (51, 60621), (55, 60645), (61, 60708), (70, 60789), (71, 60795), (76, 60855), (80, 60891), (82, 60909), (84, 60927), (90, 60948), (100, 61041), (101, 61047), (112, 61119), (117, 61164), (118, 61167),

Gene: Francesca\_184 Start: 103563, Stop: 102439, Start Num: 2

Candidate Starts for Francesca\_184:

(Start: 2 @103563 has 2 MA's), (7, 103530), (11, 103482), (12, 103473), (Start: 13 @103470 has 182 MA's), (17, 103449), (23, 103368), (30, 103254), (31, 103248), (37, 103200), (58, 103068),

Gene: FrayBell\_120 Start: 59443, Stop: 60348, Start Num: 13

Candidate Starts for FrayBell\_120:

(Start: 13 @59443 has 182 MA's), (Start: 19 @59476 has 1 MA's), (30, 59656), (Start: 33 @59677 has 2 MA's), (34, 59683), (35, 59698), (36, 59707), (51, 59785), (55, 59809), (61, 59872), (70, 59953), (71, 59959), (76, 60019), (80, 60055), (82, 60073), (84, 60091), (90, 60112), (100, 60205), (101, 60211), (112, 60283), (117, 60328), (118, 60331),

Gene: FudgeTart\_113 Start: 58138, Stop: 59043, Start Num: 13

Candidate Starts for FudgeTart\_113:

(Start: 13 @58138 has 182 MA's), (Start: 19 @58171 has 1 MA's), (30, 58351), (Start: 33 @58372 has 2 MA's), (34, 58378), (36, 58402), (51, 58480), (55, 58504), (61, 58567), (70, 58648), (71, 58654), (76, 58714), (80, 58750), (82, 58768), (84, 58786), (90, 58807), (100, 58900), (101, 58906), (112, 58978), (117, 59023), (118, 59026),

Gene: GMA4\_66 Start: 42724, Stop: 43833, Start Num: 4

Candidate Starts for GMA4\_66:

(1, 42115), (4, 42724), (20, 42868), (21, 42889), (Start: 33 @43051 has 2 MA's), (34, 43057), (88, 43483), (95, 43555), (124, 43738),

Gene: GMA6\_103 Start: 75571, Stop: 76686, Start Num: 3

Candidate Starts for GMA6\_103:

(Start: 3 @75571 has 18 MA's), (17, 75685), (26, 75826), (Start: 33 @75901 has 2 MA's), (38, 75943), (46, 76000), (56, 76045), (59, 76075), (60, 76093), (66, 76123), (75, 76237), (81, 76285), (88, 76336), (98, 76417), (105, 76465), (117, 76552), (123, 76585),

Gene: Gabriel\_115 Start: 57363, Stop: 58268, Start Num: 13

Candidate Starts for Gabriel\_115:

(Start: 13 @57363 has 182 MA's), (Start: 19 @57396 has 1 MA's), (30, 57576), (Start: 33 @57597 has 2 MA's), (34, 57603), (35, 57618), (36, 57627), (51, 57705), (55, 57729), (61, 57792), (70, 57873), (71, 57879), (76, 57939), (80, 57975), (82, 57993), (84, 58011), (90, 58032), (100, 58125), (101, 58131), (112, 58203), (117, 58248), (118, 58251),

Gene: Gamgam\_115 Start: 57637, Stop: 58542, Start Num: 13

Candidate Starts for Gamgam\_115:

(Start: 13 @57637 has 182 MA's), (Start: 19 @57670 has 1 MA's), (30, 57850), (Start: 33 @57871 has 2 MA's), (34, 57877), (35, 57892), (36, 57901), (51, 57979), (55, 58003), (61, 58066), (70, 58147), (71, 58153), (76, 58213), (80, 58249), (82, 58267), (84, 58285), (90, 58306), (100, 58399), (101, 58405), (112, 58477), (117, 58522), (118, 58525),

Gene: Ghost\_113 Start: 57637, Stop: 58542, Start Num: 13

Candidate Starts for Ghost\_113:

(Start: 13 @57637 has 182 MA's), (Start: 19 @57670 has 1 MA's), (30, 57850), (Start: 33 @57871 has 2 MA's), (34, 57877), (35, 57892), (36, 57901), (51, 57979), (55, 58003), (61, 58066), (70, 58147), (71, 58153), (76, 58213), (80, 58249), (82, 58267), (84, 58285), (90, 58306), (100, 58399), (101, 58405), (112, 58477), (117, 58522), (118, 58525),

Gene: Gizmo\_119 Start: 60259, Stop: 61164, Start Num: 13

Candidate Starts for Gizmo\_119:

(Start: 13 @60259 has 182 MA's), (Start: 19 @60292 has 1 MA's), (30, 60472), (Start: 33 @60493 has 2 MA's), (34, 60499), (35, 60514), (36, 60523), (51, 60601), (55, 60625), (61, 60688), (70, 60769), (71, 60775), (76, 60835), (80, 60871), (82, 60889), (84, 60907), (90, 60928), (100, 61021), (101, 61027), (112, 61099), (117, 61144), (118, 61147),

Gene: Grasshills\_121 Start: 61066, Stop: 61971, Start Num: 13

Candidate Starts for Grasshills\_121:

(Start: 13 @61066 has 182 MA's), (Start: 19 @61099 has 1 MA's), (30, 61279), (Start: 33 @61300 has 2 MA's), (34, 61306), (35, 61321), (36, 61330), (51, 61408), (55, 61432), (61, 61495), (70, 61576), (71, 61582), (76, 61642), (80, 61678), (82, 61696), (84, 61714), (90, 61735), (100, 61828), (101, 61834), (112, 61906), (117, 61951), (118, 61954),

Gene: Gray\_39 Start: 27700, Stop: 28608, Start Num: 13

Candidate Starts for Gray\_39:

(Start: 13 @27700 has 182 MA's), (16, 27715), (30, 27916), (Start: 33 @27937 has 2 MA's), (52, 28051), (71, 28216), (88, 28363), (101, 28471), (103, 28477), (107, 28513), (111, 28534), (114, 28564),

Gene: Gray\_118 Start: 84091, Stop: 85212, Start Num: 3

Candidate Starts for Gray\_118:

(Start: 3 @84091 has 18 MA's), (11, 84172), (14, 84196), (Start: 33 @84424 has 2 MA's), (34, 84430), (40, 84484), (47, 84517), (56, 84559), (60, 84607), (72, 84700), (76, 84757), (93, 84892), (96, 84919), (104, 84976), (105, 84979), (106, 84982), (117, 85069), (119, 85075), (123, 85114), (127, 85132), (131, 85156),

Gene: Greely\_112 Start: 56584, Stop: 57489, Start Num: 13

Candidate Starts for Greely\_112:

(Start: 13 @56584 has 182 MA's), (15, 56596), (Start: 19 @56617 has 1 MA's), (30, 56797), (31, 56803), (Start: 33 @56818 has 2 MA's), (54, 56944), (60, 57004), (61, 57010), (64, 57028), (70, 57091), (71, 57097), (76, 57157), (79, 57190), (80, 57193), (89, 57247), (101, 57352), (102, 57355), (107, 57394), (109, 57400), (113, 57430), (118, 57472),

Gene: Grungle\_102 Start: 55381, Stop: 56286, Start Num: 13

Candidate Starts for Grungle\_102:

(Start: 13 @55381 has 182 MA's), (Start: 19 @55414 has 1 MA's), (30, 55594), (Start: 33 @55615 has 2 MA's), (34, 55621), (35, 55636), (36, 55645), (51, 55723), (55, 55747), (61, 55810), (70, 55891), (71, 55897), (76, 55957), (80, 55993), (82, 56011), (84, 56029), (90, 56050), (100, 56143), (101, 56149), (112, 56221), (117, 56266), (118, 56269),

Gene: Guwapp\_114 Start: 57528, Stop: 58433, Start Num: 13

Candidate Starts for Guwapp\_114:

(Start: 13 @57528 has 182 MA's), (Start: 19 @57561 has 1 MA's), (30, 57741), (Start: 33 @57762 has 2 MA's), (34, 57768), (35, 57783), (36, 57792), (51, 57870), (55, 57894), (61, 57957), (70, 58038), (71, 58044), (76, 58104), (80, 58140), (82, 58158), (84, 58176), (90, 58197), (100, 58290), (101, 58296), (112, 58368), (117, 58413), (118, 58416),

Gene: Halldule\_108 Start: 56407, Stop: 57312, Start Num: 13

Candidate Starts for Halldule\_108:

(Start: 13 @56407 has 182 MA's), (Start: 19 @56440 has 1 MA's), (30, 56620), (Start: 33 @56641 has 2 MA's), (34, 56647), (35, 56662), (36, 56671), (51, 56749), (55, 56773), (61, 56836), (70, 56917), (71, 56923), (76, 56983), (80, 57019), (82, 57037), (84, 57055), (90, 57076), (100, 57169), (101, 57175), (117, 57292), (118, 57295),

Gene: Hanem\_39 Start: 27700, Stop: 28608, Start Num: 13

Candidate Starts for Hanem\_39:

(Start: 13 @27700 has 182 MA's), (16, 27715), (30, 27916), (Start: 33 @27937 has 2 MA's), (52, 28051), (71, 28216), (88, 28363), (101, 28471), (103, 28477), (107, 28513), (111, 28534), (114, 28564),

Gene: Hanem\_120 Start: 83632, Stop: 84753, Start Num: 3

Candidate Starts for Hanem\_120:

(Start: 3 @83632 has 18 MA's), (11, 83713), (14, 83737), (Start: 33 @83965 has 2 MA's), (34, 83971), (40, 84025), (47, 84058), (56, 84100), (60, 84148), (72, 84241), (76, 84298), (93, 84433), (96, 84460), (104, 84517), (105, 84520), (106, 84523), (117, 84610), (119, 84616), (123, 84655), (127, 84673), (131, 84697),

Gene: HyRo\_105 Start: 57634, Stop: 58539, Start Num: 13

Candidate Starts for HyRo\_105:

(Start: 13 @57634 has 182 MA's), (Start: 19 @57667 has 1 MA's), (30, 57847), (Start: 33 @57868 has 2 MA's), (34, 57874), (36, 57898), (51, 57976), (55, 58000), (61, 58063), (70, 58144), (71, 58150), (76, 58210), (80, 58246), (82, 58264), (84, 58282), (90, 58303), (100, 58396), (101, 58402), (117, 58519), (118, 58522),

Gene: I3\_120 Start: 59594, Stop: 60499, Start Num: 13

Candidate Starts for I3\_120:

(Start: 13 @59594 has 182 MA's), (Start: 19 @59627 has 1 MA's), (30, 59807), (Start: 33 @59828 has 2 MA's), (34, 59834), (35, 59849), (36, 59858), (51, 59936), (55, 59960), (61, 60023), (70, 60104), (71, 60110), (76, 60170), (80, 60206), (82, 60224), (84, 60242), (90, 60263), (100, 60356), (101, 60362), (112, 60434), (117, 60479), (118, 60482),

Gene: IkeLoa\_108 Start: 57463, Stop: 58368, Start Num: 13

Candidate Starts for IkeLoa\_108:

(Start: 13 @57463 has 182 MA's), (Start: 19 @57496 has 1 MA's), (30, 57676), (Start: 33 @57697 has 2 MA's), (34, 57703), (36, 57727), (51, 57805), (55, 57829), (61, 57892), (70, 57973), (71, 57979), (76, 58039), (80, 58075), (82, 58093), (84, 58111), (90, 58132), (100, 58225), (101, 58231), (112, 58303), (117, 58348), (118, 58351),

Gene: InigoMontoya\_116 Start: 57598, Stop: 58503, Start Num: 13

Candidate Starts for InigoMontoya\_116:

(Start: 13 @57598 has 182 MA's), (Start: 19 @57631 has 1 MA's), (30, 57811), (Start: 33 @57832 has 2 MA's), (34, 57838), (35, 57853), (36, 57862), (51, 57940), (55, 57964), (61, 58027), (70, 58108), (71,

58114), (76, 58174), (80, 58210), (82, 58228), (84, 58246), (90, 58267), (100, 58360), (101, 58366), (112, 58438), (117, 58483), (118, 58486),

Gene: InterFolia\_121 Start: 60378, Stop: 61283, Start Num: 13

Candidate Starts for InterFolia\_121:

(Start: 13 @60378 has 182 MA's), (Start: 19 @60411 has 1 MA's), (30, 60591), (Start: 33 @60612 has 2 MA's), (34, 60618), (35, 60633), (36, 60642), (51, 60720), (55, 60744), (61, 60807), (70, 60888), (71, 60894), (76, 60954), (80, 60990), (82, 61008), (84, 61026), (90, 61047), (100, 61140), (101, 61146), (112, 61218), (117, 61263), (118, 61266),

Gene: Iota\_110 Start: 58074, Stop: 58931, Start Num: 13

Candidate Starts for Iota\_110:

(Start: 13 @58074 has 182 MA's), (Start: 19 @58107 has 1 MA's), (30, 58287), (Start: 33 @58308 has 2 MA's), (34, 58314), (35, 58329), (36, 58338), (51, 58416), (55, 58440), (61, 58503), (70, 58584), (71, 58590), (76, 58650), (80, 58686), (82, 58704), (84, 58722), (90, 58743), (100, 58836), (101, 58842),

Gene: Issimir\_113 Start: 59083, Stop: 59988, Start Num: 13

Candidate Starts for Issimir\_113:

(Start: 13 @59083 has 182 MA's), (Start: 19 @59116 has 1 MA's), (30, 59296), (Start: 33 @59317 has 2 MA's), (34, 59323), (35, 59338), (36, 59347), (51, 59425), (55, 59449), (61, 59512), (70, 59593), (71, 59599), (76, 59659), (80, 59695), (82, 59713), (84, 59731), (90, 59752), (100, 59845), (101, 59851), (112, 59923), (117, 59968), (118, 59971),

Gene: Izajani\_115 Start: 59289, Stop: 60194, Start Num: 13

Candidate Starts for Izajani\_115:

(Start: 13 @59289 has 182 MA's), (Start: 19 @59322 has 1 MA's), (30, 59502), (Start: 33 @59523 has 2 MA's), (34, 59529), (35, 59544), (36, 59553), (51, 59631), (55, 59655), (61, 59718), (70, 59799), (71, 59805), (76, 59865), (80, 59901), (82, 59919), (84, 59937), (90, 59958), (100, 60051), (101, 60057), (112, 60129), (117, 60174), (118, 60177),

Gene: JPickles\_112 Start: 56868, Stop: 57773, Start Num: 13

Candidate Starts for JPickles\_112:

(Start: 13 @56868 has 182 MA's), (Start: 19 @56901 has 1 MA's), (30, 57081), (Start: 33 @57102 has 2 MA's), (34, 57108), (35, 57123), (36, 57132), (51, 57210), (55, 57234), (61, 57297), (70, 57378), (71, 57384), (76, 57444), (80, 57480), (82, 57498), (84, 57516), (90, 57537), (100, 57630), (101, 57636), (112, 57708), (117, 57753), (118, 57756),

Gene: Janiyra\_117 Start: 58564, Stop: 59469, Start Num: 13

Candidate Starts for Janiyra\_117:

(Start: 13 @58564 has 182 MA's), (Start: 19 @58597 has 1 MA's), (30, 58777), (Start: 33 @58798 has 2 MA's), (34, 58804), (35, 58819), (36, 58828), (51, 58906), (55, 58930), (61, 58993), (70, 59074), (71, 59080), (76, 59140), (80, 59176), (82, 59194), (84, 59212), (90, 59233), (100, 59326), (101, 59332), (112, 59404), (117, 59449), (118, 59452),

Gene: JayJay\_115 Start: 60074, Stop: 60979, Start Num: 13

Candidate Starts for JayJay\_115:

(Start: 13 @60074 has 182 MA's), (Start: 19 @60107 has 1 MA's), (30, 60287), (Start: 33 @60308 has 2 MA's), (34, 60314), (35, 60329), (36, 60338), (51, 60416), (55, 60440), (61, 60503), (70, 60584), (71, 60590), (76, 60650), (80, 60686), (82, 60704), (84, 60722), (90, 60743), (100, 60836), (101, 60842), (112, 60914), (117, 60959), (118, 60962),

Gene: Jaygup\_115 Start: 58393, Stop: 59298, Start Num: 13

Candidate Starts for Jaygup\_115:

(Start: 13 @58393 has 182 MA's), (Start: 19 @58426 has 1 MA's), (30, 58606), (Start: 33 @58627 has 2 MA's), (34, 58633), (35, 58648), (36, 58657), (51, 58735), (55, 58759), (61, 58822), (70, 58903), (71, 58909), (76, 58969), (80, 59005), (82, 59023), (84, 59041), (90, 59062), (100, 59155), (101, 59161), (117, 59278), (118, 59281),

Gene: Jedediah\_118 Start: 58926, Stop: 59831, Start Num: 13

Candidate Starts for Jedediah\_118:

(Start: 13 @58926 has 182 MA's), (Start: 19 @58959 has 1 MA's), (30, 59139), (Start: 33 @59160 has 2 MA's), (34, 59166), (35, 59181), (36, 59190), (51, 59268), (55, 59292), (61, 59355), (70, 59436), (71, 59442), (76, 59502), (80, 59538), (82, 59556), (84, 59574), (90, 59595), (100, 59688), (101, 59694), (112, 59766), (117, 59811), (118, 59814),

Gene: Jemmno\_115 Start: 58373, Stop: 59278, Start Num: 13

Candidate Starts for Jemmno\_115:

(Start: 13 @58373 has 182 MA's), (Start: 19 @58406 has 1 MA's), (30, 58586), (Start: 33 @58607 has 2 MA's), (34, 58613), (35, 58628), (36, 58637), (51, 58715), (55, 58739), (61, 58802), (70, 58883), (71, 58889), (76, 58949), (80, 58985), (82, 59003), (84, 59021), (90, 59042), (100, 59135), (101, 59141), (112, 59213), (117, 59258), (118, 59261),

Gene: Jessibeth14\_114 Start: 58895, Stop: 59800, Start Num: 13

Candidate Starts for Jessibeth14\_114:

(Start: 13 @58895 has 182 MA's), (Start: 19 @58928 has 1 MA's), (30, 59108), (Start: 33 @59129 has 2 MA's), (34, 59135), (35, 59150), (36, 59159), (51, 59237), (55, 59261), (61, 59324), (70, 59405), (71, 59411), (76, 59471), (80, 59507), (82, 59525), (84, 59543), (90, 59564), (100, 59657), (101, 59663), (117, 59780), (118, 59783),

Gene: JigglyPuff\_122 Start: 61223, Stop: 62128, Start Num: 13

Candidate Starts for JigglyPuff\_122:

(Start: 13 @61223 has 182 MA's), (Start: 19 @61256 has 1 MA's), (30, 61436), (Start: 33 @61457 has 2 MA's), (34, 61463), (35, 61478), (36, 61487), (51, 61565), (55, 61589), (61, 61652), (70, 61733), (71, 61739), (76, 61799), (80, 61835), (82, 61853), (84, 61871), (90, 61892), (100, 61985), (101, 61991), (112, 62063), (117, 62108), (118, 62111),

Gene: Jollymon\_70 Start: 45855, Stop: 46970, Start Num: 3

Candidate Starts for Jollymon\_70:

(Start: 3 @45855 has 18 MA's), (14, 45957), (18, 45972), (24, 46059), (28, 46140), (Start: 33 @46185 has 2 MA's), (40, 46245), (43, 46269), (45, 46278), (51, 46302), (60, 46377), (64, 46401), (81, 46566), (103, 46734), (117, 46839), (120, 46848), (130, 46911),

Gene: JonJames\_58 Start: 41881, Stop: 42987, Start Num: 3

Candidate Starts for JonJames\_58:

(Start: 3 @41881 has 18 MA's), (5, 41890), (10, 41950), (14, 41983), (27, 42163), (Start: 33 @42211 has 2 MA's), (54, 42346), (60, 42403), (64, 42427), (69, 42475), (73, 42508), (74, 42541), (103, 42751), (105, 42772), (108, 42790),

Gene: JulietS\_109 Start: 56260, Stop: 57165, Start Num: 13

Candidate Starts for JulietS\_109:

(Start: 13 @56260 has 182 MA's), (Start: 19 @56293 has 1 MA's), (30, 56473), (Start: 33 @56494 has 2 MA's), (34, 56500), (36, 56524), (51, 56602), (55, 56626), (61, 56689), (70, 56770), (71, 56776), (76, 56836), (80, 56872), (82, 56890), (84, 56908), (90, 56929), (100, 57022), (101, 57028), (112, 57100), (117, 57145), (118, 57148),

Gene: JustHall\_112 Start: 58432, Stop: 59337, Start Num: 13

Candidate Starts for JustHall\_112:

(Start: 13 @58432 has 182 MA's), (Start: 19 @58465 has 1 MA's), (30, 58645), (Start: 33 @58666 has 2 MA's), (34, 58672), (35, 58687), (36, 58696), (51, 58774), (55, 58798), (61, 58861), (70, 58942), (71, 58948), (76, 59008), (80, 59044), (82, 59062), (84, 59080), (90, 59101), (100, 59194), (101, 59200), (112, 59272), (117, 59317), (118, 59320),

Gene: Kabocha\_40 Start: 28513, Stop: 29421, Start Num: 13

Candidate Starts for Kabocha\_40:

(Start: 13 @28513 has 182 MA's), (16, 28528), (30, 28729), (Start: 33 @28750 has 2 MA's), (52, 28864), (71, 29029), (88, 29176), (101, 29284), (103, 29290), (107, 29326), (111, 29347), (114, 29377),

Gene: Kabocha\_122 Start: 85575, Stop: 86696, Start Num: 3

Candidate Starts for Kabocha\_122:

(Start: 3 @85575 has 18 MA's), (11, 85656), (14, 85680), (Start: 33 @85908 has 2 MA's), (34, 85914), (40, 85968), (47, 86001), (56, 86043), (60, 86091), (72, 86184), (76, 86241), (93, 86376), (96, 86403), (104, 86460), (105, 86463), (106, 86466), (117, 86553), (123, 86598), (131, 86640),

Gene: Kamryn\_115 Start: 59710, Stop: 60615, Start Num: 13

Candidate Starts for Kamryn\_115:

(Start: 13 @59710 has 182 MA's), (Start: 19 @59743 has 1 MA's), (30, 59923), (Start: 33 @59944 has 2 MA's), (34, 59950), (35, 59965), (36, 59974), (51, 60052), (55, 60076), (61, 60139), (70, 60220), (71, 60226), (76, 60286), (80, 60322), (82, 60340), (84, 60358), (90, 60379), (100, 60472), (101, 60478), (112, 60550), (117, 60595), (118, 60598),

Gene: Kboogie\_119 Start: 58066, Stop: 58971, Start Num: 13

Candidate Starts for Kboogie\_119:

(Start: 13 @58066 has 182 MA's), (Start: 19 @58099 has 1 MA's), (30, 58279), (Start: 33 @58300 has 2 MA's), (34, 58306), (35, 58321), (36, 58330), (51, 58408), (55, 58432), (61, 58495), (70, 58576), (71, 58582), (76, 58642), (80, 58678), (82, 58696), (84, 58714), (90, 58735), (100, 58828), (101, 58834), (117, 58951), (118, 58954),

Gene: Khaleesi\_114 Start: 59008, Stop: 59913, Start Num: 13

Candidate Starts for Khaleesi\_114:

(Start: 13 @59008 has 182 MA's), (Start: 19 @59041 has 1 MA's), (30, 59221), (Start: 33 @59242 has 2 MA's), (34, 59248), (35, 59263), (36, 59272), (51, 59350), (55, 59374), (61, 59437), (70, 59518), (71, 59524), (76, 59584), (80, 59620), (82, 59638), (84, 59656), (90, 59677), (100, 59770), (101, 59776), (112, 59848), (117, 59893), (118, 59896),

Gene: KingstonB\_70 Start: 45330, Stop: 46445, Start Num: 3

Candidate Starts for KingstonB\_70:

(Start: 3 @45330 has 18 MA's), (14, 45432), (18, 45447), (24, 45534), (28, 45615), (40, 45720), (43, 45744), (45, 45753), (51, 45777), (60, 45852), (64, 45876), (81, 46041), (117, 46314), (120, 46323), (130, 46386),

Gene: Koguma\_112 Start: 56553, Stop: 57458, Start Num: 13

Candidate Starts for Koguma\_112:

(Start: 13 @56553 has 182 MA's), (Start: 19 @56586 has 1 MA's), (30, 56766), (Start: 33 @56787 has 2 MA's), (34, 56793), (35, 56808), (36, 56817), (51, 56895), (55, 56919), (61, 56982), (70, 57063), (71, 57069), (76, 57129), (80, 57165), (82, 57183), (84, 57201), (90, 57222), (100, 57315), (101, 57321), (112, 57393), (117, 57438), (118, 57441),

Gene: LRRHood\_108 Start: 58351, Stop: 59256, Start Num: 13

Candidate Starts for LRRHood\_108:

(Start: 13 @58351 has 182 MA's), (Start: 19 @58384 has 1 MA's), (30, 58564), (Start: 33 @58585 has 2 MA's), (34, 58591), (35, 58606), (36, 58615), (51, 58693), (55, 58717), (61, 58780), (70, 58861), (71, 58867), (76, 58927), (80, 58963), (82, 58981), (84, 58999), (90, 59020), (100, 59113), (101, 59119), (112, 59191), (117, 59236), (118, 59239),

Gene: Latch\_115 Start: 57637, Stop: 58542, Start Num: 13

Candidate Starts for Latch\_115:

(Start: 13 @57637 has 182 MA's), (Start: 19 @57670 has 1 MA's), (30, 57850), (Start: 33 @57871 has 2 MA's), (34, 57877), (35, 57892), (36, 57901), (51, 57979), (55, 58003), (61, 58066), (70, 58147), (71, 58153), (76, 58213), (80, 58249), (82, 58267), (84, 58285), (90, 58306), (100, 58399), (101, 58405), (112, 58477), (117, 58522), (118, 58525),

Gene: Lee7\_112 Start: 59642, Stop: 60547, Start Num: 13

Candidate Starts for Lee7\_112:

(Start: 13 @59642 has 182 MA's), (Start: 19 @59675 has 1 MA's), (30, 59855), (Start: 33 @59876 has 2 MA's), (34, 59882), (35, 59897), (36, 59906), (51, 59984), (55, 60008), (61, 60071), (70, 60152), (71, 60158), (76, 60218), (80, 60254), (82, 60272), (84, 60290), (90, 60311), (100, 60404), (101, 60410), (112, 60482), (117, 60527), (118, 60530),

Gene: Lenoshki\_39 Start: 29380, Stop: 30288, Start Num: 13

Candidate Starts for Lenoshki\_39:

(Start: 13 @29380 has 182 MA's), (16, 29395), (30, 29596), (52, 29731), (71, 29896), (88, 30043), (101, 30151), (103, 30157), (107, 30193), (111, 30214), (114, 30244),

Gene: Lenoshki\_117 Start: 85545, Stop: 86666, Start Num: 3

Candidate Starts for Lenoshki\_117:

(Start: 3 @85545 has 18 MA's), (11, 85626), (14, 85650), (Start: 33 @85878 has 2 MA's), (34, 85884), (40, 85938), (47, 85971), (56, 86013), (60, 86061), (72, 86154), (76, 86211), (93, 86346), (96, 86373), (104, 86430), (105, 86433), (106, 86436), (117, 86523), (119, 86529), (123, 86568), (131, 86610),

Gene: LifeSavor\_113 Start: 58325, Stop: 59230, Start Num: 13

Candidate Starts for LifeSavor\_113:

(Start: 13 @58325 has 182 MA's), (Start: 19 @58358 has 1 MA's), (30, 58538), (Start: 33 @58559 has 2 MA's), (34, 58565), (35, 58580), (36, 58589), (51, 58667), (55, 58691), (61, 58754), (70, 58835), (71, 58841), (76, 58901), (80, 58937), (82, 58955), (84, 58973), (90, 58994), (100, 59087), (101, 59093), (112, 59165), (117, 59210), (118, 59213),

Gene: LinStu\_113 Start: 58960, Stop: 59865, Start Num: 13

Candidate Starts for LinStu\_113:

(Start: 13 @58960 has 182 MA's), (Start: 19 @58993 has 1 MA's), (30, 59173), (Start: 33 @59194 has 2 MA's), (34, 59200), (36, 59224), (51, 59302), (55, 59326), (61, 59389), (70, 59470), (71, 59476), (76, 59536), (80, 59572), (82, 59590), (84, 59608), (90, 59629), (100, 59722), (101, 59728), (117, 59845), (118, 59848),

Gene: Littleton\_115 Start: 58455, Stop: 59360, Start Num: 13

Candidate Starts for Littleton\_115:

(Start: 13 @58455 has 182 MA's), (Start: 19 @58488 has 1 MA's), (30, 58668), (Start: 33 @58689 has 2 MA's), (34, 58695), (35, 58710), (36, 58719), (51, 58797), (55, 58821), (61, 58884), (70, 58965), (71, 58971), (76, 59031), (80, 59067), (82, 59085), (84, 59103), (90, 59124), (100, 59217), (101, 59223), (112, 59295), (117, 59340), (118, 59343),

Gene: Loanshark\_114 Start: 58976, Stop: 59881, Start Num: 13



Candidate Starts for Loanshark\_114:

(Start: 13 @58976 has 182 MA's), (Start: 19 @59009 has 1 MA's), (30, 59189), (Start: 33 @59210 has 2 MA's), (34, 59216), (35, 59231), (36, 59240), (51, 59318), (55, 59342), (61, 59405), (70, 59486), (71, 59492), (76, 59552), (80, 59588), (82, 59606), (84, 59624), (90, 59645), (100, 59738), (101, 59744), (112, 59816), (117, 59861), (118, 59864),

Gene: LolaVinca\_115 Start: 59328, Stop: 60233, Start Num: 13

Candidate Starts for LolaVinca\_115:

(Start: 13 @59328 has 182 MA's), (Start: 19 @59361 has 1 MA's), (30, 59541), (Start: 33 @59562 has 2 MA's), (34, 59568), (35, 59583), (36, 59592), (51, 59670), (55, 59694), (61, 59757), (70, 59838), (71, 59844), (76, 59904), (80, 59940), (82, 59958), (84, 59976), (90, 59997), (100, 60090), (101, 60096), (112, 60168), (117, 60213), (118, 60216),

Gene: LordLeafolot\_118 Start: 60295, Stop: 61200, Start Num: 13

Candidate Starts for LordLeafolot\_118:

(Start: 13 @60295 has 182 MA's), (Start: 19 @60328 has 1 MA's), (30, 60508), (Start: 33 @60529 has 2 MA's), (34, 60535), (35, 60550), (36, 60559), (51, 60637), (55, 60661), (61, 60724), (70, 60805), (71, 60811), (76, 60871), (80, 60907), (82, 60925), (84, 60943), (90, 60964), (100, 61057), (101, 61063), (112, 61135), (117, 61180), (118, 61183),

Gene: Lukilu\_105 Start: 58742, Stop: 59647, Start Num: 13

Candidate Starts for Lukilu\_105:

(Start: 13 @58742 has 182 MA's), (Start: 19 @58775 has 1 MA's), (30, 58955), (Start: 33 @58976 has 2 MA's), (34, 58982), (36, 59006), (51, 59084), (55, 59108), (61, 59171), (70, 59252), (71, 59258), (76, 59318), (80, 59354), (82, 59372), (84, 59390), (90, 59411), (100, 59504), (101, 59510), (112, 59582), (117, 59627), (118, 59630),

Gene: Maby2021\_115 Start: 59102, Stop: 60007, Start Num: 13

Candidate Starts for Maby2021\_115:

(Start: 13 @59102 has 182 MA's), (Start: 19 @59135 has 1 MA's), (30, 59315), (Start: 33 @59336 has 2 MA's), (34, 59342), (35, 59357), (36, 59366), (51, 59444), (55, 59468), (61, 59531), (70, 59612), (71, 59618), (76, 59678), (80, 59714), (82, 59732), (84, 59750), (90, 59771), (100, 59864), (101, 59870), (112, 59942), (117, 59987), (118, 59990),

Gene: Mangeria\_115 Start: 59171, Stop: 60076, Start Num: 13

Candidate Starts for Mangeria\_115:

(Start: 13 @59171 has 182 MA's), (Start: 19 @59204 has 1 MA's), (30, 59384), (Start: 33 @59405 has 2 MA's), (34, 59411), (35, 59426), (36, 59435), (51, 59513), (55, 59537), (61, 59600), (70, 59681), (71, 59687), (76, 59747), (80, 59783), (82, 59801), (84, 59819), (90, 59840), (100, 59933), (101, 59939), (112, 60011), (117, 60056), (118, 60059),

Gene: Matsumoto\_111 Start: 57954, Stop: 58859, Start Num: 13

Candidate Starts for Matsumoto\_111:

(Start: 13 @57954 has 182 MA's), (Start: 19 @57987 has 1 MA's), (30, 58167), (Start: 33 @58188 has 2 MA's), (34, 58194), (36, 58218), (51, 58296), (55, 58320), (61, 58383), (70, 58464), (71, 58470), (76, 58530), (80, 58566), (82, 58584), (84, 58602), (90, 58623), (100, 58716), (101, 58722), (112, 58794), (117, 58839), (118, 58842),

Gene: McGee\_117 Start: 57707, Stop: 58612, Start Num: 13

Candidate Starts for McGee\_117:

(Start: 13 @57707 has 182 MA's), (Start: 19 @57740 has 1 MA's), (30, 57920), (Start: 33 @57941 has 2 MA's), (34, 57947), (36, 57971), (51, 58049), (55, 58073), (61, 58136), (70, 58217), (71, 58223), (76, 58283), (80, 58319), (82, 58337), (84, 58355), (90, 58376), (100, 58469), (101, 58475), (117, 58592),

(118, 58595),

Gene: McWolfish\_113 Start: 58891, Stop: 59796, Start Num: 13

Candidate Starts for McWolfish\_113:

(Start: 13 @58891 has 182 MA's), (Start: 19 @58924 has 1 MA's), (30, 59104), (Start: 33 @59125 has 2 MA's), (34, 59131), (35, 59146), (36, 59155), (51, 59233), (55, 59257), (61, 59320), (70, 59401), (71, 59407), (76, 59467), (80, 59503), (82, 59521), (84, 59539), (90, 59560), (100, 59653), (101, 59659), (112, 59731), (117, 59776), (118, 59779),

Gene: Megamind\_114 Start: 58775, Stop: 59680, Start Num: 13

Candidate Starts for Megamind\_114:

(Start: 13 @58775 has 182 MA's), (Start: 19 @58808 has 1 MA's), (30, 58988), (Start: 33 @59009 has 2 MA's), (34, 59015), (35, 59030), (36, 59039), (51, 59117), (55, 59141), (61, 59204), (70, 59285), (71, 59291), (76, 59351), (80, 59387), (82, 59405), (84, 59423), (90, 59444), (100, 59537), (101, 59543), (112, 59615), (117, 59660), (118, 59663),

Gene: Melpomini\_109 Start: 56241, Stop: 57146, Start Num: 13

Candidate Starts for Melpomini\_109:

(Start: 13 @56241 has 182 MA's), (Start: 19 @56274 has 1 MA's), (30, 56454), (Start: 33 @56475 has 2 MA's), (34, 56481), (35, 56496), (36, 56505), (51, 56583), (55, 56607), (61, 56670), (70, 56751), (71, 56757), (76, 56817), (80, 56853), (82, 56871), (84, 56889), (90, 56910), (100, 57003), (101, 57009), (112, 57081), (117, 57126), (118, 57129),

Gene: MikeLiesIn\_116 Start: 59122, Stop: 60027, Start Num: 13

Candidate Starts for MikeLiesIn\_116:

(Start: 13 @59122 has 182 MA's), (Start: 19 @59155 has 1 MA's), (30, 59335), (Start: 33 @59356 has 2 MA's), (34, 59362), (35, 59377), (36, 59386), (51, 59464), (55, 59488), (61, 59551), (70, 59632), (71, 59638), (76, 59698), (80, 59734), (82, 59752), (84, 59770), (90, 59791), (100, 59884), (101, 59890), (112, 59962), (117, 60007), (118, 60010),

Gene: Mikro\_112 Start: 60345, Stop: 61250, Start Num: 13

Candidate Starts for Mikro\_112:

(Start: 13 @60345 has 182 MA's), (Start: 19 @60378 has 1 MA's), (30, 60558), (Start: 33 @60579 has 2 MA's), (34, 60585), (35, 60600), (36, 60609), (51, 60687), (55, 60711), (61, 60774), (70, 60855), (71, 60861), (76, 60921), (80, 60957), (82, 60975), (84, 60993), (90, 61014), (100, 61107), (101, 61113), (112, 61185), (117, 61230), (118, 61233),

Gene: MintFritos\_118 Start: 84586, Stop: 85707, Start Num: 3

Candidate Starts for MintFritos\_118:

(Start: 3 @84586 has 18 MA's), (11, 84667), (14, 84691), (Start: 33 @84919 has 2 MA's), (34, 84925), (40, 84979), (47, 85012), (56, 85054), (60, 85102), (72, 85195), (76, 85252), (93, 85387), (96, 85414), (104, 85471), (105, 85474), (106, 85477), (117, 85564), (119, 85570), (123, 85609), (127, 85627), (131, 85651),

Gene: MintFritos\_37 Start: 27700, Stop: 28608, Start Num: 13

Candidate Starts for MintFritos\_37:

(Start: 13 @27700 has 182 MA's), (16, 27715), (30, 27916), (Start: 33 @27937 has 2 MA's), (52, 28051), (71, 28216), (88, 28363), (101, 28471), (103, 28477), (107, 28513), (111, 28534), (114, 28564),

Gene: MoMoMixon\_115 Start: 58598, Stop: 59503, Start Num: 13

Candidate Starts for MoMoMixon\_115:

(Start: 13 @58598 has 182 MA's), (Start: 19 @58631 has 1 MA's), (30, 58811), (Start: 33 @58832 has 2 MA's), (34, 58838), (35, 58853), (36, 58862), (51, 58940), (55, 58964), (61, 59027), (70, 59108), (71, 59114), (76, 59174), (80, 59210), (82, 59228), (84, 59246), (90, 59267), (100, 59360), (101, 59366), (112, 59438), (117, 59483), (118, 59486),

Gene: Momo\_114 Start: 57637, Stop: 58542, Start Num: 13

Candidate Starts for Momo\_114:

(Start: 13 @57637 has 182 MA's), (Start: 19 @57670 has 1 MA's), (30, 57850), (Start: 33 @57871 has 2 MA's), (34, 57877), (35, 57892), (36, 57901), (51, 57979), (55, 58003), (61, 58066), (70, 58147), (71, 58153), (76, 58213), (80, 58249), (82, 58267), (84, 58285), (90, 58306), (100, 58399), (101, 58405), (112, 58477), (117, 58522), (118, 58525),

Gene: Morizzled23\_115 Start: 58002, Stop: 58907, Start Num: 13

Candidate Starts for Morizzled23\_115:

(Start: 13 @58002 has 182 MA's), (Start: 19 @58035 has 1 MA's), (30, 58215), (Start: 33 @58236 has 2 MA's), (34, 58242), (35, 58257), (36, 58266), (51, 58344), (55, 58368), (61, 58431), (70, 58512), (71, 58518), (76, 58578), (80, 58614), (82, 58632), (84, 58650), (90, 58671), (100, 58764), (101, 58770), (112, 58842), (117, 58887), (118, 58890),

Gene: Myrna\_111 Start: 57912, Stop: 58817, Start Num: 13

Candidate Starts for Myrna\_111:

(Start: 13 @57912 has 182 MA's), (Start: 19 @57945 has 1 MA's), (28, 58101), (29, 58116), (30, 58125), (Start: 33 @58146 has 2 MA's), (42, 58221), (54, 58272), (55, 58278), (60, 58332), (62, 58341), (63, 58353), (64, 58356), (68, 58401), (70, 58419), (71, 58425), (76, 58485), (79, 58518), (80, 58521), (83, 58545), (87, 58569), (89, 58575), (100, 58674), (101, 58680), (109, 58728), (114, 58773),

Gene: Naija\_114 Start: 57637, Stop: 58542, Start Num: 13

Candidate Starts for Naija\_114:

(Start: 13 @57637 has 182 MA's), (Start: 19 @57670 has 1 MA's), (30, 57850), (Start: 33 @57871 has 2 MA's), (34, 57877), (35, 57892), (36, 57901), (51, 57979), (55, 58003), (61, 58066), (70, 58147), (71, 58153), (76, 58213), (80, 58249), (82, 58267), (84, 58285), (90, 58306), (100, 58399), (101, 58405), (112, 58477), (117, 58522), (118, 58525),

Gene: Napoleon13\_111 Start: 56679, Stop: 57584, Start Num: 13

Candidate Starts for Napoleon13\_111:

(Start: 13 @56679 has 182 MA's), (Start: 19 @56712 has 1 MA's), (30, 56892), (Start: 33 @56913 has 2 MA's), (34, 56919), (35, 56934), (36, 56943), (51, 57021), (55, 57045), (61, 57108), (70, 57189), (71, 57195), (76, 57255), (80, 57291), (82, 57309), (84, 57327), (90, 57348), (100, 57441), (101, 57447), (112, 57519), (117, 57564), (118, 57567),

Gene: Nappy\_117 Start: 60032, Stop: 60937, Start Num: 13

Candidate Starts for Nappy\_117:

(Start: 13 @60032 has 182 MA's), (Start: 19 @60065 has 1 MA's), (30, 60245), (Start: 33 @60266 has 2 MA's), (34, 60272), (35, 60287), (36, 60296), (51, 60374), (55, 60398), (61, 60461), (70, 60542), (71, 60548), (76, 60608), (80, 60644), (82, 60662), (84, 60680), (90, 60701), (100, 60794), (101, 60800), (112, 60872), (117, 60917), (118, 60920),

Gene: Naval22\_119 Start: 60565, Stop: 61470, Start Num: 13

Candidate Starts for Naval22\_119:

(Start: 13 @60565 has 182 MA's), (Start: 19 @60598 has 1 MA's), (30, 60778), (Start: 33 @60799 has 2 MA's), (34, 60805), (35, 60820), (36, 60829), (51, 60907), (55, 60931), (61, 60994), (70, 61075), (71, 61081), (76, 61141), (80, 61177), (82, 61195), (84, 61213), (90, 61234), (100, 61327), (101, 61333), (112, 61405), (117, 61450), (118, 61453),

Gene: NedWong\_116 Start: 59109, Stop: 60014, Start Num: 13

Candidate Starts for NedWong\_116:

(Start: 13 @59109 has 182 MA's), (Start: 19 @59142 has 1 MA's), (30, 59322), (Start: 33 @59343 has 2 MA's), (34, 59349), (35, 59364), (36, 59373), (51, 59451), (55, 59475), (61, 59538), (70, 59619), (71, 59625), (76, 59685), (80, 59721), (82, 59739), (84, 59757), (90, 59778), (100, 59871), (101, 59877), (112, 59949), (117, 59994), (118, 59997),

Gene: Ngannou\_111 Start: 56619, Stop: 57524, Start Num: 13

Candidate Starts for Ngannou\_111:

(Start: 13 @56619 has 182 MA's), (Start: 19 @56652 has 1 MA's), (30, 56832), (Start: 33 @56853 has 2 MA's), (34, 56859), (35, 56874), (36, 56883), (51, 56961), (55, 56985), (61, 57048), (70, 57129), (71, 57135), (76, 57195), (80, 57231), (82, 57249), (84, 57267), (90, 57288), (100, 57381), (101, 57387), (112, 57459), (117, 57504), (118, 57507),

Gene: NiceHouse\_197 Start: 110241, Stop: 109129, Start Num: 3

Candidate Starts for NiceHouse\_197:

(Start: 3 @110241 has 18 MA's), (23, 110046), (28, 109956), (31, 109926), (61, 109713), (74, 109581), (93, 109434),

Gene: Nidhogg\_116 Start: 58843, Stop: 59748, Start Num: 13

Candidate Starts for Nidhogg\_116:

(Start: 13 @58843 has 182 MA's), (Start: 19 @58876 has 1 MA's), (30, 59056), (Start: 33 @59077 has 2 MA's), (34, 59083), (35, 59098), (36, 59107), (51, 59185), (55, 59209), (61, 59272), (70, 59353), (71, 59359), (76, 59419), (80, 59455), (82, 59473), (84, 59491), (90, 59512), (100, 59605), (101, 59611), (112, 59683), (117, 59728), (118, 59731),

Gene: NoodleTree\_122 Start: 59202, Stop: 60107, Start Num: 13

Candidate Starts for NoodleTree\_122:

(Start: 13 @59202 has 182 MA's), (Start: 19 @59235 has 1 MA's), (30, 59415), (Start: 33 @59436 has 2 MA's), (34, 59442), (35, 59457), (36, 59466), (51, 59544), (55, 59568), (61, 59631), (70, 59712), (71, 59718), (76, 59778), (80, 59814), (82, 59832), (84, 59850), (90, 59871), (100, 59964), (101, 59970), (112, 60042), (117, 60087), (118, 60090),

Gene: Norm\_116 Start: 59804, Stop: 60709, Start Num: 13

Candidate Starts for Norm\_116:

(Start: 13 @59804 has 182 MA's), (Start: 19 @59837 has 1 MA's), (30, 60017), (Start: 33 @60038 has 2 MA's), (34, 60044), (35, 60059), (36, 60068), (51, 60146), (55, 60170), (61, 60233), (70, 60314), (71, 60320), (76, 60380), (80, 60416), (82, 60434), (84, 60452), (90, 60473), (100, 60566), (101, 60572), (112, 60644), (117, 60689), (118, 60692),

Gene: NuevoMundo\_120 Start: 61383, Stop: 62288, Start Num: 13

Candidate Starts for NuevoMundo\_120:

(Start: 13 @61383 has 182 MA's), (Start: 19 @61416 has 1 MA's), (30, 61596), (Start: 33 @61617 has 2 MA's), (34, 61623), (35, 61638), (36, 61647), (51, 61725), (55, 61749), (61, 61812), (70, 61893), (71, 61899), (76, 61959), (80, 61995), (82, 62013), (84, 62031), (90, 62052), (100, 62145), (101, 62151), (112, 62223), (117, 62268), (118, 62271),

Gene: Oogie\_116 Start: 85595, Stop: 86716, Start Num: 3

Candidate Starts for Oogie\_116:

(Start: 3 @85595 has 18 MA's), (11, 85676), (14, 85700), (Start: 33 @85928 has 2 MA's), (34, 85934), (40, 85988), (47, 86021), (56, 86063), (60, 86111), (72, 86204), (76, 86261), (93, 86396), (96, 86423), (104, 86480), (105, 86483), (106, 86486), (117, 86573), (119, 86579), (123, 86618), (131, 86660),

Gene: Oogie\_39 Start: 29406, Stop: 30314, Start Num: 13

Candidate Starts for Oogie\_39:

(Start: 13 @29406 has 182 MA's), (16, 29421), (30, 29622), (52, 29757), (71, 29922), (88, 30069), (101, 30177), (103, 30183), (107, 30219), (111, 30240), (114, 30270),

Gene: Pakusa\_115 Start: 83560, Stop: 84681, Start Num: 3

Candidate Starts for Pakusa\_115:

(Start: 3 @83560 has 18 MA's), (11, 83641), (14, 83665), (Start: 33 @83893 has 2 MA's), (34, 83899), (40, 83953), (47, 83986), (56, 84028), (60, 84076), (72, 84169), (76, 84226), (93, 84361), (96, 84388), (104, 84445), (105, 84448), (106, 84451), (117, 84538), (119, 84544), (123, 84583), (127, 84601), (131, 84625),

Gene: Pakusa\_37 Start: 27442, Stop: 28350, Start Num: 13

Candidate Starts for Pakusa\_37:

(Start: 13 @27442 has 182 MA's), (16, 27457), (30, 27658), (Start: 33 @27679 has 2 MA's), (52, 27793), (71, 27958), (88, 28105), (101, 28213), (103, 28219), (107, 28255), (111, 28276), (114, 28306),

Gene: ParkTD\_116 Start: 59105, Stop: 60010, Start Num: 13

Candidate Starts for ParkTD\_116:

(Start: 13 @59105 has 182 MA's), (Start: 19 @59138 has 1 MA's), (30, 59318), (Start: 33 @59339 has 2 MA's), (34, 59345), (35, 59360), (36, 59369), (51, 59447), (55, 59471), (61, 59534), (70, 59615), (71, 59621), (76, 59681), (80, 59717), (82, 59735), (84, 59753), (90, 59774), (100, 59867), (101, 59873), (112, 59945), (117, 59990), (118, 59993),

Gene: Patter\_115 Start: 57654, Stop: 58559, Start Num: 13

Candidate Starts for Patter\_115:

(Start: 13 @57654 has 182 MA's), (Start: 19 @57687 has 1 MA's), (30, 57867), (Start: 33 @57888 has 2 MA's), (34, 57894), (35, 57909), (36, 57918), (51, 57996), (55, 58020), (61, 58083), (70, 58164), (71, 58170), (76, 58230), (80, 58266), (82, 58284), (84, 58302), (90, 58323), (100, 58416), (101, 58422), (112, 58494), (117, 58539), (118, 58542),

Gene: Phabba\_114 Start: 56339, Stop: 57244, Start Num: 13

Candidate Starts for Phabba\_114:

(Start: 13 @56339 has 182 MA's), (15, 56351), (Start: 19 @56372 has 1 MA's), (30, 56552), (31, 56558), (Start: 33 @56573 has 2 MA's), (60, 56759), (61, 56765), (64, 56783), (70, 56846), (71, 56852), (76, 56912), (79, 56945), (80, 56948), (89, 57002), (101, 57107), (102, 57110), (113, 57185), (118, 57227),

Gene: Phlegm\_117 Start: 57637, Stop: 58542, Start Num: 13

Candidate Starts for Phlegm\_117:

(Start: 13 @57637 has 182 MA's), (Start: 19 @57670 has 1 MA's), (30, 57850), (Start: 33 @57871 has 2 MA's), (34, 57877), (35, 57892), (36, 57901), (51, 57979), (55, 58003), (61, 58066), (70, 58147), (71, 58153), (76, 58213), (80, 58249), (82, 58267), (84, 58285), (90, 58306), (100, 58399), (101, 58405), (112, 58477), (117, 58522), (118, 58525),

Gene: Phox\_112 Start: 59385, Stop: 60290, Start Num: 13

Candidate Starts for Phox\_112:

(Start: 13 @59385 has 182 MA's), (Start: 19 @59418 has 1 MA's), (30, 59598), (Start: 33 @59619 has 2 MA's), (34, 59625), (35, 59640), (36, 59649), (51, 59727), (55, 59751), (61, 59814), (70, 59895), (71, 59901), (76, 59961), (80, 59997), (82, 60015), (84, 60033), (90, 60054), (100, 60147), (101, 60153), (112, 60225), (117, 60270), (118, 60273),

Gene: Phrappuccino\_70 Start: 49437, Stop: 50219, Start Num: 33

Candidate Starts for Phrappuccino\_70:

(Start: 33 @49437 has 2 MA's), (39, 49491), (54, 49575), (55, 49581), (75, 49782), (76, 49788), (94, 49932), (103, 49980), (113, 50052), (119, 50094), (126, 50139), (132, 50175),

Gene: Phusco\_115 Start: 58402, Stop: 59307, Start Num: 13

Candidate Starts for Phusco\_115:

(Start: 13 @58402 has 182 MA's), (Start: 19 @58435 has 1 MA's), (30, 58615), (Start: 33 @58636 has 2 MA's), (34, 58642), (35, 58657), (36, 58666), (51, 58744), (55, 58768), (61, 58831), (70, 58912), (71, 58918), (76, 58978), (80, 59014), (82, 59032), (84, 59050), (90, 59071), (100, 59164), (101, 59170), (112, 59242), (117, 59287), (118, 59290),

Gene: Pier\_119 Start: 61391, Stop: 62296, Start Num: 13

Candidate Starts for Pier\_119:

(Start: 13 @61391 has 182 MA's), (Start: 19 @61424 has 1 MA's), (30, 61604), (Start: 33 @61625 has 2 MA's), (34, 61631), (35, 61646), (36, 61655), (51, 61733), (55, 61757), (61, 61820), (70, 61901), (71, 61907), (76, 61967), (80, 62003), (82, 62021), (84, 62039), (90, 62060), (100, 62153), (101, 62159), (112, 62231), (117, 62276), (118, 62279),

Gene: Pinkcreek\_106 Start: 56726, Stop: 57631, Start Num: 13

Candidate Starts for Pinkcreek\_106:

(Start: 13 @56726 has 182 MA's), (Start: 19 @56759 has 1 MA's), (30, 56939), (Start: 33 @56960 has 2 MA's), (34, 56966), (35, 56981), (36, 56990), (51, 57068), (55, 57092), (61, 57155), (70, 57236), (71, 57242), (76, 57302), (80, 57338), (82, 57356), (84, 57374), (90, 57395), (100, 57488), (101, 57494), (117, 57611), (118, 57614),

Gene: Pio\_119 Start: 60995, Stop: 61900, Start Num: 13

Candidate Starts for Pio\_119:

(Start: 13 @60995 has 182 MA's), (Start: 19 @61028 has 1 MA's), (30, 61208), (Start: 33 @61229 has 2 MA's), (34, 61235), (35, 61250), (36, 61259), (51, 61337), (55, 61361), (61, 61424), (70, 61505), (71, 61511), (76, 61571), (80, 61607), (82, 61625), (84, 61643), (90, 61664), (100, 61757), (101, 61763), (112, 61835), (117, 61880), (118, 61883),

Gene: Pivoine\_114 Start: 57637, Stop: 58542, Start Num: 13

Candidate Starts for Pivoine\_114:

(Start: 13 @57637 has 182 MA's), (Start: 19 @57670 has 1 MA's), (30, 57850), (Start: 33 @57871 has 2 MA's), (34, 57877), (35, 57892), (36, 57901), (51, 57979), (55, 58003), (61, 58066), (70, 58147), (71, 58153), (76, 58213), (80, 58249), (82, 58267), (84, 58285), (90, 58306), (100, 58399), (101, 58405), (112, 58477), (117, 58522), (118, 58525),

Gene: Pleione\_118 Start: 59272, Stop: 60177, Start Num: 13

Candidate Starts for Pleione\_118:

(Start: 13 @59272 has 182 MA's), (Start: 19 @59305 has 1 MA's), (30, 59485), (Start: 33 @59506 has 2 MA's), (34, 59512), (35, 59527), (36, 59536), (51, 59614), (55, 59638), (61, 59701), (70, 59782), (71, 59788), (76, 59848), (80, 59884), (82, 59902), (84, 59920), (90, 59941), (100, 60034), (101, 60040), (112, 60112), (117, 60157), (118, 60160),

Gene: PurduePete\_115 Start: 59529, Stop: 60434, Start Num: 13

Candidate Starts for PurduePete\_115:

(Start: 13 @59529 has 182 MA's), (Start: 19 @59562 has 1 MA's), (30, 59742), (Start: 33 @59763 has 2 MA's), (34, 59769), (35, 59784), (36, 59793), (51, 59871), (55, 59895), (61, 59958), (70, 60039), (71, 60045), (76, 60105), (80, 60141), (82, 60159), (84, 60177), (90, 60198), (100, 60291), (101, 60297),

(112, 60369), (117, 60414), (118, 60417),

Gene: QBert\_109 Start: 58109, Stop: 59014, Start Num: 13

Candidate Starts for QBert\_109:

(Start: 13 @58109 has 182 MA's), (Start: 19 @58142 has 1 MA's), (30, 58322), (Start: 33 @58343 has 2 MA's), (34, 58349), (36, 58373), (51, 58451), (55, 58475), (61, 58538), (70, 58619), (71, 58625), (76, 58685), (80, 58721), (82, 58739), (84, 58757), (90, 58778), (100, 58871), (101, 58877), (112, 58949), (117, 58994), (118, 58997),

Gene: Quasimodo\_116 Start: 59064, Stop: 59969, Start Num: 13

Candidate Starts for Quasimodo\_116:

(Start: 13 @59064 has 182 MA's), (Start: 19 @59097 has 1 MA's), (30, 59277), (Start: 33 @59298 has 2 MA's), (34, 59304), (35, 59319), (36, 59328), (51, 59406), (55, 59430), (61, 59493), (70, 59574), (71, 59580), (76, 59640), (80, 59676), (82, 59694), (84, 59712), (90, 59733), (100, 59826), (101, 59832), (112, 59904), (117, 59949), (118, 59952),

Gene: Rabinovish\_112 Start: 59302, Stop: 60207, Start Num: 13

Candidate Starts for Rabinovish\_112:

(Start: 13 @59302 has 182 MA's), (Start: 19 @59335 has 1 MA's), (30, 59515), (Start: 33 @59536 has 2 MA's), (34, 59542), (36, 59566), (51, 59644), (55, 59668), (61, 59731), (70, 59812), (71, 59818), (76, 59878), (80, 59914), (82, 59932), (84, 59950), (90, 59971), (100, 60064), (101, 60070), (112, 60142), (117, 60187), (118, 60190),

Gene: Rahel\_114 Start: 57994, Stop: 58899, Start Num: 13

Candidate Starts for Rahel\_114:

(Start: 13 @57994 has 182 MA's), (Start: 19 @58027 has 1 MA's), (30, 58207), (Start: 33 @58228 has 2 MA's), (34, 58234), (35, 58249), (36, 58258), (51, 58336), (55, 58360), (61, 58423), (70, 58504), (71, 58510), (76, 58570), (80, 58606), (82, 58624), (84, 58642), (90, 58663), (100, 58756), (101, 58762), (112, 58834), (117, 58879), (118, 58882),

Gene: Rizal\_110 Start: 57142, Stop: 58047, Start Num: 13

Candidate Starts for Rizal\_110:

(Start: 13 @57142 has 182 MA's), (Start: 19 @57175 has 1 MA's), (30, 57355), (Start: 33 @57376 has 2 MA's), (34, 57382), (35, 57397), (36, 57406), (51, 57484), (55, 57508), (61, 57571), (70, 57652), (71, 57658), (76, 57718), (80, 57754), (82, 57772), (84, 57790), (90, 57811), (100, 57904), (101, 57910), (112, 57982), (117, 58027), (118, 58030),

Gene: RoMag\_110 Start: 58315, Stop: 59220, Start Num: 13

Candidate Starts for RoMag\_110:

(Start: 13 @58315 has 182 MA's), (Start: 19 @58348 has 1 MA's), (30, 58528), (Start: 33 @58549 has 2 MA's), (34, 58555), (35, 58570), (36, 58579), (51, 58657), (55, 58681), (61, 58744), (70, 58825), (71, 58831), (76, 58891), (80, 58927), (82, 58945), (84, 58963), (90, 58984), (100, 59077), (101, 59083), (112, 59155), (117, 59200), (118, 59203),

Gene: Ronan\_109 Start: 56265, Stop: 57170, Start Num: 13

Candidate Starts for Ronan\_109:

(Start: 13 @56265 has 182 MA's), (Start: 19 @56298 has 1 MA's), (30, 56478), (Start: 33 @56499 has 2 MA's), (34, 56505), (35, 56520), (36, 56529), (51, 56607), (55, 56631), (61, 56694), (70, 56775), (71, 56781), (76, 56841), (80, 56877), (82, 56895), (84, 56913), (90, 56934), (100, 57027), (101, 57033), (112, 57105), (117, 57150), (118, 57153),

Gene: Roots515\_113 Start: 59302, Stop: 60207, Start Num: 13

Candidate Starts for Roots515\_113:

(Start: 13 @59302 has 182 MA's), (Start: 19 @59335 has 1 MA's), (30, 59515), (Start: 33 @59536 has 2 MA's), (34, 59542), (35, 59557), (36, 59566), (51, 59644), (55, 59668), (61, 59731), (70, 59812), (71, 59818), (76, 59878), (80, 59914), (82, 59932), (84, 59950), (90, 59971), (100, 60064), (101, 60070), (112, 60142), (117, 60187), (118, 60190),

Gene: Salacia\_119 Start: 59443, Stop: 60348, Start Num: 13

Candidate Starts for Salacia\_119:

(Start: 13 @59443 has 182 MA's), (Start: 19 @59476 has 1 MA's), (30, 59656), (Start: 33 @59677 has 2 MA's), (34, 59683), (35, 59698), (36, 59707), (51, 59785), (55, 59809), (61, 59872), (70, 59953), (71, 59959), (76, 60019), (80, 60055), (82, 60073), (84, 60091), (90, 60112), (100, 60205), (101, 60211), (112, 60283), (117, 60328), (118, 60331),

Gene: Sauce\_115 Start: 58049, Stop: 58954, Start Num: 13

Candidate Starts for Sauce\_115:

(Start: 13 @58049 has 182 MA's), (Start: 19 @58082 has 1 MA's), (30, 58262), (Start: 33 @58283 has 2 MA's), (34, 58289), (35, 58304), (36, 58313), (51, 58391), (55, 58415), (61, 58478), (70, 58559), (71, 58565), (76, 58625), (80, 58661), (82, 58679), (84, 58697), (90, 58718), (100, 58811), (101, 58817), (112, 58889), (117, 58934), (118, 58937),

Gene: ScarletRaider\_38 Start: 30584, Stop: 31492, Start Num: 13

Candidate Starts for ScarletRaider\_38:

(Start: 13 @30584 has 182 MA's), (16, 30599), (28, 30776), (34, 30827), (44, 30908), (48, 30917), (57, 30959), (60, 31007), (63, 31028), (68, 31076), (71, 31100), (77, 31187), (79, 31196), (92, 31274), (100, 31349), (101, 31355), (103, 31361), (107, 31397), (111, 31418), (112, 31427), (114, 31448),

Gene: ScarletRaider\_119 Start: 86797, Stop: 87924, Start Num: 3

Candidate Starts for ScarletRaider\_119:

(Start: 3 @86797 has 18 MA's), (8, 86845), (14, 86899), (17, 86911), (20, 86944), (22, 86968), (23, 86992), (34, 87133), (40, 87187), (60, 87319), (72, 87412), (76, 87469), (88, 87562), (93, 87604), (96, 87631), (103, 87670), (104, 87688), (105, 87691), (106, 87694), (123, 87826), (127, 87844), (131, 87868),

Gene: Schomber\_38 Start: 27450, Stop: 28358, Start Num: 13

Candidate Starts for Schomber\_38:

(Start: 13 @27450 has 182 MA's), (16, 27465), (30, 27666), (Start: 33 @27687 has 2 MA's), (52, 27801), (71, 27966), (88, 28113), (101, 28221), (103, 28227), (107, 28263), (111, 28284), (114, 28314),

Gene: Schomber\_119 Start: 83963, Stop: 85084, Start Num: 3

Candidate Starts for Schomber\_119:

(Start: 3 @83963 has 18 MA's), (11, 84044), (14, 84068), (Start: 33 @84296 has 2 MA's), (34, 84302), (40, 84356), (47, 84389), (56, 84431), (60, 84479), (72, 84572), (76, 84629), (93, 84764), (96, 84791), (104, 84848), (105, 84851), (106, 84854), (117, 84941), (119, 84947), (123, 84986), (127, 85004), (131, 85028),

Gene: ScoobyDoobyDoo\_105 Start: 55941, Stop: 56846, Start Num: 13

Candidate Starts for ScoobyDoobyDoo\_105:

(Start: 13 @55941 has 182 MA's), (15, 55953), (Start: 19 @55974 has 1 MA's), (30, 56154), (Start: 33 @56175 has 2 MA's), (42, 56250), (49, 56274), (55, 56307), (71, 56454), (76, 56514), (79, 56547), (80, 56550), (82, 56571), (89, 56604), (101, 56709), (102, 56712), (107, 56751), (118, 56829),

Gene: ScottMcG\_111 Start: 58065, Stop: 58970, Start Num: 13

Candidate Starts for ScottMcG\_111:



(Start: 13 @58065 has 182 MA's), (Start: 19 @58098 has 1 MA's), (30, 58278), (Start: 33 @58299 has 2 MA's), (34, 58305), (35, 58320), (36, 58329), (51, 58407), (55, 58431), (61, 58494), (70, 58575), (71, 58581), (76, 58641), (80, 58677), (82, 58695), (84, 58713), (90, 58734), (100, 58827), (101, 58833), (112, 58905), (117, 58950), (118, 58953),

Gene: Sebata\_115 Start: 59518, Stop: 60423, Start Num: 13

Candidate Starts for Sebata\_115:

(Start: 13 @59518 has 182 MA's), (Start: 19 @59551 has 1 MA's), (30, 59731), (Start: 33 @59752 has 2 MA's), (34, 59758), (36, 59782), (51, 59860), (55, 59884), (61, 59947), (70, 60028), (71, 60034), (76, 60094), (80, 60130), (82, 60148), (84, 60166), (90, 60187), (100, 60280), (101, 60286), (117, 60403), (118, 60406),

Gene: Settecandela\_70 Start: 49437, Stop: 50219, Start Num: 33

Candidate Starts for Settecandela\_70:

(Start: 33 @49437 has 2 MA's), (39, 49491), (54, 49575), (55, 49581), (75, 49782), (76, 49788), (94, 49932), (103, 49980), (113, 50052), (119, 50094), (126, 50139), (132, 50175),

Gene: Shaqnato\_108 Start: 57109, Stop: 58014, Start Num: 13

Candidate Starts for Shaqnato\_108:

(Start: 13 @57109 has 182 MA's), (Start: 19 @57142 has 1 MA's), (30, 57322), (Start: 33 @57343 has 2 MA's), (34, 57349), (35, 57364), (36, 57373), (51, 57451), (55, 57475), (61, 57538), (70, 57619), (71, 57625), (76, 57685), (80, 57721), (82, 57739), (84, 57757), (90, 57778), (100, 57871), (101, 57877), (112, 57949), (117, 57994), (118, 57997),

Gene: Shelob\_117 Start: 59891, Stop: 60796, Start Num: 13

Candidate Starts for Shelob\_117:

(Start: 13 @59891 has 182 MA's), (Start: 19 @59924 has 1 MA's), (30, 60104), (Start: 33 @60125 has 2 MA's), (34, 60131), (35, 60146), (36, 60155), (51, 60233), (55, 60257), (61, 60320), (70, 60401), (71, 60407), (76, 60467), (80, 60503), (82, 60521), (84, 60539), (90, 60560), (100, 60653), (101, 60659), (117, 60776), (118, 60779),

Gene: ShiaLabeouf\_114 Start: 58429, Stop: 59334, Start Num: 13

Candidate Starts for ShiaLabeouf\_114:

(Start: 13 @58429 has 182 MA's), (Start: 19 @58462 has 1 MA's), (30, 58642), (Start: 33 @58663 has 2 MA's), (34, 58669), (35, 58684), (36, 58693), (51, 58771), (55, 58795), (61, 58858), (70, 58939), (71, 58945), (76, 59005), (80, 59041), (82, 59059), (84, 59077), (90, 59098), (100, 59191), (101, 59197), (112, 59269), (117, 59314), (118, 59317),

Gene: Shifa\_103 Start: 56900, Stop: 57805, Start Num: 13

Candidate Starts for Shifa\_103:

(Start: 13 @56900 has 182 MA's), (Start: 19 @56933 has 1 MA's), (30, 57113), (Start: 33 @57134 has 2 MA's), (34, 57140), (36, 57164), (51, 57242), (55, 57266), (61, 57329), (70, 57410), (71, 57416), (76, 57476), (80, 57512), (82, 57530), (84, 57548), (90, 57569), (100, 57662), (101, 57668), (117, 57785), (118, 57788),

Gene: Shnickers\_115 Start: 58393, Stop: 59298, Start Num: 13

Candidate Starts for Shnickers\_115:

(Start: 13 @58393 has 182 MA's), (Start: 19 @58426 has 1 MA's), (30, 58606), (Start: 33 @58627 has 2 MA's), (34, 58633), (35, 58648), (36, 58657), (51, 58735), (55, 58759), (61, 58822), (70, 58903), (71, 58909), (76, 58969), (80, 59005), (82, 59023), (84, 59041), (90, 59062), (100, 59155), (101, 59161), (112, 59233), (117, 59278), (118, 59281),

Gene: Shrimp\_115 Start: 59113, Stop: 60018, Start Num: 13

Candidate Starts for Shrimp\_115:

(Start: 13 @59113 has 182 MA's), (Start: 19 @59146 has 1 MA's), (30, 59326), (Start: 33 @59347 has 2 MA's), (34, 59353), (35, 59368), (36, 59377), (51, 59455), (55, 59479), (61, 59542), (70, 59623), (71, 59629), (76, 59689), (80, 59725), (82, 59743), (84, 59761), (90, 59782), (100, 59875), (101, 59881), (112, 59953), (117, 59998), (118, 60001),

Gene: SilverDipper\_116 Start: 57637, Stop: 58542, Start Num: 13

Candidate Starts for SilverDipper\_116:

(Start: 13 @57637 has 182 MA's), (Start: 19 @57670 has 1 MA's), (30, 57850), (Start: 33 @57871 has 2 MA's), (34, 57877), (35, 57892), (36, 57901), (51, 57979), (55, 58003), (61, 58066), (70, 58147), (71, 58153), (76, 58213), (80, 58249), (82, 58267), (84, 58285), (90, 58306), (100, 58399), (101, 58405), (112, 58477), (117, 58522), (118, 58525),

Gene: SmallFry\_115 Start: 57618, Stop: 58523, Start Num: 13

Candidate Starts for SmallFry\_115:

(Start: 13 @57618 has 182 MA's), (Start: 19 @57651 has 1 MA's), (30, 57831), (Start: 33 @57852 has 2 MA's), (34, 57858), (35, 57873), (36, 57882), (51, 57960), (55, 57984), (61, 58047), (70, 58128), (71, 58134), (76, 58194), (80, 58230), (82, 58248), (84, 58266), (90, 58287), (100, 58380), (101, 58386), (112, 58458), (117, 58503), (118, 58506),

Gene: Soos\_65 Start: 45059, Stop: 46174, Start Num: 3

Candidate Starts for Soos\_65:

(Start: 3 @45059 has 18 MA's), (14, 45161), (18, 45176), (24, 45263), (28, 45344), (40, 45449), (43, 45473), (45, 45482), (51, 45506), (60, 45581), (64, 45605), (81, 45770), (117, 46043), (120, 46052), (130, 46115),

Gene: Spec\_110 Start: 58158, Stop: 59063, Start Num: 13

Candidate Starts for Spec\_110:

(Start: 13 @58158 has 182 MA's), (Start: 19 @58191 has 1 MA's), (30, 58371), (Start: 33 @58392 has 2 MA's), (34, 58398), (35, 58413), (36, 58422), (51, 58500), (55, 58524), (61, 58587), (70, 58668), (71, 58674), (76, 58734), (80, 58770), (82, 58788), (84, 58806), (90, 58827), (100, 58920), (101, 58926), (112, 58998), (117, 59043), (118, 59046),

Gene: Specks\_120 Start: 60293, Stop: 61198, Start Num: 13

Candidate Starts for Specks\_120:

(Start: 13 @60293 has 182 MA's), (Start: 19 @60326 has 1 MA's), (30, 60506), (Start: 33 @60527 has 2 MA's), (34, 60533), (35, 60548), (36, 60557), (51, 60635), (55, 60659), (61, 60722), (70, 60803), (71, 60809), (76, 60869), (80, 60905), (82, 60923), (84, 60941), (90, 60962), (100, 61055), (101, 61061), (117, 61178), (118, 61181),

Gene: Sprinklers\_111 Start: 57674, Stop: 58579, Start Num: 13

Candidate Starts for Sprinklers\_111:

(Start: 13 @57674 has 182 MA's), (Start: 19 @57707 has 1 MA's), (30, 57887), (Start: 33 @57908 has 2 MA's), (34, 57914), (36, 57938), (51, 58016), (55, 58040), (61, 58103), (70, 58184), (71, 58190), (76, 58250), (80, 58286), (82, 58304), (84, 58322), (90, 58343), (100, 58436), (101, 58442), (112, 58514), (117, 58559), (118, 58562),

Gene: Spud\_114 Start: 59189, Stop: 60094, Start Num: 13

Candidate Starts for Spud\_114:

(Start: 13 @59189 has 182 MA's), (Start: 19 @59222 has 1 MA's), (30, 59402), (Start: 33 @59423 has 2 MA's), (34, 59429), (35, 59444), (36, 59453), (51, 59531), (55, 59555), (61, 59618), (70, 59699), (71, 59705), (76, 59765), (80, 59801), (82, 59819), (84, 59837), (90, 59858), (100, 59951), (101, 59957), (112, 60029), (117, 60074), (118, 60077),

Gene: SrishMeg2525\_114 Start: 59211, Stop: 60116, Start Num: 13

Candidate Starts for SrishMeg2525\_114:

(Start: 13 @59211 has 182 MA's), (Start: 19 @59244 has 1 MA's), (30, 59424), (Start: 33 @59445 has 2 MA's), (34, 59451), (35, 59466), (36, 59475), (51, 59553), (55, 59577), (61, 59640), (70, 59721), (71, 59727), (76, 59787), (80, 59823), (82, 59841), (84, 59859), (90, 59880), (100, 59973), (101, 59979), (112, 60051), (117, 60096), (118, 60099),

Gene: StephanieG\_113 Start: 60020, Stop: 60925, Start Num: 13

Candidate Starts for StephanieG\_113:

(Start: 13 @60020 has 182 MA's), (Start: 19 @60053 has 1 MA's), (30, 60233), (Start: 33 @60254 has 2 MA's), (34, 60260), (35, 60275), (36, 60284), (51, 60362), (55, 60386), (61, 60449), (70, 60530), (71, 60536), (76, 60596), (80, 60632), (82, 60650), (84, 60668), (90, 60689), (100, 60782), (101, 60788), (112, 60860), (117, 60905), (118, 60908),

Gene: Sting\_68 Start: 45498, Stop: 46613, Start Num: 3

Candidate Starts for Sting\_68:

(Start: 3 @45498 has 18 MA's), (14, 45600), (18, 45615), (24, 45702), (28, 45783), (Start: 33 @45828 has 2 MA's), (40, 45888), (43, 45912), (45, 45921), (51, 45945), (60, 46020), (64, 46044), (81, 46209), (103, 46377), (117, 46482), (120, 46491), (130, 46554),

Gene: Stubby\_107 Start: 57216, Stop: 58121, Start Num: 13

Candidate Starts for Stubby\_107:

(Start: 13 @57216 has 182 MA's), (Start: 19 @57249 has 1 MA's), (30, 57429), (Start: 33 @57450 has 2 MA's), (34, 57456), (35, 57471), (36, 57480), (51, 57558), (55, 57582), (61, 57645), (70, 57726), (71, 57732), (76, 57792), (80, 57828), (82, 57846), (84, 57864), (90, 57885), (100, 57978), (101, 57984), (117, 58101), (118, 58104),

Gene: StubbySaigey\_118 Start: 57807, Stop: 58712, Start Num: 13

Candidate Starts for StubbySaigey\_118:

(Start: 13 @57807 has 182 MA's), (Start: 19 @57840 has 1 MA's), (30, 58020), (Start: 33 @58041 has 2 MA's), (34, 58047), (35, 58062), (36, 58071), (51, 58149), (55, 58173), (61, 58236), (70, 58317), (71, 58323), (76, 58383), (80, 58419), (82, 58437), (84, 58455), (90, 58476), (100, 58569), (101, 58575), (112, 58647), (117, 58692), (118, 58695),

Gene: Sunfish\_38 Start: 20443, Stop: 21225, Start Num: 33

Candidate Starts for Sunfish\_38:

(Start: 33 @20443 has 2 MA's), (36, 20473), (64, 20662), (66, 20668), (91, 20884), (115, 21082),

Gene: Tainan\_118 Start: 59615, Stop: 60520, Start Num: 13

Candidate Starts for Tainan\_118:

(Start: 13 @59615 has 182 MA's), (Start: 19 @59648 has 1 MA's), (30, 59828), (Start: 33 @59849 has 2 MA's), (34, 59855), (35, 59870), (36, 59879), (51, 59957), (55, 59981), (61, 60044), (70, 60125), (71, 60131), (76, 60191), (80, 60227), (82, 60245), (84, 60263), (90, 60284), (100, 60377), (101, 60383), (112, 60455), (117, 60500), (118, 60503),

Gene: Teardrop\_114 Start: 57617, Stop: 58522, Start Num: 13

Candidate Starts for Teardrop\_114:

(Start: 13 @57617 has 182 MA's), (Start: 19 @57650 has 1 MA's), (30, 57830), (Start: 33 @57851 has 2 MA's), (34, 57857), (35, 57872), (36, 57881), (51, 57959), (55, 57983), (61, 58046), (70, 58127), (71, 58133), (76, 58193), (80, 58229), (82, 58247), (84, 58265), (90, 58286), (100, 58379), (101, 58385), (117, 58502), (118, 58505),

Gene: TinyTim\_115 Start: 58869, Stop: 59774, Start Num: 13

Candidate Starts for TinyTim\_115:

(Start: 13 @58869 has 182 MA's), (Start: 19 @58902 has 1 MA's), (30, 59082), (Start: 33 @59103 has 2 MA's), (34, 59109), (35, 59124), (36, 59133), (51, 59211), (55, 59235), (61, 59298), (70, 59379), (71, 59385), (76, 59445), (80, 59481), (82, 59499), (84, 59517), (90, 59538), (100, 59631), (101, 59637), (112, 59709), (117, 59754), (118, 59757),

Gene: Tonenili\_129 Start: 62333, Stop: 63238, Start Num: 13

Candidate Starts for Tonenili\_129:

(Start: 13 @62333 has 182 MA's), (Start: 19 @62366 has 1 MA's), (30, 62546), (Start: 33 @62567 has 2 MA's), (34, 62573), (35, 62588), (36, 62597), (51, 62675), (54, 62693), (55, 62699), (57, 62705), (63, 62777), (64, 62780), (70, 62843), (71, 62849), (76, 62909), (80, 62945), (82, 62963), (84, 62981), (86, 62987), (90, 63002), (92, 63020), (100, 63095), (101, 63101), (112, 63173), (117, 63218), (118, 63221),

Gene: Tonitrus\_56 Start: 42209, Stop: 43330, Start Num: 3

Candidate Starts for Tonitrus\_56:

(Start: 3 @42209 has 18 MA's), (9, 42272), (14, 42311), (23, 42404), (34, 42545), (42, 42614), (43, 42623), (50, 42650), (54, 42674), (60, 42731), (64, 42755), (65, 42758), (66, 42761), (75, 42872), (92, 43007), (104, 43115), (110, 43139), (117, 43199), (123, 43232),

Gene: Tortoise16\_112 Start: 58218, Stop: 59123, Start Num: 13

Candidate Starts for Tortoise16\_112:

(Start: 13 @58218 has 182 MA's), (Start: 19 @58251 has 1 MA's), (30, 58431), (Start: 33 @58452 has 2 MA's), (34, 58458), (35, 58473), (36, 58482), (51, 58560), (55, 58584), (61, 58647), (70, 58728), (71, 58734), (76, 58794), (80, 58830), (82, 58848), (84, 58866), (90, 58887), (100, 58980), (101, 58986), (112, 59058), (117, 59103), (118, 59106),

Gene: Trina\_205 Start: 110686, Stop: 109574, Start Num: 3

Candidate Starts for Trina\_205:

(Start: 3 @110686 has 18 MA's), (35, 110335), (96, 109849), (114, 109726), (128, 109645),

Gene: Trinitium\_112 Start: 57573, Stop: 58478, Start Num: 13

Candidate Starts for Trinitium\_112:

(Start: 13 @57573 has 182 MA's), (Start: 19 @57606 has 1 MA's), (30, 57786), (Start: 33 @57807 has 2 MA's), (34, 57813), (35, 57828), (36, 57837), (51, 57915), (55, 57939), (61, 58002), (70, 58083), (71, 58089), (76, 58149), (80, 58185), (82, 58203), (84, 58221), (90, 58242), (100, 58335), (101, 58341), (112, 58413), (117, 58458), (118, 58461),

Gene: Turret\_110 Start: 57018, Stop: 57923, Start Num: 13

Candidate Starts for Turret\_110:

(Start: 13 @57018 has 182 MA's), (Start: 19 @57051 has 1 MA's), (30, 57231), (Start: 33 @57252 has 2 MA's), (34, 57258), (35, 57273), (36, 57282), (51, 57360), (55, 57384), (61, 57447), (70, 57528), (71, 57534), (76, 57594), (80, 57630), (82, 57648), (84, 57666), (90, 57687), (100, 57780), (101, 57786), (112, 57858), (117, 57903), (118, 57906),

Gene: Twin\_116 Start: 84309, Stop: 85430, Start Num: 3

Candidate Starts for Twin\_116:

(Start: 3 @84309 has 18 MA's), (11, 84390), (14, 84414), (Start: 33 @84642 has 2 MA's), (34, 84648), (40, 84702), (47, 84735), (56, 84777), (60, 84825), (72, 84918), (76, 84975), (93, 85110), (96, 85137), (104, 85194), (105, 85197), (106, 85200), (117, 85287), (119, 85293), (123, 85332), (127, 85350), (131, 85374),

Gene: Twin\_37 Start: 27700, Stop: 28608, Start Num: 13

Candidate Starts for Twin\_37:

(Start: 13 @27700 has 182 MA's), (16, 27715), (30, 27916), (Start: 33 @27937 has 2 MA's), (52, 28051), (71, 28216), (88, 28363), (101, 28471), (103, 28477), (107, 28513), (111, 28534), (114, 28564),

Gene: Tyke\_115 Start: 59524, Stop: 60429, Start Num: 13

Candidate Starts for Tyke\_115:

(Start: 13 @59524 has 182 MA's), (Start: 19 @59557 has 1 MA's), (30, 59737), (Start: 33 @59758 has 2 MA's), (34, 59764), (35, 59779), (36, 59788), (51, 59866), (55, 59890), (61, 59953), (70, 60034), (71, 60040), (76, 60100), (80, 60136), (82, 60154), (84, 60172), (90, 60193), (100, 60286), (101, 60292), (112, 60364), (117, 60409), (118, 60412),

Gene: UBSmoodge\_40 Start: 30318, Stop: 31226, Start Num: 13

Candidate Starts for UBSmoodge\_40:

(Start: 13 @30318 has 182 MA's), (16, 30333), (28, 30510), (30, 30534), (44, 30642), (48, 30651), (57, 30693), (60, 30741), (63, 30762), (68, 30810), (71, 30834), (77, 30921), (79, 30930), (92, 31008), (100, 31083), (101, 31089), (103, 31095), (107, 31131), (111, 31152), (112, 31161), (114, 31182), (117, 31206),

Gene: UBSmoodge\_123 Start: 87367, Stop: 88497, Start Num: 3

Candidate Starts for UBSmoodge\_123:

(Start: 3 @87367 has 18 MA's), (8, 87415), (20, 87517), (23, 87565), (25, 87616), (34, 87706), (40, 87760), (60, 87892), (72, 87985), (76, 88042), (88, 88135), (93, 88177), (104, 88261), (105, 88264), (106, 88267), (112, 88309), (116, 88351), (123, 88399), (127, 88417), (131, 88441),

Gene: ValleyTerrace\_115 Start: 57637, Stop: 58542, Start Num: 13

Candidate Starts for ValleyTerrace\_115:

(Start: 13 @57637 has 182 MA's), (Start: 19 @57670 has 1 MA's), (30, 57850), (Start: 33 @57871 has 2 MA's), (34, 57877), (35, 57892), (36, 57901), (51, 57979), (55, 58003), (61, 58066), (70, 58147), (71, 58153), (76, 58213), (80, 58249), (82, 58267), (84, 58285), (90, 58306), (100, 58399), (101, 58405), (112, 58477), (117, 58522), (118, 58525),

Gene: Wally\_114 Start: 57647, Stop: 58552, Start Num: 13

Candidate Starts for Wally\_114:

(Start: 13 @57647 has 182 MA's), (Start: 19 @57680 has 1 MA's), (30, 57860), (Start: 33 @57881 has 2 MA's), (34, 57887), (35, 57902), (36, 57911), (51, 57989), (55, 58013), (61, 58076), (70, 58157), (71, 58163), (76, 58223), (80, 58259), (82, 58277), (84, 58295), (90, 58316), (100, 58409), (101, 58415), (112, 58487), (117, 58532), (118, 58535),

Gene: Willis\_116 Start: 59004, Stop: 59909, Start Num: 13

Candidate Starts for Willis\_116:

(Start: 13 @59004 has 182 MA's), (Start: 19 @59037 has 1 MA's), (30, 59217), (Start: 33 @59238 has 2 MA's), (34, 59244), (35, 59259), (36, 59268), (51, 59346), (55, 59370), (61, 59433), (70, 59514), (71, 59520), (76, 59580), (80, 59616), (82, 59634), (84, 59652), (90, 59673), (100, 59766), (101, 59772), (112, 59844), (117, 59889), (118, 59892),

Gene: Yassified\_112 Start: 57724, Stop: 58629, Start Num: 13

Candidate Starts for Yassified\_112:

(Start: 13 @57724 has 182 MA's), (Start: 19 @57757 has 1 MA's), (30, 57937), (Start: 33 @57958 has 2 MA's), (34, 57964), (36, 57988), (51, 58066), (55, 58090), (61, 58153), (70, 58234), (71, 58240), (76, 58300), (80, 58336), (82, 58354), (84, 58372), (90, 58393), (100, 58486), (101, 58492), (117, 58609), (118, 58612),

Gene: YemiJoy2021\_116 Start: 59106, Stop: 60011, Start Num: 13

Candidate Starts for YemiJoy2021\_116:

(Start: 13 @59106 has 182 MA's), (Start: 19 @59139 has 1 MA's), (30, 59319), (Start: 33 @59340 has 2 MA's), (34, 59346), (35, 59361), (36, 59370), (51, 59448), (55, 59472), (61, 59535), (70, 59616), (71, 59622), (76, 59682), (80, 59718), (82, 59736), (84, 59754), (90, 59775), (100, 59868), (101, 59874), (112, 59946), (117, 59991), (118, 59994),

Gene: YoungMoneyMata\_116 Start: 58273, Stop: 59178, Start Num: 13

Candidate Starts for YoungMoneyMata\_116:

(Start: 13 @58273 has 182 MA's), (Start: 19 @58306 has 1 MA's), (30, 58486), (Start: 33 @58507 has 2 MA's), (34, 58513), (35, 58528), (36, 58537), (51, 58615), (55, 58639), (61, 58702), (70, 58783), (71, 58789), (76, 58849), (80, 58885), (82, 58903), (84, 58921), (90, 58942), (100, 59035), (101, 59041), (112, 59113), (117, 59158), (118, 59161),

Gene: Yucca\_114 Start: 58788, Stop: 59693, Start Num: 13

Candidate Starts for Yucca\_114:

(Start: 13 @58788 has 182 MA's), (Start: 19 @58821 has 1 MA's), (30, 59001), (Start: 33 @59022 has 2 MA's), (34, 59028), (35, 59043), (36, 59052), (51, 59130), (55, 59154), (61, 59217), (70, 59298), (71, 59304), (76, 59364), (80, 59400), (82, 59418), (84, 59436), (90, 59457), (100, 59550), (101, 59556), (112, 59628), (117, 59673), (118, 59676),

Gene: Yvonnetastic\_56 Start: 39416, Stop: 40522, Start Num: 3

Candidate Starts for Yvonnetastic\_56:

(Start: 3 @39416 has 18 MA's), (5, 39425), (10, 39485), (14, 39518), (27, 39698), (Start: 33 @39746 has 2 MA's), (54, 39881), (60, 39938), (64, 39962), (69, 40010), (73, 40043), (74, 40076), (103, 40286), (105, 40307), (108, 40325),

Gene: Zalkecks\_116 Start: 58789, Stop: 59694, Start Num: 13

Candidate Starts for Zalkecks\_116:

(Start: 13 @58789 has 182 MA's), (Start: 19 @58822 has 1 MA's), (30, 59002), (Start: 33 @59023 has 2 MA's), (34, 59029), (35, 59044), (36, 59053), (51, 59131), (55, 59155), (61, 59218), (70, 59299), (71, 59305), (76, 59365), (80, 59401), (82, 59419), (84, 59437), (90, 59458), (100, 59551), (101, 59557), (112, 59629), (117, 59674), (118, 59677),

Gene: Zeenon\_116 Start: 58907, Stop: 59779, Start Num: 19

Candidate Starts for Zeenon\_116:

(Start: 13 @58874 has 182 MA's), (Start: 19 @58907 has 1 MA's), (30, 59087), (Start: 33 @59108 has 2 MA's), (34, 59114), (35, 59129), (36, 59138), (51, 59216), (55, 59240), (61, 59303), (70, 59384), (71, 59390), (76, 59450), (80, 59486), (82, 59504), (84, 59522), (90, 59543), (100, 59636), (101, 59642), (112, 59714), (117, 59759), (118, 59762),

Gene: ZygoTaiga\_113 Start: 60034, Stop: 60939, Start Num: 13

Candidate Starts for ZygoTaiga\_113:

(Start: 13 @60034 has 182 MA's), (Start: 19 @60067 has 1 MA's), (30, 60247), (Start: 33 @60268 has 2 MA's), (34, 60274), (35, 60289), (36, 60298), (51, 60376), (55, 60400), (61, 60463), (70, 60544), (71, 60550), (76, 60610), (80, 60646), (82, 60664), (84, 60682), (90, 60703), (100, 60796), (101, 60802), (112, 60874), (117, 60919), (118, 60922),