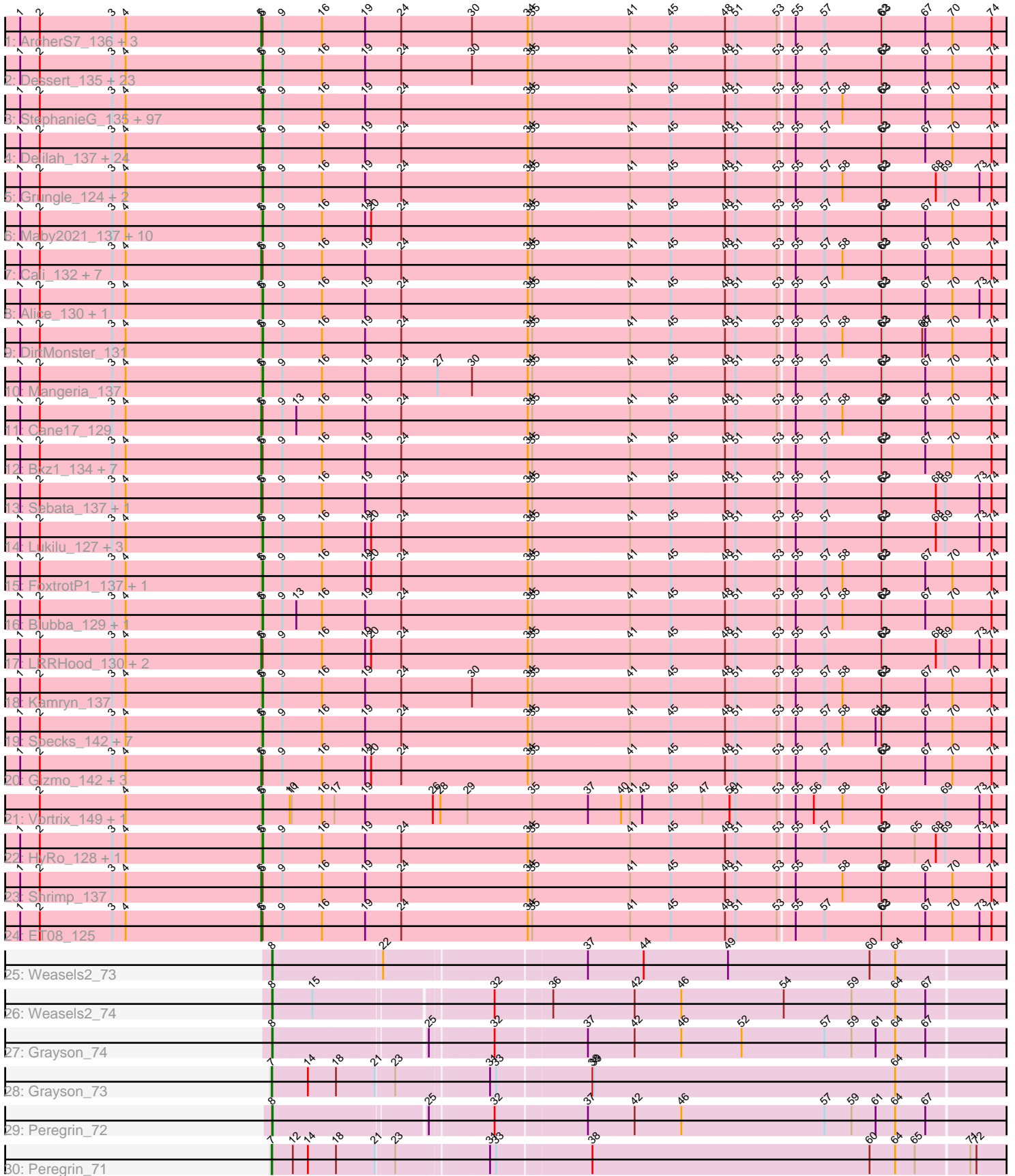


# Pham 311220



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 311220 Report

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

Pham number 311220 has 224 members, 37 are drafts.

Phages represented in each track:

- Track 1 : ArcherS7\_136, Ghost\_136, MikeLiesIn\_138, Audrick\_140
- Track 2 : Dessert\_135, InigoMontoya\_140, Atlantean\_137, Fixie\_135, Tortoise16\_134, GlutenPhree\_139, ValleyTerrace\_138, Momo\_137, Chomp\_137, Stubby\_130, Amataga\_138, Pivoine\_137, Capablanca\_140, SilverDipper\_139, Babyland\_139, Khaleesi\_136, Ngannou\_134, Ading\_137, Janiyra\_140, JPickles\_134, Phlegm\_141, Latch\_138, Naija\_137, Gabriel\_137
- Track 3 : StephanieG\_135, Ava3\_138, LifeSavor\_135, Maturis\_135, StubbySaigey\_141, DrPhinkDaddy\_136, Halldule\_131, Iota\_132, Domi\_130, TinyTim\_137, LookingGlass\_137, Substance289\_135, NoodleTree\_144, EmmaElysia\_138, Essence\_134, Gamgam\_138, BigCity\_145, Jemmno\_137, Ablatia\_137, Pier\_141, Wally\_136, Shnickers\_137, Jaygup\_137, Montpel\_136, QBert\_131, Jezreel\_137, Spud\_136, Flabslab\_132, BackyardAgain\_134, DTDevon\_137, Ewok\_138, PurduePete\_137, Lunareta\_136, Jedediah\_140, Jessibeth14\_136, ParkTD\_138, EggyFarm\_145, Belieber\_133, Bonray\_138, CindyLou\_139, Duckfeet\_131, IkeLoa\_131, Adlitam\_138, Guwapp\_136, Grasshills\_144, JustHall\_135, JulietS\_131, ScottMcG\_133, Kboogie\_141, Rabinovish\_136, ChaylaJr\_133, Ronan\_131, Nidhogg\_139, Blackbrain\_133, BobaPhatt\_132, NuevoMundo\_142, Morizzled23\_138, SoilZilla\_133, Spec\_133, Shaqnato\_130, Loanshark\_136, BeanWater\_129, Shelob\_139, BadAgartude\_133, Naval22\_145, Basquiat\_134, ChickenPhender\_133, Bigswole\_140, Trinitium\_135, Sprinklers\_133, SmallFry\_137, Daffodil\_142, Fludd\_138, Rahel\_136, CharlieB\_134, Lethe\_135, I3\_142, Norm\_138, Tyke\_137, RoMag\_132, Phusco\_137, YoungMoneyMata\_139, Napoleon13\_133, ZygoTaiga\_135, Derek\_136, Chergie21\_134, Erdmann\_137, Melpomini\_131, ShiaLabeouf\_136, Quasimodo\_139, JayJay\_142, Izajani\_137, Salacia\_141, ErnieJ\_131, Phox\_134, Delylah\_140, Mikro\_134, SVoro\_135
- Track 4 : Delilah\_137, Pleione\_140, EmToTheThree\_139, Demodog\_144, Cactojaque\_133, Dandelion\_142, JigglyPuff\_145, McWolfish\_135, Dietrick\_129, Concombre\_143, Matsumoto\_135, Caravan\_131, LordLeafolot\_141, Pupusa\_143, Tainan\_140, Burrough\_137, Patter\_138, Breeniome\_136, PharkleMinkus\_141, DeejaClivia\_124, Darko\_137, Cleatunium\_130, Turret\_133, McGee\_139, FrayBell\_142
- Track 5 : Grungle\_124, Blackdragon\_133, Sauce\_137
- Track 6 : Maby2021\_137, Fongie\_135, SrishMeg2525\_136, Lee7\_135, OrediggerDelux\_135, Megamind\_136, YemiJoy2021\_138, Zalkecks\_138, NedWong\_138, Yucca\_136, Asterius\_140

- Track 7 : Cali\_132, Bangla1971\_138, Roots515\_136, Bipolarisk\_136, Littleton\_137, LolaVinca\_137, Issimir\_135, Catera\_133
- Track 8 : Alice\_130, Yassified\_134
- Track 9 : DirtMonster\_131
- Track 10 : Mangeria\_137
- Track 11 : Cane17\_129
- Track 12 : Bxz1\_134, EasyJones\_140, Nappy\_139, Drazdys\_135, Pio\_141, Willis\_138, Rizal\_132, MoMoMixon\_137
- Track 13 : Sebata\_137, LinStu\_135
- Track 14 : Lukilu\_127, Moiqah\_129, Bezza\_126, Moby\_130
- Track 15 : FoxtrotP1\_137, Rocha\_135
- Track 16 : Blubba\_129, Colt\_129
- Track 17 : LRRHood\_130, Koguma\_134, Pinkcreek\_128
- Track 18 : Kamryn\_137
- Track 19 : Specks\_142, Bowman\_134, Primadonna\_131, Astraea\_133, Labradorite\_136, Teardrop\_136, InterFolia\_143, BananaFence\_136
- Track 20 : Gizmo\_142, Bread\_136, Zeenon\_138, FudgeTart\_135
- Track 21 : Vortrix\_149, Tonenili\_150
- Track 22 : HyRo\_128, Shifa\_126
- Track 23 : Shrimp\_137
- Track 24 : ET08\_125
- Track 25 : Weasels2\_73
- Track 26 : Weasels2\_74
- Track 27 : Grayson\_74
- Track 28 : Grayson\_73
- Track 29 : Peregrin\_72
- Track 30 : Peregrin\_71

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

The start number called the most often in the published annotations is 6, it was called in 149 of the 187 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ablatia\_137, Ading\_137, Adlitam\_138, Alice\_130, Amataga\_138, Asterius\_140, Astraea\_133, Atlantean\_137, Ava3\_138, Babyland\_139, BackyardAgain\_134, BadAgartude\_133, BananaFence\_136, Basquiat\_134, BeanWater\_129, Belieber\_133, Bezza\_126, BigCity\_145, Bigswole\_140, Blackbrain\_133, Blackdragon\_133, Blubba\_129, BobaPhatt\_132, Bonray\_138, Bowman\_134, Breeniome\_136, Burrough\_137, Cactojaque\_133, Capablanca\_140, Caravan\_131, Chargie21\_134, CharlieB\_134, ChaylaJr\_133, ChickenPhender\_133, Chomp\_137, CindyLou\_139, Cleatunium\_130, Colt\_129, Concombre\_143, DTDevon\_137, Daffodil\_142, Dandelion\_142, Darko\_137, DeejaClivia\_124, Delilah\_137, Delylah\_140, Demodog\_144, Derek\_136, Dessert\_135, Dietrick\_129, DirtMonster\_131, Domi\_130, DrPhinkDaddy\_136, Duckfeet\_131, EggyFarm\_145, EmToTheThree\_139, EmmaElysia\_138, Erdmann\_137, ErnieJ\_131, Essence\_134, Ewok\_138, Fixie\_135, Flabslab\_132, Fludd\_138, Fongie\_135, FoxtrotP1\_137, FrayBell\_142, Gabriel\_137, Gamgam\_138, GlutenPhree\_139, Grasshills\_144, Grungle\_124, Guwapp\_136, Halldule\_131, HyRo\_128, I3\_142, IkeLoa\_131, InigoMontoya\_140, InterFolia\_143, Iota\_132, Izajani\_137, JPickles\_134, Janiyra\_140,

JayJay\_142, Jaygup\_137, Jedediah\_140, Jemmno\_137, Jessibeth14\_136, Jezreel\_137, JigglyPuff\_145, JulietS\_131, JustHall\_135, Kamryn\_137, Kboogie\_141, Khaleesi\_136, Labradorite\_136, Latch\_138, Lee7\_135, Lethe\_135, LifeSavor\_135, Loanshark\_136, LookingGlass\_137, LordLeafolot\_141, Lukilu\_127, Lunareta\_136, Maby2021\_137, Mangeria\_137, Matsumoto\_135, Maturis\_135, McGee\_139, McWolfish\_135, Megamind\_136, Melpomini\_131, Mikro\_134, Moby\_130, Moiqah\_129, Momo\_137, Montpel\_136, Morizzled23\_138, Naija\_137, Napoleon13\_133, Naval22\_145, NedWong\_138, Ngannou\_134, Nidhogg\_139, NoodleTree\_144, Norm\_138, NuevoMundo\_142, OrediggerDelux\_135, ParkTD\_138, Patter\_138, PharkleMinkus\_141, Phlegm\_141, Phox\_134, Phusco\_137, Pier\_141, Pivoine\_137, Pleione\_140, Primadonna\_131, Pupusa\_143, PurduePete\_137, QBert\_131, Quasimodo\_139, Rabinovish\_136, Rahel\_136, RoMag\_132, Rocha\_135, Ronan\_131, SVoro\_135, Salacia\_141, Sauce\_137, ScottMcG\_133, Shaq nato\_130, Shelob\_139, ShiaLabeouf\_136, Shifa\_126, Shnickers\_137, SilverDipper\_139, SmallFry\_137, SoilZilla\_133, Spec\_133, Specks\_142, Sprinklers\_133, Spud\_136, SrishMeg2525\_136, StephanieG\_135, StubbySaigey\_141, Stubby\_130, Substance289\_135, Tainan\_140, Teardrop\_136, TinyTim\_137, Tonenili\_150, Tortoise16\_134, Trinitium\_135, Turret\_133, Tyke\_137, ValleyTerrace\_138, Vortrix\_149, Wally\_136, Yassified\_134, YemiJoy2021\_138, YoungMoneyMata\_139, Yucca\_136, Zalkecks\_138, ZygoTaiga\_135,

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

- ArcherS7\_136, Audrick\_140, Bangla1971\_138, Bipolarisk\_136, Bread\_136, Bxz1\_134, Cali\_132, Cane17\_129, Catera\_133, Drazdys\_135, ET08\_125, EasyJones\_140, FudgeTart\_135, Ghost\_136, Gizmo\_142, Issimir\_135, Koguma\_134, LRRHood\_130, LinStu\_135, Littleton\_137, LolaVinca\_137, MikeLiesIn\_138, MoMoMixon\_137, Nappy\_139, Pinkcreek\_128, Pio\_141, Rizal\_132, Roots515\_136, Sebata\_137, Shrimp\_137, Willis\_138, Zeenon\_138,

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

- Grayson\_73, Grayson\_74, Peregrin\_71, Peregrin\_72, Weasels2\_73, Weasels2\_74,

### Summary by start number:

Start 5:

- Found in 218 of 224 ( 97.3% ) of genes in pham
- Manual Annotations of this start: 32 of 187
- Called 14.7% of time when present
- Phage (with cluster) where this start called: ArcherS7\_136 (C1), Audrick\_140 (C1), Bangla1971\_138 (C1), Bipolarisk\_136 (C1), Bread\_136 (C1), Bxz1\_134 (C1), Cali\_132 (C1), Cane17\_129 (C1), Catera\_133 (C1), Drazdys\_135 (C1), ET08\_125 (C1), EasyJones\_140 (C1), FudgeTart\_135 (C1), Ghost\_136 (C1), Gizmo\_142 (C1), Issimir\_135 (C1), Koguma\_134 (C1), LRRHood\_130 (C1), LinStu\_135 (C1), Littleton\_137 (C1), LolaVinca\_137 (C1), MikeLiesIn\_138 (C1), MoMoMixon\_137 (C1), Nappy\_139 (C1), Pinkcreek\_128 (C1), Pio\_141 (C1), Rizal\_132 (C1), Roots515\_136 (C1), Sebata\_137 (C1), Shrimp\_137 (C1), Willis\_138 (C1), Zeenon\_138 (C1),

Start 6:

- Found in 218 of 224 ( 97.3% ) of genes in pham
- Manual Annotations of this start: 149 of 187
- Called 85.3% of time when present
- Phage (with cluster) where this start called: Ablatia\_137 (C1), Ading\_137 (C1), Adlitam\_138 (C1), Alice\_130 (C1), Amataga\_138 (C1), Asterius\_140 (C1),

Astraea\_133 (C1), Atlantean\_137 (C1), Ava3\_138 (C1), Babyland\_139 (C1),  
 BackyardAgain\_134 (C1), BadAgartude\_133 (C1), BananaFence\_136 (C1),  
 Basquiat\_134 (C1), BeanWater\_129 (C1), Belieber\_133 (C1), Bezza\_126 (C1),  
 BigCity\_145 (C1), Bigswole\_140 (C1), Blackbrain\_133 (C1), Blackdragon\_133 (C1),  
 Blubba\_129 (C1), BobaPhatt\_132 (C1), Bonray\_138 (C1), Bowman\_134 (C1),  
 Breeniome\_136 (C1), Burrough\_137 (C1), Cactojaque\_133 (C1), Capablanca\_140  
 (C1), Caravan\_131 (C1), Chargie21\_134 (C1), CharlieB\_134 (C1), ChaylaJr\_133  
 (C1), ChickenPhender\_133 (C1), Chomp\_137 (C1), CindyLou\_139 (C1),  
 Cleatunium\_130 (C1), Colt\_129 (C1), Concombre\_143 (C1), DTDevon\_137 (C1),  
 Daffodil\_142 (C1), Dandelion\_142 (C1), Darko\_137 (C1), DeejaClivia\_124 (C1),  
 Delilah\_137 (C1), Delylah\_140 (C1), Demodog\_144 (C1), Derek\_136 (C1),  
 Dessert\_135 (C1), Dietrick\_129 (C1), DirtMonster\_131 (C1), Domi\_130 (C1),  
 DrPhinkDaddy\_136 (C1), Duckfeet\_131 (C1), EggyFarm\_145 (C1),  
 EmToTheThree\_139 (C1), EmmaElysia\_138 (C1), Erdmann\_137 (C1), ErnieJ\_131  
 (C1), Essence\_134 (C1), Ewok\_138 (C1), Fixie\_135 (C1), Flabslab\_132 (C1),  
 Fludd\_138 (C1), Fongie\_135 (C1), FoxtrotP1\_137 (C1), FrayBell\_142 (C1),  
 Gabriel\_137 (C1), Gamgam\_138 (C1), GlutenPhree\_139 (C1), Grasshills\_144 (C1),  
 Grungle\_124 (C1), Guwapp\_136 (C1), Halldule\_131 (C1), HyRo\_128 (C1), I3\_142  
 (C1), IkeLoa\_131 (C1), InigoMontoya\_140 (C1), InterFolia\_143 (C1), Iota\_132 (C1),  
 Izajani\_137 (C1), JPickles\_134 (C1), Janiyr\_140 (C1), JayJay\_142 (C1),  
 Jaygup\_137 (C1), Jedediah\_140 (C1), Jemmno\_137 (C1), Jessibeth14\_136 (C1),  
 Jezreel\_137 (C1), JigglyPuff\_145 (C1), JulietS\_131 (C1), JustHall\_135 (C1),  
 Kamryn\_137 (C1), Kboogie\_141 (C1), Khaleesi\_136 (C1), Labradorite\_136 (C1),  
 Latch\_138 (C1), Lee7\_135 (C1), Lethe\_135 (C1), LifeSavor\_135 (C1),  
 Loanshark\_136 (C1), LookingGlass\_137 (C1), LordLeafolot\_141 (C1), Lukilu\_127  
 (C1), Lunareta\_136 (C1), Maby2021\_137 (C1), Mangeria\_137 (C1), Matsumoto\_135  
 (C1), Maturis\_135 (C1), McGee\_139 (C1), McWolfish\_135 (C1), Megamind\_136 (C1),  
 Melpomini\_131 (C1), Mikro\_134 (C1), Moby\_130 (C1), Moiqah\_129 (C1), Momo\_137  
 (C1), Montpel\_136 (C1), Morizzled23\_138 (C1), Naija\_137 (C1), Napoleon13\_133  
 (C1), Naval22\_145 (C1), NedWong\_138 (C1), Ngannou\_134 (C1), Nidhogg\_139  
 (C1), NoodleTree\_144 (C1), Norm\_138 (C1), NuevoMundo\_142 (C1),  
 OrediggerDelux\_135 (C1), ParkTD\_138 (C1), Patter\_138 (C1), PharkleMinkus\_141  
 (C1), Phlegm\_141 (C1), Phox\_134 (C1), Phusco\_137 (C1), Pier\_141 (C1),  
 Pivoine\_137 (C1), Pleione\_140 (C1), Primadonna\_131 (C1), Pupusa\_143 (C1),  
 PurduePete\_137 (C1), QBert\_131 (C1), Quasimodo\_139 (C1), Rabinovish\_136 (C1),  
 Rahel\_136 (C1), RoMag\_132 (C1), Rocha\_135 (C1), Ronan\_131 (C1), SVoro\_135  
 (C1), Salacia\_141 (C1), Sauce\_137 (C1), ScottMcG\_133 (C1), Shaqato\_130 (C1),  
 Shelob\_139 (C1), ShiaLabeouf\_136 (C1), Shifa\_126 (C1), Shnickers\_137 (C1),  
 SilverDipper\_139 (C1), SmallFry\_137 (C1), SoilZilla\_133 (C1), Spec\_133 (C1),  
 Specks\_142 (C1), Sprinklers\_133 (C1), Spud\_136 (C1), SrishMeg2525\_136 (C1),  
 StephanieG\_135 (C1), StubbySaigey\_141 (C1), Stubby\_130 (C1),  
 Substance289\_135 (C1), Tainan\_140 (C1), Teardrop\_136 (C1), TinyTim\_137 (C1),  
 Tonenili\_150 (C1), Tortoise16\_134 (C1), Trinitium\_135 (C1), Turret\_133 (C1),  
 Tyke\_137 (C1), ValleyTerrace\_138 (C1), Vortrix\_149 (C1), Wally\_136 (C1),  
 Yassified\_134 (C1), YemiJoy2021\_138 (C1), YoungMoneyMata\_139 (C1),  
 Yucca\_136 (C1), Zalkecks\_138 (C1), ZygoTaiga\_135 (C1),

Start 7:

- Found in 2 of 224 ( 0.9% ) of genes in pham
- Manual Annotations of this start: 2 of 187
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Grayson\_73 (CB), Peregrin\_71 (CB),

#### Start 8:

- Found in 4 of 224 ( 1.8% ) of genes in pham
- Manual Annotations of this start: 4 of 187
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Grayson\_74 (CB), Peregrin\_72 (CB), Weasels2\_73 (CB), Weasels2\_74 (CB),

#### Summary by clusters:

There are 2 clusters represented in this pham: CB, C1,

#### Info for manual annotations of cluster C1:

- Start number 5 was manually annotated 32 times for cluster C1.
- Start number 6 was manually annotated 149 times for cluster C1.

#### Info for manual annotations of cluster CB:

- Start number 7 was manually annotated 2 times for cluster CB.
- Start number 8 was manually annotated 4 times for cluster CB.

#### Gene Information:

Gene: Ablatia\_137 Start: 78162, Stop: 79628, Start Num: 6

Candidate Starts for Ablatia\_137:

(1, 77679), (2, 77718), (3, 77862), (4, 77889), (Start: 5 @78159 has 32 MA's), (Start: 6 @78162 has 149 MA's), (9, 78201), (16, 78279), (19, 78363), (24, 78435), (34, 78687), (35, 78696), (41, 78888), (45, 78969), (48, 79074), (51, 79095), (53, 79176), (55, 79206), (57, 79263), (58, 79296), (62, 79374), (63, 79377), (67, 79461), (70, 79515), (74, 79593),

Gene: Ading\_137 Start: 78131, Stop: 79597, Start Num: 6

Candidate Starts for Ading\_137:

(1, 77648), (2, 77687), (3, 77831), (4, 77858), (Start: 5 @78128 has 32 MA's), (Start: 6 @78131 has 149 MA's), (9, 78170), (16, 78248), (19, 78332), (24, 78404), (30, 78545), (34, 78656), (35, 78665), (41, 78857), (45, 78938), (48, 79043), (51, 79064), (53, 79145), (55, 79175), (57, 79232), (62, 79343), (63, 79346), (67, 79430), (70, 79484), (74, 79562),

Gene: Adlitam\_138 Start: 78627, Stop: 80093, Start Num: 6

Candidate Starts for Adlitam\_138:

(1, 78144), (2, 78183), (3, 78327), (4, 78354), (Start: 5 @78624 has 32 MA's), (Start: 6 @78627 has 149 MA's), (9, 78666), (16, 78744), (19, 78828), (24, 78900), (34, 79152), (35, 79161), (41, 79353), (45, 79434), (48, 79539), (51, 79560), (53, 79641), (55, 79671), (57, 79728), (58, 79761), (62, 79839), (63, 79842), (67, 79926), (70, 79980), (74, 80058),

Gene: Alice\_130 Start: 77852, Stop: 79318, Start Num: 6

Candidate Starts for Alice\_130:

(1, 77369), (2, 77408), (3, 77552), (4, 77579), (Start: 5 @77849 has 32 MA's), (Start: 6 @77852 has 149 MA's), (9, 77891), (16, 77969), (19, 78053), (24, 78125), (34, 78377), (35, 78386), (41, 78578), (45, 78659), (48, 78764), (51, 78785), (53, 78866), (55, 78896), (57, 78953), (62, 79064), (63, 79067), (67, 79151), (70, 79205), (73, 79259), (74, 79283),

Gene: Amataga\_138 Start: 77872, Stop: 79338, Start Num: 6

Candidate Starts for Amataga\_138:

(1, 77389), (2, 77428), (3, 77572), (4, 77599), (Start: 5 @77869 has 32 MA's), (Start: 6 @77872 has 149 MA's), (9, 77911), (16, 77989), (19, 78073), (24, 78145), (30, 78286), (34, 78397), (35, 78406), (41, 78598), (45, 78679), (48, 78784), (51, 78805), (53, 78886), (55, 78916), (57, 78973), (62, 79084), (63, 79087), (67, 79171), (70, 79225), (74, 79303),

Gene: ArcherS7\_136 Start: 77708, Stop: 79177, Start Num: 5

Candidate Starts for ArcherS7\_136:

(1, 77228), (2, 77267), (3, 77411), (4, 77438), (Start: 5 @77708 has 32 MA's), (Start: 6 @77711 has 149 MA's), (9, 77750), (16, 77828), (19, 77912), (24, 77984), (30, 78125), (34, 78236), (35, 78245), (41, 78437), (45, 78518), (48, 78623), (51, 78644), (53, 78725), (55, 78755), (57, 78812), (62, 78923), (63, 78926), (67, 79010), (70, 79064), (74, 79142),

Gene: Asterius\_140 Start: 78387, Stop: 79853, Start Num: 6

Candidate Starts for Asterius\_140:

(1, 77904), (2, 77943), (3, 78087), (4, 78114), (Start: 5 @78384 has 32 MA's), (Start: 6 @78387 has 149 MA's), (9, 78426), (16, 78504), (19, 78588), (20, 78600), (24, 78660), (34, 78912), (35, 78921), (41, 79113), (45, 79194), (48, 79299), (51, 79320), (53, 79401), (55, 79431), (57, 79488), (62, 79599), (63, 79602), (67, 79686), (70, 79740), (74, 79818),

Gene: Astraea\_133 Start: 77152, Stop: 78618, Start Num: 6

Candidate Starts for Astraea\_133:

(1, 76669), (2, 76708), (3, 76852), (4, 76879), (Start: 5 @77149 has 32 MA's), (Start: 6 @77152 has 149 MA's), (9, 77191), (16, 77269), (19, 77353), (24, 77425), (34, 77677), (35, 77686), (41, 77878), (45, 77959), (48, 78064), (51, 78085), (53, 78166), (55, 78196), (57, 78253), (58, 78286), (61, 78352), (62, 78364), (63, 78367), (67, 78451), (70, 78505), (74, 78583),

Gene: Atlantean\_137 Start: 77872, Stop: 79338, Start Num: 6

Candidate Starts for Atlantean\_137:

(1, 77389), (2, 77428), (3, 77572), (4, 77599), (Start: 5 @77869 has 32 MA's), (Start: 6 @77872 has 149 MA's), (9, 77911), (16, 77989), (19, 78073), (24, 78145), (30, 78286), (34, 78397), (35, 78406), (41, 78598), (45, 78679), (48, 78784), (51, 78805), (53, 78886), (55, 78916), (57, 78973), (62, 79084), (63, 79087), (67, 79171), (70, 79225), (74, 79303),

Gene: Audrick\_140 Start: 77848, Stop: 79317, Start Num: 5

Candidate Starts for Audrick\_140:

(1, 77368), (2, 77407), (3, 77551), (4, 77578), (Start: 5 @77848 has 32 MA's), (Start: 6 @77851 has 149 MA's), (9, 77890), (16, 77968), (19, 78052), (24, 78124), (30, 78265), (34, 78376), (35, 78385), (41, 78577), (45, 78658), (48, 78763), (51, 78784), (53, 78865), (55, 78895), (57, 78952), (62, 79063), (63, 79066), (67, 79150), (70, 79204), (74, 79282),

Gene: Ava3\_138 Start: 78296, Stop: 79762, Start Num: 6

Candidate Starts for Ava3\_138:

(1, 77813), (2, 77852), (3, 77996), (4, 78023), (Start: 5 @78293 has 32 MA's), (Start: 6 @78296 has 149 MA's), (9, 78335), (16, 78413), (19, 78497), (24, 78569), (34, 78821), (35, 78830), (41, 79022), (45, 79103), (48, 79208), (51, 79229), (53, 79310), (55, 79340), (57, 79397), (58, 79430), (62, 79508), (63, 79511), (67, 79595), (70, 79649), (74, 79727),

Gene: Babyland\_139 Start: 77950, Stop: 79416, Start Num: 6

Candidate Starts for Babyland\_139:

(1, 77467), (2, 77506), (3, 77650), (4, 77677), (Start: 5 @77947 has 32 MA's), (Start: 6 @77950 has 149 MA's), (9, 77989), (16, 78067), (19, 78151), (24, 78223), (30, 78364), (34, 78475), (35, 78484), (41, 78676), (45, 78757), (48, 78862), (51, 78883), (53, 78964), (55, 78994), (57, 79051), (62, 79162), (63, 79165), (67, 79249), (70, 79303), (74, 79381),

Gene: BackyardAgain\_134 Start: 77299, Stop: 78765, Start Num: 6

Candidate Starts for BackyardAgain\_134:

(1, 76816), (2, 76855), (3, 76999), (4, 77026), (Start: 5 @77296 has 32 MA's), (Start: 6 @77299 has 149 MA's), (9, 77338), (16, 77416), (19, 77500), (24, 77572), (34, 77824), (35, 77833), (41, 78025), (45, 78106), (48, 78211), (51, 78232), (53, 78313), (55, 78343), (57, 78400), (58, 78433), (62, 78511), (63, 78514), (67, 78598), (70, 78652), (74, 78730),

Gene: BadAgartude\_133 Start: 78598, Stop: 80064, Start Num: 6

Candidate Starts for BadAgartude\_133:

(1, 78115), (2, 78154), (3, 78298), (4, 78325), (Start: 5 @78595 has 32 MA's), (Start: 6 @78598 has 149 MA's), (9, 78637), (16, 78715), (19, 78799), (24, 78871), (34, 79123), (35, 79132), (41, 79324), (45, 79405), (48, 79510), (51, 79531), (53, 79612), (55, 79642), (57, 79699), (58, 79732), (62, 79810), (63, 79813), (67, 79897), (70, 79951), (74, 80029),

Gene: BananaFence\_136 Start: 78552, Stop: 80018, Start Num: 6

Candidate Starts for BananaFence\_136:

(1, 78069), (2, 78108), (3, 78252), (4, 78279), (Start: 5 @78549 has 32 MA's), (Start: 6 @78552 has 149 MA's), (9, 78591), (16, 78669), (19, 78753), (24, 78825), (34, 79077), (35, 79086), (41, 79278), (45, 79359), (48, 79464), (51, 79485), (53, 79566), (55, 79596), (57, 79653), (58, 79686), (61, 79752), (62, 79764), (63, 79767), (67, 79851), (70, 79905), (74, 79983),

Gene: Bangla1971\_138 Start: 77838, Stop: 79307, Start Num: 5

Candidate Starts for Bangla1971\_138:

(1, 77358), (2, 77397), (3, 77541), (4, 77568), (Start: 5 @77838 has 32 MA's), (Start: 6 @77841 has 149 MA's), (9, 77880), (16, 77958), (19, 78042), (24, 78114), (34, 78366), (35, 78375), (41, 78567), (45, 78648), (48, 78753), (51, 78774), (53, 78855), (55, 78885), (57, 78942), (58, 78975), (62, 79053), (63, 79056), (67, 79140), (70, 79194), (74, 79272),

Gene: Basquiat\_134 Start: 77450, Stop: 78916, Start Num: 6

Candidate Starts for Basquiat\_134:

(1, 76967), (2, 77006), (3, 77150), (4, 77177), (Start: 5 @77447 has 32 MA's), (Start: 6 @77450 has 149 MA's), (9, 77489), (16, 77567), (19, 77651), (24, 77723), (34, 77975), (35, 77984), (41, 78176), (45, 78257), (48, 78362), (51, 78383), (53, 78464), (55, 78494), (57, 78551), (58, 78584), (62, 78662), (63, 78665), (67, 78749), (70, 78803), (74, 78881),

Gene: BeanWater\_129 Start: 78150, Stop: 79616, Start Num: 6

Candidate Starts for BeanWater\_129:

(1, 77667), (2, 77706), (3, 77850), (4, 77877), (Start: 5 @78147 has 32 MA's), (Start: 6 @78150 has 149 MA's), (9, 78189), (16, 78267), (19, 78351), (24, 78423), (34, 78675), (35, 78684), (41, 78876), (45, 78957), (48, 79062), (51, 79083), (53, 79164), (55, 79194), (57, 79251), (58, 79284), (62, 79362), (63, 79365), (67, 79449), (70, 79503), (74, 79581),

Gene: Belieber\_133 Start: 77625, Stop: 79091, Start Num: 6

Candidate Starts for Belieber\_133:

(1, 77142), (2, 77181), (3, 77325), (4, 77352), (Start: 5 @77622 has 32 MA's), (Start: 6 @77625 has 149 MA's), (9, 77664), (16, 77742), (19, 77826), (24, 77898), (34, 78150), (35, 78159), (41, 78351), (45, 78432), (48, 78537), (51, 78558), (53, 78639), (55, 78669), (57, 78726), (58, 78759), (62, 78837), (63, 78840), (67, 78924), (70, 78978), (74, 79056),

Gene: Bezza\_126 Start: 78208, Stop: 79674, Start Num: 6

Candidate Starts for Bezza\_126:

(1, 77725), (2, 77764), (3, 77908), (4, 77935), (Start: 5 @78205 has 32 MA's), (Start: 6 @78208 has 149 MA's), (9, 78247), (16, 78325), (19, 78409), (20, 78421), (24, 78481), (34, 78733), (35, 78742), (41, 78934), (45, 79015), (48, 79120), (51, 79141), (53, 79222), (55, 79252), (57, 79309), (62, 79420), (63, 79423), (68, 79528), (69, 79546), (73, 79615), (74, 79639),

Gene: BigCity\_145 Start: 80822, Stop: 82288, Start Num: 6

Candidate Starts for BigCity\_145:

(1, 80339), (2, 80378), (3, 80522), (4, 80549), (Start: 5 @80819 has 32 MA's), (Start: 6 @80822 has 149 MA's), (9, 80861), (16, 80939), (19, 81023), (24, 81095), (34, 81347), (35, 81356), (41, 81548), (45, 81629), (48, 81734), (51, 81755), (53, 81836), (55, 81866), (57, 81923), (58, 81956), (62, 82034), (63, 82037), (67, 82121), (70, 82175), (74, 82253),

Gene: Bigswole\_140 Start: 80107, Stop: 81573, Start Num: 6

Candidate Starts for Bigswole\_140:

(1, 79624), (2, 79663), (3, 79807), (4, 79834), (Start: 5 @80104 has 32 MA's), (Start: 6 @80107 has 149 MA's), (9, 80146), (16, 80224), (19, 80308), (24, 80380), (34, 80632), (35, 80641), (41, 80833), (45, 80914), (48, 81019), (51, 81040), (53, 81121), (55, 81151), (57, 81208), (58, 81241), (62, 81319), (63, 81322), (67, 81406), (70, 81460), (74, 81538),

Gene: Bipolarisk\_136 Start: 78561, Stop: 80030, Start Num: 5

Candidate Starts for Bipolarisk\_136:

(1, 78081), (2, 78120), (3, 78264), (4, 78291), (Start: 5 @78561 has 32 MA's), (Start: 6 @78564 has 149 MA's), (9, 78603), (16, 78681), (19, 78765), (24, 78837), (34, 79089), (35, 79098), (41, 79290), (45, 79371), (48, 79476), (51, 79497), (53, 79578), (55, 79608), (57, 79665), (58, 79698), (62, 79776), (63, 79779), (67, 79863), (70, 79917), (74, 79995),

Gene: Blackbrain\_133 Start: 77335, Stop: 78801, Start Num: 6

Candidate Starts for Blackbrain\_133:

(1, 76852), (2, 76891), (3, 77035), (4, 77062), (Start: 5 @77332 has 32 MA's), (Start: 6 @77335 has 149 MA's), (9, 77374), (16, 77452), (19, 77536), (24, 77608), (34, 77860), (35, 77869), (41, 78061), (45, 78142), (48, 78247), (51, 78268), (53, 78349), (55, 78379), (57, 78436), (58, 78469), (62, 78547), (63, 78550), (67, 78634), (70, 78688), (74, 78766),

Gene: Blackdragon\_133 Start: 77979, Stop: 79445, Start Num: 6

Candidate Starts for Blackdragon\_133:

(1, 77496), (2, 77535), (3, 77679), (4, 77706), (Start: 5 @77976 has 32 MA's), (Start: 6 @77979 has 149 MA's), (9, 78018), (16, 78096), (19, 78180), (24, 78252), (34, 78504), (35, 78513), (41, 78705), (45, 78786), (48, 78891), (51, 78912), (53, 78993), (55, 79023), (57, 79080), (58, 79113), (62, 79191), (63, 79194), (68, 79299), (69, 79317), (73, 79386), (74, 79410),

Gene: Blubba\_129 Start: 79697, Stop: 81163, Start Num: 6

Candidate Starts for Blubba\_129:

(1, 79214), (2, 79253), (3, 79397), (4, 79424), (Start: 5 @79694 has 32 MA's), (Start: 6 @79697 has 149 MA's), (9, 79736), (13, 79763), (16, 79814), (19, 79898), (24, 79970), (34, 80222), (35, 80231), (41, 80423), (45, 80504), (48, 80609), (51, 80630), (53, 80711), (55, 80741), (57, 80798), (58, 80831), (62, 80909), (63, 80912), (67, 80996), (70, 81050), (74, 81128),

Gene: BobaPhatt\_132 Start: 76914, Stop: 78380, Start Num: 6

Candidate Starts for BobaPhatt\_132:

(1, 76431), (2, 76470), (3, 76614), (4, 76641), (Start: 5 @76911 has 32 MA's), (Start: 6 @76914 has 149 MA's), (9, 76953), (16, 77031), (19, 77115), (24, 77187), (34, 77439), (35, 77448), (41, 77640), (45, 77721), (48, 77826), (51, 77847), (53, 77928), (55, 77958), (57, 78015), (58, 78048), (62, 78126), (63, 78129), (67, 78213), (70, 78267), (74, 78345),

Gene: Bonray\_138 Start: 79206, Stop: 80672, Start Num: 6

Candidate Starts for Bonray\_138:

(1, 78723), (2, 78762), (3, 78906), (4, 78933), (Start: 5 @79203 has 32 MA's), (Start: 6 @79206 has 149 MA's), (9, 79245), (16, 79323), (19, 79407), (24, 79479), (34, 79731), (35, 79740), (41, 79932), (45, 80013), (48, 80118), (51, 80139), (53, 80220), (55, 80250), (57, 80307), (58, 80340), (62, 80418), (63, 80421), (67, 80505), (70, 80559), (74, 80637),

Gene: Bowman\_134 Start: 78288, Stop: 79754, Start Num: 6

Candidate Starts for Bowman\_134:

(1, 77805), (2, 77844), (3, 77988), (4, 78015), (Start: 5 @78285 has 32 MA's), (Start: 6 @78288 has 149 MA's), (9, 78327), (16, 78405), (19, 78489), (24, 78561), (34, 78813), (35, 78822), (41, 79014), (45, 79095), (48, 79200), (51, 79221), (53, 79302), (55, 79332), (57, 79389), (58, 79422), (61, 79488), (62, 79500), (63, 79503), (67, 79587), (70, 79641), (74, 79719),

Gene: Bread\_136 Start: 78379, Stop: 79848, Start Num: 5

Candidate Starts for Bread\_136:

(1, 77899), (2, 77938), (3, 78082), (4, 78109), (Start: 5 @78379 has 32 MA's), (Start: 6 @78382 has 149 MA's), (9, 78421), (16, 78499), (19, 78583), (20, 78595), (24, 78655), (34, 78907), (35, 78916), (41, 79108), (45, 79189), (48, 79294), (51, 79315), (53, 79396), (55, 79426), (57, 79483), (62, 79594), (63, 79597), (67, 79681), (70, 79735), (74, 79813),

Gene: Breeniome\_136 Start: 76740, Stop: 78206, Start Num: 6

Candidate Starts for Breeniome\_136:

(1, 76257), (2, 76296), (3, 76440), (4, 76467), (Start: 5 @76737 has 32 MA's), (Start: 6 @76740 has 149 MA's), (9, 76779), (16, 76857), (19, 76941), (24, 77013), (34, 77265), (35, 77274), (41, 77466), (45, 77547), (48, 77652), (51, 77673), (53, 77754), (55, 77784), (57, 77841), (62, 77952), (63, 77955), (67, 78039), (70, 78093), (74, 78171),

Gene: Burrough\_137 Start: 78891, Stop: 80357, Start Num: 6

Candidate Starts for Burrough\_137:

(1, 78408), (2, 78447), (3, 78591), (4, 78618), (Start: 5 @78888 has 32 MA's), (Start: 6 @78891 has 149 MA's), (9, 78930), (16, 79008), (19, 79092), (24, 79164), (34, 79416), (35, 79425), (41, 79617), (45, 79698), (48, 79803), (51, 79824), (53, 79905), (55, 79935), (57, 79992), (62, 80103), (63, 80106), (67, 80190), (70, 80244), (74, 80322),

Gene: Bxz1\_134 Start: 80091, Stop: 81560, Start Num: 5

Candidate Starts for Bxz1\_134:

(1, 79611), (2, 79650), (3, 79794), (4, 79821), (Start: 5 @80091 has 32 MA's), (Start: 6 @80094 has 149 MA's), (9, 80133), (16, 80211), (19, 80295), (24, 80367), (34, 80619), (35, 80628), (41, 80820), (45, 80901), (48, 81006), (51, 81027), (53, 81108), (55, 81138), (57, 81195), (62, 81306), (63, 81309), (67, 81393), (70, 81447), (74, 81525),

Gene: Cactojaque\_133 Start: 77442, Stop: 78908, Start Num: 6

Candidate Starts for Cactojaque\_133:

(1, 76959), (2, 76998), (3, 77142), (4, 77169), (Start: 5 @77439 has 32 MA's), (Start: 6 @77442 has 149 MA's), (9, 77481), (16, 77559), (19, 77643), (24, 77715), (34, 77967), (35, 77976), (41, 78168), (45, 78249), (48, 78354), (51, 78375), (53, 78456), (55, 78486), (57, 78543), (62, 78654), (63, 78657), (67, 78741), (70, 78795), (74, 78873),

Gene: Cali\_132 Start: 78890, Stop: 80359, Start Num: 5

Candidate Starts for Cali\_132:

(1, 78410), (2, 78449), (3, 78593), (4, 78620), (Start: 5 @78890 has 32 MA's), (Start: 6 @78893 has 149 MA's), (9, 78932), (16, 79010), (19, 79094), (24, 79166), (34, 79418), (35, 79427), (41, 79619), (45, 79700), (48, 79805), (51, 79826), (53, 79907), (55, 79937), (57, 79994), (58, 80027), (62, 80105), (63, 80108), (67, 80192), (70, 80246), (74, 80324),

Gene: Cane17\_129 Start: 79752, Stop: 81221, Start Num: 5

Candidate Starts for Cane17\_129:

(1, 79272), (2, 79311), (3, 79455), (4, 79482), (Start: 5 @79752 has 32 MA's), (Start: 6 @79755 has 149 MA's), (9, 79794), (13, 79821), (16, 79872), (19, 79956), (24, 80028), (34, 80280), (35, 80289), (41, 80481), (45, 80562), (48, 80667), (51, 80688), (53, 80769), (55, 80799), (57, 80856), (58, 80889), (62, 80967), (63, 80970), (67, 81054), (70, 81108), (74, 81186),

Gene: Capablanca\_140 Start: 79622, Stop: 81088, Start Num: 6

Candidate Starts for Capablanca\_140:

(1, 79139), (2, 79178), (3, 79322), (4, 79349), (Start: 5 @79619 has 32 MA's), (Start: 6 @79622 has 149 MA's), (9, 79661), (16, 79739), (19, 79823), (24, 79895), (30, 80036), (34, 80147), (35, 80156), (41, 80348), (45, 80429), (48, 80534), (51, 80555), (53, 80636), (55, 80666), (57, 80723), (62, 80834), (63, 80837), (67, 80921), (70, 80975), (74, 81053),

Gene: Caravan\_131 Start: 78250, Stop: 79716, Start Num: 6

Candidate Starts for Caravan\_131:

(1, 77767), (2, 77806), (3, 77950), (4, 77977), (Start: 5 @78247 has 32 MA's), (Start: 6 @78250 has 149 MA's), (9, 78289), (16, 78367), (19, 78451), (24, 78523), (34, 78775), (35, 78784), (41, 78976), (45, 79057), (48, 79162), (51, 79183), (53, 79264), (55, 79294), (57, 79351), (62, 79462), (63, 79465), (67, 79549), (70, 79603), (74, 79681),

Gene: Catera\_133 Start: 77154, Stop: 78623, Start Num: 5

Candidate Starts for Catera\_133:

(1, 76674), (2, 76713), (3, 76857), (4, 76884), (Start: 5 @77154 has 32 MA's), (Start: 6 @77157 has 149 MA's), (9, 77196), (16, 77274), (19, 77358), (24, 77430), (34, 77682), (35, 77691), (41, 77883), (45, 77964), (48, 78069), (51, 78090), (53, 78171), (55, 78201), (57, 78258), (58, 78291), (62, 78369), (63, 78372), (67, 78456), (70, 78510), (74, 78588),

Gene: Chargie21\_134 Start: 77450, Stop: 78916, Start Num: 6

Candidate Starts for Chargie21\_134:

(1, 76967), (2, 77006), (3, 77150), (4, 77177), (Start: 5 @77447 has 32 MA's), (Start: 6 @77450 has 149 MA's), (9, 77489), (16, 77567), (19, 77651), (24, 77723), (34, 77975), (35, 77984), (41, 78176), (45, 78257), (48, 78362), (51, 78383), (53, 78464), (55, 78494), (57, 78551), (58, 78584), (62, 78662), (63, 78665), (67, 78749), (70, 78803), (74, 78881),

Gene: CharlieB\_134 Start: 77776, Stop: 79242, Start Num: 6

Candidate Starts for CharlieB\_134:

(1, 77293), (2, 77332), (3, 77476), (4, 77503), (Start: 5 @77773 has 32 MA's), (Start: 6 @77776 has 149 MA's), (9, 77815), (16, 77893), (19, 77977), (24, 78049), (34, 78301), (35, 78310), (41, 78502), (45, 78583), (48, 78688), (51, 78709), (53, 78790), (55, 78820), (57, 78877), (58, 78910), (62, 78988), (63, 78991), (67, 79075), (70, 79129), (74, 79207),

Gene: ChaylaJr\_133 Start: 77258, Stop: 78724, Start Num: 6

Candidate Starts for ChaylaJr\_133:

(1, 76775), (2, 76814), (3, 76958), (4, 76985), (Start: 5 @77255 has 32 MA's), (Start: 6 @77258 has 149 MA's), (9, 77297), (16, 77375), (19, 77459), (24, 77531), (34, 77783), (35, 77792), (41, 77984), (45, 78065), (48, 78170), (51, 78191), (53, 78272), (55, 78302), (57, 78359), (58, 78392), (62, 78470), (63, 78473), (67, 78557), (70, 78611), (74, 78689),

Gene: ChickenPhender\_133 Start: 77082, Stop: 78548, Start Num: 6

Candidate Starts for ChickenPhender\_133:

(1, 76599), (2, 76638), (3, 76782), (4, 76809), (Start: 5 @77079 has 32 MA's), (Start: 6 @77082 has 149 MA's), (9, 77121), (16, 77199), (19, 77283), (24, 77355), (34, 77607), (35, 77616), (41, 77808), (45, 77889), (48, 77994), (51, 78015), (53, 78096), (55, 78126), (57, 78183), (58, 78216), (62, 78294), (63, 78297), (67, 78381), (70, 78435), (74, 78513),

Gene: Chomp\_137 Start: 79161, Stop: 80627, Start Num: 6

Candidate Starts for Chomp\_137:

(1, 78678), (2, 78717), (3, 78861), (4, 78888), (Start: 5 @79158 has 32 MA's), (Start: 6 @79161 has 149 MA's), (9, 79200), (16, 79278), (19, 79362), (24, 79434), (30, 79575), (34, 79686), (35, 79695), (41, 79887), (45, 79968), (48, 80073), (51, 80094), (53, 80175), (55, 80205), (57, 80262), (62, 80373), (63, 80376), (67, 80460), (70, 80514), (74, 80592),

Gene: CindyLou\_139 Start: 79201, Stop: 80667, Start Num: 6

Candidate Starts for CindyLou\_139:

(1, 78718), (2, 78757), (3, 78901), (4, 78928), (Start: 5 @79198 has 32 MA's), (Start: 6 @79201 has 149 MA's), (9, 79240), (16, 79318), (19, 79402), (24, 79474), (34, 79726), (35, 79735), (41, 79927), (45, 80008), (48, 80113), (51, 80134), (53, 80215), (55, 80245), (57, 80302), (58, 80335), (62, 80413), (63, 80416), (67, 80500), (70, 80554), (74, 80632),

Gene: Cleatunium\_130 Start: 77369, Stop: 78835, Start Num: 6

Candidate Starts for Cleatunium\_130:

(1, 76886), (2, 76925), (3, 77069), (4, 77096), (Start: 5 @77366 has 32 MA's), (Start: 6 @77369 has 149 MA's), (9, 77408), (16, 77486), (19, 77570), (24, 77642), (34, 77894), (35, 77903), (41, 78095), (45, 78176), (48, 78281), (51, 78302), (53, 78383), (55, 78413), (57, 78470), (62, 78581), (63, 78584), (67, 78668), (70, 78722), (74, 78800),

Gene: Colt\_129 Start: 79872, Stop: 81338, Start Num: 6

Candidate Starts for Colt\_129:

(1, 79389), (2, 79428), (3, 79572), (4, 79599), (Start: 5 @79869 has 32 MA's), (Start: 6 @79872 has 149 MA's), (9, 79911), (13, 79938), (16, 79989), (19, 80073), (24, 80145), (34, 80397), (35, 80406), (41, 80598), (45, 80679), (48, 80784), (51, 80805), (53, 80886), (55, 80916), (57, 80973), (58, 81006), (62, 81084), (63, 81087), (67, 81171), (70, 81225), (74, 81303),

Gene: Concombres\_143 Start: 81055, Stop: 82521, Start Num: 6

Candidate Starts for Concombres\_143:

(1, 80572), (2, 80611), (3, 80755), (4, 80782), (Start: 5 @81052 has 32 MA's), (Start: 6 @81055 has 149 MA's), (9, 81094), (16, 81172), (19, 81256), (24, 81328), (34, 81580), (35, 81589), (41, 81781), (45, 81862), (48, 81967), (51, 81988), (53, 82069), (55, 82099), (57, 82156), (62, 82267), (63, 82270), (67, 82354), (70, 82408), (74, 82486),

Gene: DTDevon\_137 Start: 78923, Stop: 80389, Start Num: 6

Candidate Starts for DTDevon\_137:

(1, 78440), (2, 78479), (3, 78623), (4, 78650), (Start: 5 @78920 has 32 MA's), (Start: 6 @78923 has 149 MA's), (9, 78962), (16, 79040), (19, 79124), (24, 79196), (34, 79448), (35, 79457), (41, 79649), (45, 79730), (48, 79835), (51, 79856), (53, 79937), (55, 79967), (57, 80024), (58, 80057), (62, 80135), (63, 80138), (67, 80222), (70, 80276), (74, 80354),

Gene: Daffodil\_142 Start: 78864, Stop: 80330, Start Num: 6

Candidate Starts for Daffodil\_142:

(1, 78381), (2, 78420), (3, 78564), (4, 78591), (Start: 5 @78861 has 32 MA's), (Start: 6 @78864 has 149 MA's), (9, 78903), (16, 78981), (19, 79065), (24, 79137), (34, 79389), (35, 79398), (41, 79590), (45, 79671), (48, 79776), (51, 79797), (53, 79878), (55, 79908), (57, 79965), (58, 79998), (62, 80076), (63, 80079), (67, 80163), (70, 80217), (74, 80295),

Gene: Dandelion\_142 Start: 81056, Stop: 82522, Start Num: 6

Candidate Starts for Dandelion\_142:

(1, 80573), (2, 80612), (3, 80756), (4, 80783), (Start: 5 @81053 has 32 MA's), (Start: 6 @81056 has 149 MA's), (9, 81095), (16, 81173), (19, 81257), (24, 81329), (34, 81581), (35, 81590), (41, 81782), (45, 81863), (48, 81968), (51, 81989), (53, 82070), (55, 82100), (57, 82157), (62, 82268), (63, 82271), (67, 82355), (70, 82409), (74, 82487),

Gene: Darko\_137 Start: 78556, Stop: 80022, Start Num: 6

Candidate Starts for Darko\_137:

(1, 78073), (2, 78112), (3, 78256), (4, 78283), (Start: 5 @78553 has 32 MA's), (Start: 6 @78556 has 149 MA's), (9, 78595), (16, 78673), (19, 78757), (24, 78829), (34, 79081), (35, 79090), (41, 79282), (45, 79363), (48, 79468), (51, 79489), (53, 79570), (55, 79600), (57, 79657), (62, 79768), (63, 79771), (67, 79855), (70, 79909), (74, 79987),

Gene: DeejaClivia\_124 Start: 75222, Stop: 76688, Start Num: 6

Candidate Starts for DeejaClivia\_124:

(1, 74739), (2, 74778), (3, 74922), (4, 74949), (Start: 5 @75219 has 32 MA's), (Start: 6 @75222 has 149 MA's), (9, 75261), (16, 75339), (19, 75423), (24, 75495), (34, 75747), (35, 75756), (41, 75948), (45, 76029), (48, 76134), (51, 76155), (53, 76236), (55, 76266), (57, 76323), (62, 76434), (63, 76437), (67, 76521), (70, 76575), (74, 76653),

Gene: Delilah\_137 Start: 79018, Stop: 80484, Start Num: 6

Candidate Starts for Delilah\_137:

(1, 78535), (2, 78574), (3, 78718), (4, 78745), (Start: 5 @79015 has 32 MA's), (Start: 6 @79018 has 149 MA's), (9, 79057), (16, 79135), (19, 79219), (24, 79291), (34, 79543), (35, 79552), (41, 79744), (45, 79825), (48, 79930), (51, 79951), (53, 80032), (55, 80062), (57, 80119), (62, 80230), (63, 80233), (67, 80317), (70, 80371), (74, 80449),

Gene: Delylah\_140 Start: 78557, Stop: 80023, Start Num: 6

Candidate Starts for Delylah\_140:

(1, 78074), (2, 78113), (3, 78257), (4, 78284), (Start: 5 @78554 has 32 MA's), (Start: 6 @78557 has 149 MA's), (9, 78596), (16, 78674), (19, 78758), (24, 78830), (34, 79082), (35, 79091), (41, 79283), (45, 79364), (48, 79469), (51, 79490), (53, 79571), (55, 79601), (57, 79658), (58, 79691), (62, 79769), (63, 79772), (67, 79856), (70, 79910), (74, 79988),

Gene: Demodog\_144 Start: 81064, Stop: 82530, Start Num: 6

Candidate Starts for Demodog\_144:

(1, 80581), (2, 80620), (3, 80764), (4, 80791), (Start: 5 @81061 has 32 MA's), (Start: 6 @81064 has 149 MA's), (9, 81103), (16, 81181), (19, 81265), (24, 81337), (34, 81589), (35, 81598), (41, 81790), (45, 81871), (48, 81976), (51, 81997), (53, 82078), (55, 82108), (57, 82165), (62, 82276), (63, 82279), (67, 82363), (70, 82417), (74, 82495),

Gene: Derek\_136 Start: 78483, Stop: 79949, Start Num: 6

Candidate Starts for Derek\_136:

(1, 78000), (2, 78039), (3, 78183), (4, 78210), (Start: 5 @78480 has 32 MA's), (Start: 6 @78483 has 149 MA's), (9, 78522), (16, 78600), (19, 78684), (24, 78756), (34, 79008), (35, 79017), (41, 79209), (45, 79290), (48, 79395), (51, 79416), (53, 79497), (55, 79527), (57, 79584), (58, 79617), (62, 79695), (63, 79698), (67, 79782), (70, 79836), (74, 79914),

Gene: Dessert\_135 Start: 77438, Stop: 78904, Start Num: 6

Candidate Starts for Dessert\_135:

(1, 76955), (2, 76994), (3, 77138), (4, 77165), (Start: 5 @77435 has 32 MA's), (Start: 6 @77438 has 149 MA's), (9, 77477), (16, 77555), (19, 77639), (24, 77711), (30, 77852), (34, 77963), (35, 77972), (41, 78164), (45, 78245), (48, 78350), (51, 78371), (53, 78452), (55, 78482), (57, 78539), (62, 78650), (63, 78653), (67, 78737), (70, 78791), (74, 78869),

Gene: Dietrick\_129 Start: 76559, Stop: 78025, Start Num: 6

Candidate Starts for Dietrick\_129:

(1, 76076), (2, 76115), (3, 76259), (4, 76286), (Start: 5 @76556 has 32 MA's), (Start: 6 @76559 has 149 MA's), (9, 76598), (16, 76676), (19, 76760), (24, 76832), (34, 77084), (35, 77093), (41, 77285), (45, 77366), (48, 77471), (51, 77492), (53, 77573), (55, 77603), (57, 77660), (62, 77771), (63, 77774), (67, 77858), (70, 77912), (74, 77990),

Gene: DirtMonster\_131 Start: 77817, Stop: 79283, Start Num: 6

Candidate Starts for DirtMonster\_131:

(1, 77334), (2, 77373), (3, 77517), (4, 77544), (Start: 5 @77814 has 32 MA's), (Start: 6 @77817 has 149 MA's), (9, 77856), (16, 77934), (19, 78018), (24, 78090), (34, 78342), (35, 78351), (41, 78543), (45, 78624), (48, 78729), (51, 78750), (53, 78831), (55, 78861), (57, 78918), (58, 78951), (62, 79029), (63, 79032), (66, 79110), (67, 79116), (70, 79170), (74, 79248),

Gene: Domi\_130 Start: 77896, Stop: 79362, Start Num: 6

Candidate Starts for Domi\_130:

(1, 77413), (2, 77452), (3, 77596), (4, 77623), (Start: 5 @77893 has 32 MA's), (Start: 6 @77896 has 149 MA's), (9, 77935), (16, 78013), (19, 78097), (24, 78169), (34, 78421), (35, 78430), (41, 78622), (45, 78703), (48, 78808), (51, 78829), (53, 78910), (55, 78940), (57, 78997), (58, 79030), (62, 79108), (63, 79111), (67, 79195), (70, 79249), (74, 79327),

Gene: DrPhinkDaddy\_136 Start: 79076, Stop: 80542, Start Num: 6

Candidate Starts for DrPhinkDaddy\_136:

(1, 78593), (2, 78632), (3, 78776), (4, 78803), (Start: 5 @79073 has 32 MA's), (Start: 6 @79076 has 149 MA's), (9, 79115), (16, 79193), (19, 79277), (24, 79349), (34, 79601), (35, 79610), (41, 79802), (45, 79883), (48, 79988), (51, 80009), (53, 80090), (55, 80120), (57, 80177), (58, 80210), (62, 80288), (63, 80291), (67, 80375), (70, 80429), (74, 80507),

Gene: Drazdys\_135 Start: 77544, Stop: 79013, Start Num: 5

Candidate Starts for Drazdys\_135:

(1, 77064), (2, 77103), (3, 77247), (4, 77274), (Start: 5 @77544 has 32 MA's), (Start: 6 @77547 has 149 MA's), (9, 77586), (16, 77664), (19, 77748), (24, 77820), (34, 78072), (35, 78081), (41, 78273), (45, 78354), (48, 78459), (51, 78480), (53, 78561), (55, 78591), (57, 78648), (62, 78759), (63, 78762), (67, 78846), (70, 78900), (74, 78978),

Gene: Duckfeet\_131 Start: 77488, Stop: 78954, Start Num: 6

Candidate Starts for Duckfeet\_131:

(1, 77005), (2, 77044), (3, 77188), (4, 77215), (Start: 5 @77485 has 32 MA's), (Start: 6 @77488 has 149 MA's), (9, 77527), (16, 77605), (19, 77689), (24, 77761), (34, 78013), (35, 78022), (41, 78214), (45, 78295), (48, 78400), (51, 78421), (53, 78502), (55, 78532), (57, 78589), (58, 78622), (62, 78700), (63, 78703), (67, 78787), (70, 78841), (74, 78919),

Gene: ET08\_125 Start: 77534, Stop: 79003, Start Num: 5

Candidate Starts for ET08\_125:

(1, 77054), (2, 77093), (3, 77237), (4, 77264), (Start: 5 @77534 has 32 MA's), (Start: 6 @77537 has 149 MA's), (9, 77576), (16, 77654), (19, 77738), (24, 77810), (34, 78062), (35, 78071), (41, 78263), (45, 78344), (48, 78449), (51, 78470), (53, 78551), (55, 78581), (57, 78638), (62, 78749), (63, 78752), (67, 78836), (70, 78890), (73, 78944), (74, 78968),

Gene: EasyJones\_140 Start: 78101, Stop: 79570, Start Num: 5

Candidate Starts for EasyJones\_140:

(1, 77621), (2, 77660), (3, 77804), (4, 77831), (Start: 5 @78101 has 32 MA's), (Start: 6 @78104 has 149 MA's), (9, 78143), (16, 78221), (19, 78305), (24, 78377), (34, 78629), (35, 78638), (41, 78830), (45, 78911), (48, 79016), (51, 79037), (53, 79118), (55, 79148), (57, 79205), (62, 79316), (63, 79319), (67, 79403), (70, 79457), (74, 79535),

Gene: EggyFarm\_145 Start: 80822, Stop: 82288, Start Num: 6

Candidate Starts for EggyFarm\_145:

(1, 80339), (2, 80378), (3, 80522), (4, 80549), (Start: 5 @80819 has 32 MA's), (Start: 6 @80822 has 149 MA's), (9, 80861), (16, 80939), (19, 81023), (24, 81095), (34, 81347), (35, 81356), (41, 81548), (45, 81629), (48, 81734), (51, 81755), (53, 81836), (55, 81866), (57, 81923), (58, 81956), (62, 82034), (63, 82037), (67, 82121), (70, 82175), (74, 82253),

Gene: EmToTheThree\_139 Start: 79816, Stop: 81282, Start Num: 6

Candidate Starts for EmToTheThree\_139:

(1, 79333), (2, 79372), (3, 79516), (4, 79543), (Start: 5 @79813 has 32 MA's), (Start: 6 @79816 has 149 MA's), (9, 79855), (16, 79933), (19, 80017), (24, 80089), (34, 80341), (35, 80350), (41, 80542), (45, 80623), (48, 80728), (51, 80749), (53, 80830), (55, 80860), (57, 80917), (62, 81028), (63, 81031), (67, 81115), (70, 81169), (74, 81247),

Gene: EmmaElysia\_138 Start: 78091, Stop: 79557, Start Num: 6

Candidate Starts for EmmaElysia\_138:

(1, 77608), (2, 77647), (3, 77791), (4, 77818), (Start: 5 @78088 has 32 MA's), (Start: 6 @78091 has 149 MA's), (9, 78130), (16, 78208), (19, 78292), (24, 78364), (34, 78616), (35, 78625), (41, 78817), (45, 78898), (48, 79003), (51, 79024), (53, 79105), (55, 79135), (57, 79192), (58, 79225), (62, 79303), (63, 79306), (67, 79390), (70, 79444), (74, 79522),

Gene: Erdmann\_137 Start: 78865, Stop: 80331, Start Num: 6

Candidate Starts for Erdmann\_137:

(1, 78382), (2, 78421), (3, 78565), (4, 78592), (Start: 5 @78862 has 32 MA's), (Start: 6 @78865 has 149 MA's), (9, 78904), (16, 78982), (19, 79066), (24, 79138), (34, 79390), (35, 79399), (41, 79591), (45, 79672), (48, 79777), (51, 79798), (53, 79879), (55, 79909), (57, 79966), (58, 79999), (62, 80077), (63, 80080), (67, 80164), (70, 80218), (74, 80296),

Gene: ErnieJ\_131 Start: 76834, Stop: 78300, Start Num: 6

Candidate Starts for ErnieJ\_131:

(1, 76351), (2, 76390), (3, 76534), (4, 76561), (Start: 5 @76831 has 32 MA's), (Start: 6 @76834 has 149 MA's), (9, 76873), (16, 76951), (19, 77035), (24, 77107), (34, 77359), (35, 77368), (41, 77560), (45, 77641), (48, 77746), (51, 77767), (53, 77848), (55, 77878), (57, 77935), (58, 77968), (62, 78046), (63, 78049), (67, 78133), (70, 78187), (74, 78265),

Gene: Essence\_134 Start: 77713, Stop: 79179, Start Num: 6

Candidate Starts for Essence\_134:

(1, 77230), (2, 77269), (3, 77413), (4, 77440), (Start: 5 @77710 has 32 MA's), (Start: 6 @77713 has 149 MA's), (9, 77752), (16, 77830), (19, 77914), (24, 77986), (34, 78238), (35, 78247), (41, 78439), (45, 78520), (48, 78625), (51, 78646), (53, 78727), (55, 78757), (57, 78814), (58, 78847), (62, 78925), (63, 78928), (67, 79012), (70, 79066), (74, 79144),

Gene: Ewok\_138 Start: 78242, Stop: 79708, Start Num: 6

Candidate Starts for Ewok\_138:

(1, 77759), (2, 77798), (3, 77942), (4, 77969), (Start: 5 @78239 has 32 MA's), (Start: 6 @78242 has 149 MA's), (9, 78281), (16, 78359), (19, 78443), (24, 78515), (34, 78767), (35, 78776), (41, 78968), (45, 79049), (48, 79154), (51, 79175), (53, 79256), (55, 79286), (57, 79343), (58, 79376), (62, 79454), (63, 79457), (67, 79541), (70, 79595), (74, 79673),

Gene: Fixie\_135 Start: 77985, Stop: 79451, Start Num: 6

Candidate Starts for Fixie\_135:

(1, 77502), (2, 77541), (3, 77685), (4, 77712), (Start: 5 @77982 has 32 MA's), (Start: 6 @77985 has 149 MA's), (9, 78024), (16, 78102), (19, 78186), (24, 78258), (30, 78399), (34, 78510), (35, 78519), (41, 78711), (45, 78792), (48, 78897), (51, 78918), (53, 78999), (55, 79029), (57, 79086), (62, 79197), (63, 79200), (67, 79284), (70, 79338), (74, 79416),

Gene: Flabslab\_132 Start: 76424, Stop: 77890, Start Num: 6

Candidate Starts for Flabslab\_132:

(1, 75941), (2, 75980), (3, 76124), (4, 76151), (Start: 5 @76421 has 32 MA's), (Start: 6 @76424 has 149 MA's), (9, 76463), (16, 76541), (19, 76625), (24, 76697), (34, 76949), (35, 76958), (41, 77150), (45, 77231), (48, 77336), (51, 77357), (53, 77438), (55, 77468), (57, 77525), (58, 77558), (62, 77636), (63, 77639), (67, 77723), (70, 77777), (74, 77855),

Gene: Fludd\_138 Start: 77890, Stop: 79356, Start Num: 6

Candidate Starts for Fludd\_138:

(1, 77407), (2, 77446), (3, 77590), (4, 77617), (Start: 5 @77887 has 32 MA's), (Start: 6 @77890 has 149 MA's), (9, 77929), (16, 78007), (19, 78091), (24, 78163), (34, 78415), (35, 78424), (41, 78616), (45, 78697), (48, 78802), (51, 78823), (53, 78904), (55, 78934), (57, 78991), (58, 79024), (62, 79102), (63, 79105), (67, 79189), (70, 79243), (74, 79321),

Gene: Fongie\_135 Start: 78455, Stop: 79921, Start Num: 6

Candidate Starts for Fongie\_135:

(1, 77972), (2, 78011), (3, 78155), (4, 78182), (Start: 5 @78452 has 32 MA's), (Start: 6 @78455 has 149 MA's), (9, 78494), (16, 78572), (19, 78656), (20, 78668), (24, 78728), (34, 78980), (35, 78989), (41, 79181), (45, 79262), (48, 79367), (51, 79388), (53, 79469), (55, 79499), (57, 79556), (62, 79667), (63, 79670), (67, 79754), (70, 79808), (74, 79886),

Gene: FoxtrotP1\_137 Start: 80025, Stop: 81491, Start Num: 6

Candidate Starts for FoxtrotP1\_137:

(1, 79542), (2, 79581), (3, 79725), (4, 79752), (Start: 5 @80022 has 32 MA's), (Start: 6 @80025 has 149 MA's), (9, 80064), (16, 80142), (19, 80226), (20, 80238), (24, 80298), (34, 80550), (35, 80559), (41, 80751), (45, 80832), (48, 80937), (51, 80958), (53, 81039), (55, 81069), (57, 81126), (58, 81159), (62, 81237), (63, 81240), (67, 81324), (70, 81378), (74, 81456),

Gene: FrayBell\_142 Start: 79189, Stop: 80655, Start Num: 6

Candidate Starts for FrayBell\_142:

(1, 78706), (2, 78745), (3, 78889), (4, 78916), (Start: 5 @79186 has 32 MA's), (Start: 6 @79189 has 149 MA's), (9, 79228), (16, 79306), (19, 79390), (24, 79462), (34, 79714), (35, 79723), (41, 79915), (45, 79996), (48, 80101), (51, 80122), (53, 80203), (55, 80233), (57, 80290), (62, 80401), (63, 80404), (67, 80488), (70, 80542), (74, 80620),

Gene: FudgeTart\_135 Start: 77892, Stop: 79361, Start Num: 5

Candidate Starts for FudgeTart\_135:

(1, 77412), (2, 77451), (3, 77595), (4, 77622), (Start: 5 @77892 has 32 MA's), (Start: 6 @77895 has 149 MA's), (9, 77934), (16, 78012), (19, 78096), (20, 78108), (24, 78168), (34, 78420), (35, 78429), (41, 78621), (45, 78702), (48, 78807), (51, 78828), (53, 78909), (55, 78939), (57, 78996), (62, 79107), (63, 79110), (67, 79194), (70, 79248), (74, 79326),

Gene: Gabriel\_137 Start: 77119, Stop: 78585, Start Num: 6

Candidate Starts for Gabriel\_137:

(1, 76636), (2, 76675), (3, 76819), (4, 76846), (Start: 5 @77116 has 32 MA's), (Start: 6 @77119 has 149 MA's), (9, 77158), (16, 77236), (19, 77320), (24, 77392), (30, 77533), (34, 77644), (35, 77653), (41, 77845), (45, 77926), (48, 78031), (51, 78052), (53, 78133), (55, 78163), (57, 78220), (62, 78331), (63, 78334), (67, 78418), (70, 78472), (74, 78550),

Gene: Gamgam\_138 Start: 77862, Stop: 79328, Start Num: 6

Candidate Starts for Gamgam\_138:

(1, 77379), (2, 77418), (3, 77562), (4, 77589), (Start: 5 @77859 has 32 MA's), (Start: 6 @77862 has 149 MA's), (9, 77901), (16, 77979), (19, 78063), (24, 78135), (34, 78387), (35, 78396), (41, 78588), (45, 78669), (48, 78774), (51, 78795), (53, 78876), (55, 78906), (57, 78963), (58, 78996), (62, 79074), (63, 79077), (67, 79161), (70, 79215), (74, 79293),

Gene: Ghost\_136 Start: 77869, Stop: 79338, Start Num: 5

Candidate Starts for Ghost\_136:

(1, 77389), (2, 77428), (3, 77572), (4, 77599), (Start: 5 @77869 has 32 MA's), (Start: 6 @77872 has 149 MA's), (9, 77911), (16, 77989), (19, 78073), (24, 78145), (30, 78286), (34, 78397), (35, 78406), (41, 78598), (45, 78679), (48, 78784), (51, 78805), (53, 78886), (55, 78916), (57, 78973), (62, 79084), (63, 79087), (67, 79171), (70, 79225), (74, 79303),

Gene: Gizmo\_142 Start: 80491, Stop: 81960, Start Num: 5

Candidate Starts for Gizmo\_142:

(1, 80011), (2, 80050), (3, 80194), (4, 80221), (Start: 5 @80491 has 32 MA's), (Start: 6 @80494 has 149 MA's), (9, 80533), (16, 80611), (19, 80695), (20, 80707), (24, 80767), (34, 81019), (35, 81028), (41, 81220), (45, 81301), (48, 81406), (51, 81427), (53, 81508), (55, 81538), (57, 81595), (62, 81706), (63, 81709), (67, 81793), (70, 81847), (74, 81925),

Gene: GlutenPhree\_139 Start: 77872, Stop: 79338, Start Num: 6

Candidate Starts for GlutenPhree\_139:

(1, 77389), (2, 77428), (3, 77572), (4, 77599), (Start: 5 @77869 has 32 MA's), (Start: 6 @77872 has 149 MA's), (9, 77911), (16, 77989), (19, 78073), (24, 78145), (30, 78286), (34, 78397), (35, 78406), (41, 78598), (45, 78679), (48, 78784), (51, 78805), (53, 78886), (55, 78916), (57, 78973), (62, 79084), (63, 79087), (67, 79171), (70, 79225), (74, 79303),

Gene: Grasshills\_144 Start: 80822, Stop: 82288, Start Num: 6

Candidate Starts for Grasshills\_144:

(1, 80339), (2, 80378), (3, 80522), (4, 80549), (Start: 5 @80819 has 32 MA's), (Start: 6 @80822 has 149 MA's), (9, 80861), (16, 80939), (19, 81023), (24, 81095), (34, 81347), (35, 81356), (41, 81548), (45, 81629), (48, 81734), (51, 81755), (53, 81836), (55, 81866), (57, 81923), (58, 81956), (62, 82034), (63, 82037), (67, 82121), (70, 82175), (74, 82253),

Gene: Grayson\_74 Start: 34649, Stop: 36040, Start Num: 8

Candidate Starts for Grayson\_74:

(Start: 8 @34649 has 4 MA's), (25, 34928), (32, 35045), (37, 35219), (42, 35309), (46, 35402), (52, 35522), (57, 35687), (59, 35741), (61, 35789), (64, 35828), (67, 35888),

Gene: Grayson\_73 Start: 33212, Stop: 34630, Start Num: 7

Candidate Starts for Grayson\_73:

(Start: 7 @33212 has 2 MA's), (14, 33281), (18, 33335), (21, 33410), (23, 33443), (31, 33617), (33, 33629), (38, 33809), (39, 33812), (64, 34409),

Gene: Grungle\_124 Start: 75137, Stop: 76603, Start Num: 6

Candidate Starts for Grungle\_124:

(1, 74654), (2, 74693), (3, 74837), (4, 74864), (Start: 5 @75134 has 32 MA's), (Start: 6 @75137 has 149 MA's), (9, 75176), (16, 75254), (19, 75338), (24, 75410), (34, 75662), (35, 75671), (41, 75863), (45, 75944), (48, 76049), (51, 76070), (53, 76151), (55, 76181), (57, 76238), (58, 76271), (62, 76349), (63, 76352), (68, 76457), (69, 76475), (73, 76544), (74, 76568),

Gene: Guwapp\_136 Start: 77284, Stop: 78750, Start Num: 6

Candidate Starts for Guwapp\_136:

(1, 76801), (2, 76840), (3, 76984), (4, 77011), (Start: 5 @77281 has 32 MA's), (Start: 6 @77284 has 149 MA's), (9, 77323), (16, 77401), (19, 77485), (24, 77557), (34, 77809), (35, 77818), (41, 78010), (45, 78091), (48, 78196), (51, 78217), (53, 78298), (55, 78328), (57, 78385), (58, 78418), (62, 78496), (63, 78499), (67, 78583), (70, 78637), (74, 78715),

Gene: Halldule\_131 Start: 76163, Stop: 77629, Start Num: 6

Candidate Starts for Halldule\_131:

(1, 75680), (2, 75719), (3, 75863), (4, 75890), (Start: 5 @76160 has 32 MA's), (Start: 6 @76163 has 149 MA's), (9, 76202), (16, 76280), (19, 76364), (24, 76436), (34, 76688), (35, 76697), (41, 76889), (45, 76970), (48, 77075), (51, 77096), (53, 77177), (55, 77207), (57, 77264), (58, 77297), (62, 77375), (63, 77378), (67, 77462), (70, 77516), (74, 77594),

Gene: HyRo\_128 Start: 77815, Stop: 79281, Start Num: 6

Candidate Starts for HyRo\_128:

(1, 77332), (2, 77371), (3, 77515), (4, 77542), (Start: 5 @77812 has 32 MA's), (Start: 6 @77815 has 149 MA's), (9, 77854), (16, 77932), (19, 78016), (24, 78088), (34, 78340), (35, 78349), (41, 78541), (45, 78622), (48, 78727), (51, 78748), (53, 78829), (55, 78859), (57, 78916), (62, 79027), (63, 79030), (65, 79093), (68, 79135), (69, 79153), (73, 79222), (74, 79246),

Gene: I3\_142 Start: 79350, Stop: 80816, Start Num: 6

Candidate Starts for I3\_142:

(1, 78867), (2, 78906), (3, 79050), (4, 79077), (Start: 5 @79347 has 32 MA's), (Start: 6 @79350 has 149 MA's), (9, 79389), (16, 79467), (19, 79551), (24, 79623), (34, 79875), (35, 79884), (41, 80076), (45, 80157), (48, 80262), (51, 80283), (53, 80364), (55, 80394), (57, 80451), (58, 80484), (62, 80562), (63, 80565), (67, 80649), (70, 80703), (74, 80781),

Gene: IkeLoa\_131 Start: 77770, Stop: 79236, Start Num: 6

Candidate Starts for IkeLoa\_131:

(1, 77287), (2, 77326), (3, 77470), (4, 77497), (Start: 5 @77767 has 32 MA's), (Start: 6 @77770 has 149 MA's), (9, 77809), (16, 77887), (19, 77971), (24, 78043), (34, 78295), (35, 78304), (41, 78496), (45, 78577), (48, 78682), (51, 78703), (53, 78784), (55, 78814), (57, 78871), (58, 78904), (62, 78982), (63, 78985), (67, 79069), (70, 79123), (74, 79201),

Gene: InigoMontoya\_140 Start: 77833, Stop: 79299, Start Num: 6

Candidate Starts for InigoMontoya\_140:

(1, 77350), (2, 77389), (3, 77533), (4, 77560), (Start: 5 @77830 has 32 MA's), (Start: 6 @77833 has 149 MA's), (9, 77872), (16, 77950), (19, 78034), (24, 78106), (30, 78247), (34, 78358), (35, 78367), (41, 78559), (45, 78640), (48, 78745), (51, 78766), (53, 78847), (55, 78877), (57, 78934), (62, 79045), (63, 79048), (67, 79132), (70, 79186), (74, 79264),

Gene: InterFolia\_143 Start: 80124, Stop: 81590, Start Num: 6

Candidate Starts for InterFolia\_143:

(1, 79641), (2, 79680), (3, 79824), (4, 79851), (Start: 5 @80121 has 32 MA's), (Start: 6 @80124 has 149 MA's), (9, 80163), (16, 80241), (19, 80325), (24, 80397), (34, 80649), (35, 80658), (41, 80850), (45, 80931), (48, 81036), (51, 81057), (53, 81138), (55, 81168), (57, 81225), (58, 81258), (61, 81324), (62, 81336), (63, 81339), (67, 81423), (70, 81477), (74, 81555),

Gene: Iota\_132 Start: 77821, Stop: 79287, Start Num: 6

Candidate Starts for Iota\_132:

(1, 77338), (2, 77377), (3, 77521), (4, 77548), (Start: 5 @77818 has 32 MA's), (Start: 6 @77821 has 149 MA's), (9, 77860), (16, 77938), (19, 78022), (24, 78094), (34, 78346), (35, 78355), (41, 78547), (45, 78628), (48, 78733), (51, 78754), (53, 78835), (55, 78865), (57, 78922), (58, 78955), (62, 79033), (63, 79036), (67, 79120), (70, 79174), (74, 79252),

Gene: Issimir\_135 Start: 78826, Stop: 80295, Start Num: 5

Candidate Starts for Issimir\_135:

(1, 78346), (2, 78385), (3, 78529), (4, 78556), (Start: 5 @78826 has 32 MA's), (Start: 6 @78829 has 149 MA's), (9, 78868), (16, 78946), (19, 79030), (24, 79102), (34, 79354), (35, 79363), (41, 79555), (45, 79636), (48, 79741), (51, 79762), (53, 79843), (55, 79873), (57, 79930), (58, 79963), (62, 80041), (63, 80044), (67, 80128), (70, 80182), (74, 80260),

Gene: Izajani\_137 Start: 79035, Stop: 80501, Start Num: 6

Candidate Starts for Izajani\_137:

(1, 78552), (2, 78591), (3, 78735), (4, 78762), (Start: 5 @79032 has 32 MA's), (Start: 6 @79035 has 149 MA's), (9, 79074), (16, 79152), (19, 79236), (24, 79308), (34, 79560), (35, 79569), (41, 79761), (45, 79842), (48, 79947), (51, 79968), (53, 80049), (55, 80079), (57, 80136), (58, 80169), (62, 80247), (63, 80250), (67, 80334), (70, 80388), (74, 80466),

Gene: JPickles\_134 Start: 76624, Stop: 78090, Start Num: 6

Candidate Starts for JPickles\_134:

(1, 76141), (2, 76180), (3, 76324), (4, 76351), (Start: 5 @76621 has 32 MA's), (Start: 6 @76624 has 149 MA's), (9, 76663), (16, 76741), (19, 76825), (24, 76897), (30, 77038), (34, 77149), (35, 77158), (41, 77350), (45, 77431), (48, 77536), (51, 77557), (53, 77638), (55, 77668), (57, 77725), (62, 77836), (63, 77839), (67, 77923), (70, 77977), (74, 78055),

Gene: Janiyra\_140 Start: 78799, Stop: 80265, Start Num: 6

Candidate Starts for Janiyra\_140:

(1, 78316), (2, 78355), (3, 78499), (4, 78526), (Start: 5 @78796 has 32 MA's), (Start: 6 @78799 has 149 MA's), (9, 78838), (16, 78916), (19, 79000), (24, 79072), (30, 79213), (34, 79324), (35, 79333), (41, 79525), (45, 79606), (48, 79711), (51, 79732), (53, 79813), (55, 79843), (57, 79900), (62, 80011), (63, 80014), (67, 80098), (70, 80152), (74, 80230),

Gene: JayJay\_142 Start: 79830, Stop: 81296, Start Num: 6

Candidate Starts for JayJay\_142:

(1, 79347), (2, 79386), (3, 79530), (4, 79557), (Start: 5 @79827 has 32 MA's), (Start: 6 @79830 has 149 MA's), (9, 79869), (16, 79947), (19, 80031), (24, 80103), (34, 80355), (35, 80364), (41, 80556), (45, 80637), (48, 80742), (51, 80763), (53, 80844), (55, 80874), (57, 80931), (58, 80964), (62, 81042), (63, 81045), (67, 81129), (70, 81183), (74, 81261),

Gene: Jaygup\_137 Start: 78149, Stop: 79615, Start Num: 6

Candidate Starts for Jaygup\_137:

(1, 77666), (2, 77705), (3, 77849), (4, 77876), (Start: 5 @78146 has 32 MA's), (Start: 6 @78149 has 149 MA's), (9, 78188), (16, 78266), (19, 78350), (24, 78422), (34, 78674), (35, 78683), (41, 78875),

(45, 78956), (48, 79061), (51, 79082), (53, 79163), (55, 79193), (57, 79250), (58, 79283), (62, 79361), (63, 79364), (67, 79448), (70, 79502), (74, 79580),

Gene: Jedediah\_140 Start: 78682, Stop: 80148, Start Num: 6

Candidate Starts for Jedediah\_140:

(1, 78199), (2, 78238), (3, 78382), (4, 78409), (Start: 5 @78679 has 32 MA's), (Start: 6 @78682 has 149 MA's), (9, 78721), (16, 78799), (19, 78883), (24, 78955), (34, 79207), (35, 79216), (41, 79408), (45, 79489), (48, 79594), (51, 79615), (53, 79696), (55, 79726), (57, 79783), (58, 79816), (62, 79894), (63, 79897), (67, 79981), (70, 80035), (74, 80113),

Gene: Jemmno\_137 Start: 78129, Stop: 79595, Start Num: 6

Candidate Starts for Jemmno\_137:

(1, 77646), (2, 77685), (3, 77829), (4, 77856), (Start: 5 @78126 has 32 MA's), (Start: 6 @78129 has 149 MA's), (9, 78168), (16, 78246), (19, 78330), (24, 78402), (34, 78654), (35, 78663), (41, 78855), (45, 78936), (48, 79041), (51, 79062), (53, 79143), (55, 79173), (57, 79230), (58, 79263), (62, 79341), (63, 79344), (67, 79428), (70, 79482), (74, 79560),

Gene: Jessibeth14\_136 Start: 78661, Stop: 80127, Start Num: 6

Candidate Starts for Jessibeth14\_136:

(1, 78178), (2, 78217), (3, 78361), (4, 78388), (Start: 5 @78658 has 32 MA's), (Start: 6 @78661 has 149 MA's), (9, 78700), (16, 78778), (19, 78862), (24, 78934), (34, 79186), (35, 79195), (41, 79387), (45, 79468), (48, 79573), (51, 79594), (53, 79675), (55, 79705), (57, 79762), (58, 79795), (62, 79873), (63, 79876), (67, 79960), (70, 80014), (74, 80092),

Gene: Jezreel\_137 Start: 78815, Stop: 80281, Start Num: 6

Candidate Starts for Jezreel\_137:

(1, 78332), (2, 78371), (3, 78515), (4, 78542), (Start: 5 @78812 has 32 MA's), (Start: 6 @78815 has 149 MA's), (9, 78854), (16, 78932), (19, 79016), (24, 79088), (34, 79340), (35, 79349), (41, 79541), (45, 79622), (48, 79727), (51, 79748), (53, 79829), (55, 79859), (57, 79916), (58, 79949), (62, 80027), (63, 80030), (67, 80114), (70, 80168), (74, 80246),

Gene: JigglyPuff\_145 Start: 80979, Stop: 82445, Start Num: 6

Candidate Starts for JigglyPuff\_145:

(1, 80496), (2, 80535), (3, 80679), (4, 80706), (Start: 5 @80976 has 32 MA's), (Start: 6 @80979 has 149 MA's), (9, 81018), (16, 81096), (19, 81180), (24, 81252), (34, 81504), (35, 81513), (41, 81705), (45, 81786), (48, 81891), (51, 81912), (53, 81993), (55, 82023), (57, 82080), (62, 82191), (63, 82194), (67, 82278), (70, 82332), (74, 82410),

Gene: JulietS\_131 Start: 76016, Stop: 77482, Start Num: 6

Candidate Starts for JulietS\_131:

(1, 75533), (2, 75572), (3, 75716), (4, 75743), (Start: 5 @76013 has 32 MA's), (Start: 6 @76016 has 149 MA's), (9, 76055), (16, 76133), (19, 76217), (24, 76289), (34, 76541), (35, 76550), (41, 76742), (45, 76823), (48, 76928), (51, 76949), (53, 77030), (55, 77060), (57, 77117), (58, 77150), (62, 77228), (63, 77231), (67, 77315), (70, 77369), (74, 77447),

Gene: JustHall\_135 Start: 78657, Stop: 80123, Start Num: 6

Candidate Starts for JustHall\_135:

(1, 78174), (2, 78213), (3, 78357), (4, 78384), (Start: 5 @78654 has 32 MA's), (Start: 6 @78657 has 149 MA's), (9, 78696), (16, 78774), (19, 78858), (24, 78930), (34, 79182), (35, 79191), (41, 79383), (45, 79464), (48, 79569), (51, 79590), (53, 79671), (55, 79701), (57, 79758), (58, 79791), (62, 79869), (63, 79872), (67, 79956), (70, 80010), (74, 80088),

Gene: Kamryn\_137 Start: 79467, Stop: 80933, Start Num: 6

Candidate Starts for Kamryn\_137:

(1, 78984), (2, 79023), (3, 79167), (4, 79194), (Start: 5 @79464 has 32 MA's), (Start: 6 @79467 has 149 MA's), (9, 79506), (16, 79584), (19, 79668), (24, 79740), (30, 79881), (34, 79992), (35, 80001), (41, 80193), (45, 80274), (48, 80379), (51, 80400), (53, 80481), (55, 80511), (57, 80568), (58, 80601), (62, 80679), (63, 80682), (67, 80766), (70, 80820), (74, 80898),

Gene: Kboogie\_141 Start: 77822, Stop: 79288, Start Num: 6

Candidate Starts for Kboogie\_141:

(1, 77339), (2, 77378), (3, 77522), (4, 77549), (Start: 5 @77819 has 32 MA's), (Start: 6 @77822 has 149 MA's), (9, 77861), (16, 77939), (19, 78023), (24, 78095), (34, 78347), (35, 78356), (41, 78548), (45, 78629), (48, 78734), (51, 78755), (53, 78836), (55, 78866), (57, 78923), (58, 78956), (62, 79034), (63, 79037), (67, 79121), (70, 79175), (74, 79253),

Gene: Khaleesi\_136 Start: 78764, Stop: 80230, Start Num: 6

Candidate Starts for Khaleesi\_136:

(1, 78281), (2, 78320), (3, 78464), (4, 78491), (Start: 5 @78761 has 32 MA's), (Start: 6 @78764 has 149 MA's), (9, 78803), (16, 78881), (19, 78965), (24, 79037), (30, 79178), (34, 79289), (35, 79298), (41, 79490), (45, 79571), (48, 79676), (51, 79697), (53, 79778), (55, 79808), (57, 79865), (62, 79976), (63, 79979), (67, 80063), (70, 80117), (74, 80195),

Gene: Koguma\_134 Start: 76296, Stop: 77765, Start Num: 5

Candidate Starts for Koguma\_134:

(1, 75816), (2, 75855), (3, 75999), (4, 76026), (Start: 5 @76296 has 32 MA's), (Start: 6 @76299 has 149 MA's), (9, 76338), (16, 76416), (19, 76500), (20, 76512), (24, 76572), (34, 76824), (35, 76833), (41, 77025), (45, 77106), (48, 77211), (51, 77232), (53, 77313), (55, 77343), (57, 77400), (62, 77511), (63, 77514), (68, 77619), (69, 77637), (73, 77706), (74, 77730),

Gene: LRRHood\_130 Start: 78104, Stop: 79573, Start Num: 5

Candidate Starts for LRRHood\_130:

(1, 77624), (2, 77663), (3, 77807), (4, 77834), (Start: 5 @78104 has 32 MA's), (Start: 6 @78107 has 149 MA's), (9, 78146), (16, 78224), (19, 78308), (20, 78320), (24, 78380), (34, 78632), (35, 78641), (41, 78833), (45, 78914), (48, 79019), (51, 79040), (53, 79121), (55, 79151), (57, 79208), (62, 79319), (63, 79322), (68, 79427), (69, 79445), (73, 79514), (74, 79538),

Gene: Labradorite\_136 Start: 76836, Stop: 78302, Start Num: 6

Candidate Starts for Labradorite\_136:

(1, 76353), (2, 76392), (3, 76536), (4, 76563), (Start: 5 @76833 has 32 MA's), (Start: 6 @76836 has 149 MA's), (9, 76875), (16, 76953), (19, 77037), (24, 77109), (34, 77361), (35, 77370), (41, 77562), (45, 77643), (48, 77748), (51, 77769), (53, 77850), (55, 77880), (57, 77937), (58, 77970), (61, 78036), (62, 78048), (63, 78051), (67, 78135), (70, 78189), (74, 78267),

Gene: Latch\_138 Start: 77872, Stop: 79338, Start Num: 6

Candidate Starts for Latch\_138:

(1, 77389), (2, 77428), (3, 77572), (4, 77599), (Start: 5 @77869 has 32 MA's), (Start: 6 @77872 has 149 MA's), (9, 77911), (16, 77989), (19, 78073), (24, 78145), (30, 78286), (34, 78397), (35, 78406), (41, 78598), (45, 78679), (48, 78784), (51, 78805), (53, 78886), (55, 78916), (57, 78973), (62, 79084), (63, 79087), (67, 79171), (70, 79225), (74, 79303),

Gene: Lee7\_135 Start: 79388, Stop: 80854, Start Num: 6

Candidate Starts for Lee7\_135:

(1, 78905), (2, 78944), (3, 79088), (4, 79115), (Start: 5 @79385 has 32 MA's), (Start: 6 @79388 has 149 MA's), (9, 79427), (16, 79505), (19, 79589), (20, 79601), (24, 79661), (34, 79913), (35, 79922), (41, 80114), (45, 80195), (48, 80300), (51, 80321), (53, 80402), (55, 80432), (57, 80489), (62, 80600),

(63, 80603), (67, 80687), (70, 80741), (74, 80819),

Gene: Lethe\_135 Start: 78826, Stop: 80292, Start Num: 6

Candidate Starts for Lethe\_135:

(1, 78343), (2, 78382), (3, 78526), (4, 78553), (Start: 5 @78823 has 32 MA's), (Start: 6 @78826 has 149 MA's), (9, 78865), (16, 78943), (19, 79027), (24, 79099), (34, 79351), (35, 79360), (41, 79552), (45, 79633), (48, 79738), (51, 79759), (53, 79840), (55, 79870), (57, 79927), (58, 79960), (62, 80038), (63, 80041), (67, 80125), (70, 80179), (74, 80257),

Gene: LifeSavor\_135 Start: 78081, Stop: 79547, Start Num: 6

Candidate Starts for LifeSavor\_135:

(1, 77598), (2, 77637), (3, 77781), (4, 77808), (Start: 5 @78078 has 32 MA's), (Start: 6 @78081 has 149 MA's), (9, 78120), (16, 78198), (19, 78282), (24, 78354), (34, 78606), (35, 78615), (41, 78807), (45, 78888), (48, 78993), (51, 79014), (53, 79095), (55, 79125), (57, 79182), (58, 79215), (62, 79293), (63, 79296), (67, 79380), (70, 79434), (74, 79512),

Gene: LinStu\_135 Start: 78713, Stop: 80182, Start Num: 5

Candidate Starts for LinStu\_135:

(1, 78233), (2, 78272), (3, 78416), (4, 78443), (Start: 5 @78713 has 32 MA's), (Start: 6 @78716 has 149 MA's), (9, 78755), (16, 78833), (19, 78917), (24, 78989), (34, 79241), (35, 79250), (41, 79442), (45, 79523), (48, 79628), (51, 79649), (53, 79730), (55, 79760), (57, 79817), (62, 79928), (63, 79931), (68, 80036), (69, 80054), (73, 80123), (74, 80147),

Gene: Littleton\_137 Start: 78198, Stop: 79667, Start Num: 5

Candidate Starts for Littleton\_137:

(1, 77718), (2, 77757), (3, 77901), (4, 77928), (Start: 5 @78198 has 32 MA's), (Start: 6 @78201 has 149 MA's), (9, 78240), (16, 78318), (19, 78402), (24, 78474), (34, 78726), (35, 78735), (41, 78927), (45, 79008), (48, 79113), (51, 79134), (53, 79215), (55, 79245), (57, 79302), (58, 79335), (62, 79413), (63, 79416), (67, 79500), (70, 79554), (74, 79632),

Gene: Loanshark\_136 Start: 78732, Stop: 80198, Start Num: 6

Candidate Starts for Loanshark\_136:

(1, 78249), (2, 78288), (3, 78432), (4, 78459), (Start: 5 @78729 has 32 MA's), (Start: 6 @78732 has 149 MA's), (9, 78771), (16, 78849), (19, 78933), (24, 79005), (34, 79257), (35, 79266), (41, 79458), (45, 79539), (48, 79644), (51, 79665), (53, 79746), (55, 79776), (57, 79833), (58, 79866), (62, 79944), (63, 79947), (67, 80031), (70, 80085), (74, 80163),

Gene: LolaVinca\_137 Start: 79072, Stop: 80541, Start Num: 5

Candidate Starts for LolaVinca\_137:

(1, 78592), (2, 78631), (3, 78775), (4, 78802), (Start: 5 @79072 has 32 MA's), (Start: 6 @79075 has 149 MA's), (9, 79114), (16, 79192), (19, 79276), (24, 79348), (34, 79600), (35, 79609), (41, 79801), (45, 79882), (48, 79987), (51, 80008), (53, 80089), (55, 80119), (57, 80176), (58, 80209), (62, 80287), (63, 80290), (67, 80374), (70, 80428), (74, 80506),

Gene: LookingGlass\_137 Start: 78900, Stop: 80366, Start Num: 6

Candidate Starts for LookingGlass\_137:

(1, 78417), (2, 78456), (3, 78600), (4, 78627), (Start: 5 @78897 has 32 MA's), (Start: 6 @78900 has 149 MA's), (9, 78939), (16, 79017), (19, 79101), (24, 79173), (34, 79425), (35, 79434), (41, 79626), (45, 79707), (48, 79812), (51, 79833), (53, 79914), (55, 79944), (57, 80001), (58, 80034), (62, 80112), (63, 80115), (67, 80199), (70, 80253), (74, 80331),

Gene: LordLeafolot\_141 Start: 80041, Stop: 81507, Start Num: 6

Candidate Starts for LordLeafolot\_141:

(1, 79558), (2, 79597), (3, 79741), (4, 79768), (Start: 5 @80038 has 32 MA's), (Start: 6 @80041 has 149 MA's), (9, 80080), (16, 80158), (19, 80242), (24, 80314), (34, 80566), (35, 80575), (41, 80767), (45, 80848), (48, 80953), (51, 80974), (53, 81055), (55, 81085), (57, 81142), (62, 81253), (63, 81256), (67, 81340), (70, 81394), (74, 81472),

Gene: Lukilu\_127 Start: 79117, Stop: 80583, Start Num: 6

Candidate Starts for Lukilu\_127:

(1, 78634), (2, 78673), (3, 78817), (4, 78844), (Start: 5 @79114 has 32 MA's), (Start: 6 @79117 has 149 MA's), (9, 79156), (16, 79234), (19, 79318), (20, 79330), (24, 79390), (34, 79642), (35, 79651), (41, 79843), (45, 79924), (48, 80029), (51, 80050), (53, 80131), (55, 80161), (57, 80218), (62, 80329), (63, 80332), (68, 80437), (69, 80455), (73, 80524), (74, 80548),

Gene: Lunareta\_136 Start: 79997, Stop: 81463, Start Num: 6

Candidate Starts for Lunareta\_136:

(1, 79514), (2, 79553), (3, 79697), (4, 79724), (Start: 5 @79994 has 32 MA's), (Start: 6 @79997 has 149 MA's), (9, 80036), (16, 80114), (19, 80198), (24, 80270), (34, 80522), (35, 80531), (41, 80723), (45, 80804), (48, 80909), (51, 80930), (53, 81011), (55, 81041), (57, 81098), (58, 81131), (62, 81209), (63, 81212), (67, 81296), (70, 81350), (74, 81428),

Gene: Maby2021\_137 Start: 78848, Stop: 80314, Start Num: 6

Candidate Starts for Maby2021\_137:

(1, 78365), (2, 78404), (3, 78548), (4, 78575), (Start: 5 @78845 has 32 MA's), (Start: 6 @78848 has 149 MA's), (9, 78887), (16, 78965), (19, 79049), (20, 79061), (24, 79121), (34, 79373), (35, 79382), (41, 79574), (45, 79655), (48, 79760), (51, 79781), (53, 79862), (55, 79892), (57, 79949), (62, 80060), (63, 80063), (67, 80147), (70, 80201), (74, 80279),

Gene: Mangeria\_137 Start: 78918, Stop: 80384, Start Num: 6

Candidate Starts for Mangeria\_137:

(1, 78435), (2, 78474), (3, 78618), (4, 78645), (Start: 5 @78915 has 32 MA's), (Start: 6 @78918 has 149 MA's), (9, 78957), (16, 79035), (19, 79119), (24, 79191), (27, 79263), (30, 79332), (34, 79443), (35, 79452), (41, 79644), (45, 79725), (48, 79830), (51, 79851), (53, 79932), (55, 79962), (57, 80019), (62, 80130), (63, 80133), (67, 80217), (70, 80271), (74, 80349),

Gene: Matsumoto\_135 Start: 77709, Stop: 79175, Start Num: 6

Candidate Starts for Matsumoto\_135:

(1, 77226), (2, 77265), (3, 77409), (4, 77436), (Start: 5 @77706 has 32 MA's), (Start: 6 @77709 has 149 MA's), (9, 77748), (16, 77826), (19, 77910), (24, 77982), (34, 78234), (35, 78243), (41, 78435), (45, 78516), (48, 78621), (51, 78642), (53, 78723), (55, 78753), (57, 78810), (62, 78921), (63, 78924), (67, 79008), (70, 79062), (74, 79140),

Gene: Maturis\_135 Start: 78493, Stop: 79959, Start Num: 6

Candidate Starts for Maturis\_135:

(1, 78010), (2, 78049), (3, 78193), (4, 78220), (Start: 5 @78490 has 32 MA's), (Start: 6 @78493 has 149 MA's), (9, 78532), (16, 78610), (19, 78694), (24, 78766), (34, 79018), (35, 79027), (41, 79219), (45, 79300), (48, 79405), (51, 79426), (53, 79507), (55, 79537), (57, 79594), (58, 79627), (62, 79705), (63, 79708), (67, 79792), (70, 79846), (74, 79924),

Gene: McGee\_139 Start: 77463, Stop: 78929, Start Num: 6

Candidate Starts for McGee\_139:

(1, 76980), (2, 77019), (3, 77163), (4, 77190), (Start: 5 @77460 has 32 MA's), (Start: 6 @77463 has 149 MA's), (9, 77502), (16, 77580), (19, 77664), (24, 77736), (34, 77988), (35, 77997), (41, 78189), (45, 78270), (48, 78375), (51, 78396), (53, 78477), (55, 78507), (57, 78564), (62, 78675), (63, 78678), (67, 78762), (70, 78816), (74, 78894),

Gene: McWolfish\_135 Start: 78637, Stop: 80103, Start Num: 6

Candidate Starts for McWolfish\_135:

(1, 78154), (2, 78193), (3, 78337), (4, 78364), (Start: 5 @78634 has 32 MA's), (Start: 6 @78637 has 149 MA's), (9, 78676), (16, 78754), (19, 78838), (24, 78910), (34, 79162), (35, 79171), (41, 79363), (45, 79444), (48, 79549), (51, 79570), (53, 79651), (55, 79681), (57, 79738), (62, 79849), (63, 79852), (67, 79936), (70, 79990), (74, 80068),

Gene: Megamind\_136 Start: 78521, Stop: 79987, Start Num: 6

Candidate Starts for Megamind\_136:

(1, 78038), (2, 78077), (3, 78221), (4, 78248), (Start: 5 @78518 has 32 MA's), (Start: 6 @78521 has 149 MA's), (9, 78560), (16, 78638), (19, 78722), (20, 78734), (24, 78794), (34, 79046), (35, 79055), (41, 79247), (45, 79328), (48, 79433), (51, 79454), (53, 79535), (55, 79565), (57, 79622), (62, 79733), (63, 79736), (67, 79820), (70, 79874), (74, 79952),

Gene: Melpomini\_131 Start: 75987, Stop: 77453, Start Num: 6

Candidate Starts for Melpomini\_131:

(1, 75504), (2, 75543), (3, 75687), (4, 75714), (Start: 5 @75984 has 32 MA's), (Start: 6 @75987 has 149 MA's), (9, 76026), (16, 76104), (19, 76188), (24, 76260), (34, 76512), (35, 76521), (41, 76713), (45, 76794), (48, 76899), (51, 76920), (53, 77001), (55, 77031), (57, 77088), (58, 77121), (62, 77199), (63, 77202), (67, 77286), (70, 77340), (74, 77418),

Gene: MikeLiesIn\_138 Start: 78875, Stop: 80344, Start Num: 5

Candidate Starts for MikeLiesIn\_138:

(1, 78395), (2, 78434), (3, 78578), (4, 78605), (Start: 5 @78875 has 32 MA's), (Start: 6 @78878 has 149 MA's), (9, 78917), (16, 78995), (19, 79079), (24, 79151), (30, 79292), (34, 79403), (35, 79412), (41, 79604), (45, 79685), (48, 79790), (51, 79811), (53, 79892), (55, 79922), (57, 79979), (62, 80090), (63, 80093), (67, 80177), (70, 80231), (74, 80309),

Gene: Mikro\_134 Start: 80091, Stop: 81557, Start Num: 6

Candidate Starts for Mikro\_134:

(1, 79608), (2, 79647), (3, 79791), (4, 79818), (Start: 5 @80088 has 32 MA's), (Start: 6 @80091 has 149 MA's), (9, 80130), (16, 80208), (19, 80292), (24, 80364), (34, 80616), (35, 80625), (41, 80817), (45, 80898), (48, 81003), (51, 81024), (53, 81105), (55, 81135), (57, 81192), (58, 81225), (62, 81303), (63, 81306), (67, 81390), (70, 81444), (74, 81522),

Gene: MoMoMixon\_137 Start: 78351, Stop: 79820, Start Num: 5

Candidate Starts for MoMoMixon\_137:

(1, 77871), (2, 77910), (3, 78054), (4, 78081), (Start: 5 @78351 has 32 MA's), (Start: 6 @78354 has 149 MA's), (9, 78393), (16, 78471), (19, 78555), (24, 78627), (34, 78879), (35, 78888), (41, 79080), (45, 79161), (48, 79266), (51, 79287), (53, 79368), (55, 79398), (57, 79455), (62, 79566), (63, 79569), (67, 79653), (70, 79707), (74, 79785),

Gene: Moby\_130 Start: 75692, Stop: 77158, Start Num: 6

Candidate Starts for Moby\_130:

(1, 75209), (2, 75248), (3, 75392), (4, 75419), (Start: 5 @75689 has 32 MA's), (Start: 6 @75692 has 149 MA's), (9, 75731), (16, 75809), (19, 75893), (20, 75905), (24, 75965), (34, 76217), (35, 76226), (41, 76418), (45, 76499), (48, 76604), (51, 76625), (53, 76706), (55, 76736), (57, 76793), (62, 76904), (63, 76907), (68, 77012), (69, 77030), (73, 77099), (74, 77123),

Gene: Moiqah\_129 Start: 75669, Stop: 77135, Start Num: 6

Candidate Starts for Moiqah\_129:

(1, 75186), (2, 75225), (3, 75369), (4, 75396), (Start: 5 @75666 has 32 MA's), (Start: 6 @75669 has 149 MA's), (9, 75708), (16, 75786), (19, 75870), (20, 75882), (24, 75942), (34, 76194), (35, 76203), (41, 76395), (45, 76476), (48, 76581), (51, 76602), (53, 76683), (55, 76713), (57, 76770), (62, 76881), (63, 76884), (68, 76989), (69, 77007), (73, 77076), (74, 77100),

Gene: Momo\_137 Start: 77872, Stop: 79338, Start Num: 6

Candidate Starts for Momo\_137:

(1, 77389), (2, 77428), (3, 77572), (4, 77599), (Start: 5 @77869 has 32 MA's), (Start: 6 @77872 has 149 MA's), (9, 77911), (16, 77989), (19, 78073), (24, 78145), (30, 78286), (34, 78397), (35, 78406), (41, 78598), (45, 78679), (48, 78784), (51, 78805), (53, 78886), (55, 78916), (57, 78973), (62, 79084), (63, 79087), (67, 79171), (70, 79225), (74, 79303),

Gene: Montpel\_136 Start: 79995, Stop: 81461, Start Num: 6

Candidate Starts for Montpel\_136:

(1, 79512), (2, 79551), (3, 79695), (4, 79722), (Start: 5 @79992 has 32 MA's), (Start: 6 @79995 has 149 MA's), (9, 80034), (16, 80112), (19, 80196), (24, 80268), (34, 80520), (35, 80529), (41, 80721), (45, 80802), (48, 80907), (51, 80928), (53, 81009), (55, 81039), (57, 81096), (58, 81129), (62, 81207), (63, 81210), (67, 81294), (70, 81348), (74, 81426),

Gene: Morizzled23\_138 Start: 78227, Stop: 79693, Start Num: 6

Candidate Starts for Morizzled23\_138:

(1, 77744), (2, 77783), (3, 77927), (4, 77954), (Start: 5 @78224 has 32 MA's), (Start: 6 @78227 has 149 MA's), (9, 78266), (16, 78344), (19, 78428), (24, 78500), (34, 78752), (35, 78761), (41, 78953), (45, 79034), (48, 79139), (51, 79160), (53, 79241), (55, 79271), (57, 79328), (58, 79361), (62, 79439), (63, 79442), (67, 79526), (70, 79580), (74, 79658),

Gene: Naija\_137 Start: 77872, Stop: 79338, Start Num: 6

Candidate Starts for Naija\_137:

(1, 77389), (2, 77428), (3, 77572), (4, 77599), (Start: 5 @77869 has 32 MA's), (Start: 6 @77872 has 149 MA's), (9, 77911), (16, 77989), (19, 78073), (24, 78145), (30, 78286), (34, 78397), (35, 78406), (41, 78598), (45, 78679), (48, 78784), (51, 78805), (53, 78886), (55, 78916), (57, 78973), (62, 79084), (63, 79087), (67, 79171), (70, 79225), (74, 79303),

Gene: Napoleon13\_133 Start: 76425, Stop: 77891, Start Num: 6

Candidate Starts for Napoleon13\_133:

(1, 75942), (2, 75981), (3, 76125), (4, 76152), (Start: 5 @76422 has 32 MA's), (Start: 6 @76425 has 149 MA's), (9, 76464), (16, 76542), (19, 76626), (24, 76698), (34, 76950), (35, 76959), (41, 77151), (45, 77232), (48, 77337), (51, 77358), (53, 77439), (55, 77469), (57, 77526), (58, 77559), (62, 77637), (63, 77640), (67, 77724), (70, 77778), (74, 77856),

Gene: Nappy\_139 Start: 79785, Stop: 81254, Start Num: 5

Candidate Starts for Nappy\_139:

(1, 79305), (2, 79344), (3, 79488), (4, 79515), (Start: 5 @79785 has 32 MA's), (Start: 6 @79788 has 149 MA's), (9, 79827), (16, 79905), (19, 79989), (24, 80061), (34, 80313), (35, 80322), (41, 80514), (45, 80595), (48, 80700), (51, 80721), (53, 80802), (55, 80832), (57, 80889), (62, 81000), (63, 81003), (67, 81087), (70, 81141), (74, 81219),

Gene: Naval22\_145 Start: 80321, Stop: 81787, Start Num: 6

Candidate Starts for Naval22\_145:

(1, 79838), (2, 79877), (3, 80021), (4, 80048), (Start: 5 @80318 has 32 MA's), (Start: 6 @80321 has 149 MA's), (9, 80360), (16, 80438), (19, 80522), (24, 80594), (34, 80846), (35, 80855), (41, 81047), (45, 81128), (48, 81233), (51, 81254), (53, 81335), (55, 81365), (57, 81422), (58, 81455), (62, 81533), (63, 81536), (67, 81620), (70, 81674), (74, 81752),

Gene: NedWong\_138 Start: 78855, Stop: 80321, Start Num: 6

Candidate Starts for NedWong\_138:

(1, 78372), (2, 78411), (3, 78555), (4, 78582), (Start: 5 @78852 has 32 MA's), (Start: 6 @78855 has 149 MA's), (9, 78894), (16, 78972), (19, 79056), (20, 79068), (24, 79128), (34, 79380), (35, 79389), (41, 79581), (45, 79662), (48, 79767), (51, 79788), (53, 79869), (55, 79899), (57, 79956), (62, 80067), (63, 80070), (67, 80154), (70, 80208), (74, 80286),

Gene: Ngannou\_134 Start: 76854, Stop: 78320, Start Num: 6

Candidate Starts for Ngannou\_134:

(1, 76371), (2, 76410), (3, 76554), (4, 76581), (Start: 5 @76851 has 32 MA's), (Start: 6 @76854 has 149 MA's), (9, 76893), (16, 76971), (19, 77055), (24, 77127), (30, 77268), (34, 77379), (35, 77388), (41, 77580), (45, 77661), (48, 77766), (51, 77787), (53, 77868), (55, 77898), (57, 77955), (62, 78066), (63, 78069), (67, 78153), (70, 78207), (74, 78285),

Gene: Nidhogg\_139 Start: 79078, Stop: 80544, Start Num: 6

Candidate Starts for Nidhogg\_139:

(1, 78595), (2, 78634), (3, 78778), (4, 78805), (Start: 5 @79075 has 32 MA's), (Start: 6 @79078 has 149 MA's), (9, 79117), (16, 79195), (19, 79279), (24, 79351), (34, 79603), (35, 79612), (41, 79804), (45, 79885), (48, 79990), (51, 80011), (53, 80092), (55, 80122), (57, 80179), (58, 80212), (62, 80290), (63, 80293), (67, 80377), (70, 80431), (74, 80509),

Gene: NoodleTree\_144 Start: 78948, Stop: 80414, Start Num: 6

Candidate Starts for NoodleTree\_144:

(1, 78465), (2, 78504), (3, 78648), (4, 78675), (Start: 5 @78945 has 32 MA's), (Start: 6 @78948 has 149 MA's), (9, 78987), (16, 79065), (19, 79149), (24, 79221), (34, 79473), (35, 79482), (41, 79674), (45, 79755), (48, 79860), (51, 79881), (53, 79962), (55, 79992), (57, 80049), (58, 80082), (62, 80160), (63, 80163), (67, 80247), (70, 80301), (74, 80379),

Gene: Norm\_138 Start: 79550, Stop: 81016, Start Num: 6

Candidate Starts for Norm\_138:

(1, 79067), (2, 79106), (3, 79250), (4, 79277), (Start: 5 @79547 has 32 MA's), (Start: 6 @79550 has 149 MA's), (9, 79589), (16, 79667), (19, 79751), (24, 79823), (34, 80075), (35, 80084), (41, 80276), (45, 80357), (48, 80462), (51, 80483), (53, 80564), (55, 80594), (57, 80651), (58, 80684), (62, 80762), (63, 80765), (67, 80849), (70, 80903), (74, 80981),

Gene: NuevoMundo\_142 Start: 81130, Stop: 82596, Start Num: 6

Candidate Starts for NuevoMundo\_142:

(1, 80647), (2, 80686), (3, 80830), (4, 80857), (Start: 5 @81127 has 32 MA's), (Start: 6 @81130 has 149 MA's), (9, 81169), (16, 81247), (19, 81331), (24, 81403), (34, 81655), (35, 81664), (41, 81856), (45, 81937), (48, 82042), (51, 82063), (53, 82144), (55, 82174), (57, 82231), (58, 82264), (62, 82342), (63, 82345), (67, 82429), (70, 82483), (74, 82561),

Gene: OrediggerDelux\_135 Start: 79385, Stop: 80851, Start Num: 6

Candidate Starts for OrediggerDelux\_135:

(1, 78902), (2, 78941), (3, 79085), (4, 79112), (Start: 5 @79382 has 32 MA's), (Start: 6 @79385 has 149 MA's), (9, 79424), (16, 79502), (19, 79586), (20, 79598), (24, 79658), (34, 79910), (35, 79919), (41, 80111), (45, 80192), (48, 80297), (51, 80318), (53, 80399), (55, 80429), (57, 80486), (62, 80597), (63, 80600), (67, 80684), (70, 80738), (74, 80816),

Gene: ParkTD\_138 Start: 78861, Stop: 80327, Start Num: 6

Candidate Starts for ParkTD\_138:

(1, 78378), (2, 78417), (3, 78561), (4, 78588), (Start: 5 @78858 has 32 MA's), (Start: 6 @78861 has 149 MA's), (9, 78900), (16, 78978), (19, 79062), (24, 79134), (34, 79386), (35, 79395), (41, 79587), (45, 79668), (48, 79773), (51, 79794), (53, 79875), (55, 79905), (57, 79962), (58, 79995), (62, 80073), (63, 80076), (67, 80160), (70, 80214), (74, 80292),

Gene: Patter\_138 Start: 77889, Stop: 79355, Start Num: 6

Candidate Starts for Patter\_138:

(1, 77406), (2, 77445), (3, 77589), (4, 77616), (Start: 5 @77886 has 32 MA's), (Start: 6 @77889 has 149 MA's), (9, 77928), (16, 78006), (19, 78090), (24, 78162), (34, 78414), (35, 78423), (41, 78615), (45, 78696), (48, 78801), (51, 78822), (53, 78903), (55, 78933), (57, 78990), (62, 79101), (63, 79104), (67, 79188), (70, 79242), (74, 79320),

Gene: Peregrin\_72 Start: 33431, Stop: 34822, Start Num: 8

Candidate Starts for Peregrin\_72:

(Start: 8 @33431 has 4 MA's), (25, 33710), (32, 33827), (37, 34001), (42, 34091), (46, 34184), (57, 34469), (59, 34523), (61, 34571), (64, 34610), (67, 34670),

Gene: Peregrin\_71 Start: 31994, Stop: 33412, Start Num: 7

Candidate Starts for Peregrin\_71:

(Start: 7 @31994 has 2 MA's), (12, 32033), (14, 32063), (18, 32117), (21, 32192), (23, 32225), (31, 32399), (33, 32411), (38, 32591), (60, 33140), (64, 33191), (65, 33230), (71, 33329), (72, 33341),

Gene: PharkleMinkus\_141 Start: 79189, Stop: 80655, Start Num: 6

Candidate Starts for PharkleMinkus\_141:

(1, 78706), (2, 78745), (3, 78889), (4, 78916), (Start: 5 @79186 has 32 MA's), (Start: 6 @79189 has 149 MA's), (9, 79228), (16, 79306), (19, 79390), (24, 79462), (34, 79714), (35, 79723), (41, 79915), (45, 79996), (48, 80101), (51, 80122), (53, 80203), (55, 80233), (57, 80290), (62, 80401), (63, 80404), (67, 80488), (70, 80542), (74, 80620),

Gene: Phlegm\_141 Start: 77872, Stop: 79338, Start Num: 6

Candidate Starts for Phlegm\_141:

(1, 77389), (2, 77428), (3, 77572), (4, 77599), (Start: 5 @77869 has 32 MA's), (Start: 6 @77872 has 149 MA's), (9, 77911), (16, 77989), (19, 78073), (24, 78145), (30, 78286), (34, 78397), (35, 78406), (41, 78598), (45, 78679), (48, 78784), (51, 78805), (53, 78886), (55, 78916), (57, 78973), (62, 79084), (63, 79087), (67, 79171), (70, 79225), (74, 79303),

Gene: Phox\_134 Start: 79141, Stop: 80607, Start Num: 6

Candidate Starts for Phox\_134:

(1, 78658), (2, 78697), (3, 78841), (4, 78868), (Start: 5 @79138 has 32 MA's), (Start: 6 @79141 has 149 MA's), (9, 79180), (16, 79258), (19, 79342), (24, 79414), (34, 79666), (35, 79675), (41, 79867), (45, 79948), (48, 80053), (51, 80074), (53, 80155), (55, 80185), (57, 80242), (58, 80275), (62, 80353), (63, 80356), (67, 80440), (70, 80494), (74, 80572),

Gene: Phusco\_137 Start: 78148, Stop: 79614, Start Num: 6

Candidate Starts for Phusco\_137:

(1, 77665), (2, 77704), (3, 77848), (4, 77875), (Start: 5 @78145 has 32 MA's), (Start: 6 @78148 has 149 MA's), (9, 78187), (16, 78265), (19, 78349), (24, 78421), (34, 78673), (35, 78682), (41, 78874), (45, 78955), (48, 79060), (51, 79081), (53, 79162), (55, 79192), (57, 79249), (58, 79282), (62, 79360), (63, 79363), (67, 79447), (70, 79501), (74, 79579),

Gene: Pier\_141 Start: 81138, Stop: 82604, Start Num: 6

Candidate Starts for Pier\_141:

(1, 80655), (2, 80694), (3, 80838), (4, 80865), (Start: 5 @81135 has 32 MA's), (Start: 6 @81138 has 149 MA's), (9, 81177), (16, 81255), (19, 81339), (24, 81411), (34, 81663), (35, 81672), (41, 81864), (45, 81945), (48, 82050), (51, 82071), (53, 82152), (55, 82182), (57, 82239), (58, 82272), (62, 82350), (63, 82353), (67, 82437), (70, 82491), (74, 82569),

Gene: Pinkcreek\_128 Start: 76479, Stop: 77948, Start Num: 5

Candidate Starts for Pinkcreek\_128:

(1, 75999), (2, 76038), (3, 76182), (4, 76209), (Start: 5 @76479 has 32 MA's), (Start: 6 @76482 has 149 MA's), (9, 76521), (16, 76599), (19, 76683), (20, 76695), (24, 76755), (34, 77007), (35, 77016), (41, 77208), (45, 77289), (48, 77394), (51, 77415), (53, 77496), (55, 77526), (57, 77583), (62, 77694), (63, 77697), (68, 77802), (69, 77820), (73, 77889), (74, 77913),

Gene: Pio\_141 Start: 80747, Stop: 82216, Start Num: 5

Candidate Starts for Pio\_141:

(1, 80267), (2, 80306), (3, 80450), (4, 80477), (Start: 5 @80747 has 32 MA's), (Start: 6 @80750 has 149 MA's), (9, 80789), (16, 80867), (19, 80951), (24, 81023), (34, 81275), (35, 81284), (41, 81476), (45, 81557), (48, 81662), (51, 81683), (53, 81764), (55, 81794), (57, 81851), (62, 81962), (63, 81965), (67, 82049), (70, 82103), (74, 82181),

Gene: Pivoine\_137 Start: 77872, Stop: 79338, Start Num: 6

Candidate Starts for Pivoine\_137:

(1, 77389), (2, 77428), (3, 77572), (4, 77599), (Start: 5 @77869 has 32 MA's), (Start: 6 @77872 has 149 MA's), (9, 77911), (16, 77989), (19, 78073), (24, 78145), (30, 78286), (34, 78397), (35, 78406), (41, 78598), (45, 78679), (48, 78784), (51, 78805), (53, 78886), (55, 78916), (57, 78973), (62, 79084), (63, 79087), (67, 79171), (70, 79225), (74, 79303),

Gene: Pleione\_140 Start: 79028, Stop: 80494, Start Num: 6

Candidate Starts for Pleione\_140:

(1, 78545), (2, 78584), (3, 78728), (4, 78755), (Start: 5 @79025 has 32 MA's), (Start: 6 @79028 has 149 MA's), (9, 79067), (16, 79145), (19, 79229), (24, 79301), (34, 79553), (35, 79562), (41, 79754), (45, 79835), (48, 79940), (51, 79961), (53, 80042), (55, 80072), (57, 80129), (62, 80240), (63, 80243), (67, 80327), (70, 80381), (74, 80459),

Gene: Primadonna\_131 Start: 77513, Stop: 78979, Start Num: 6

Candidate Starts for Primadonna\_131:

(1, 77030), (2, 77069), (3, 77213), (4, 77240), (Start: 5 @77510 has 32 MA's), (Start: 6 @77513 has 149 MA's), (9, 77552), (16, 77630), (19, 77714), (24, 77786), (34, 78038), (35, 78047), (41, 78239), (45, 78320), (48, 78425), (51, 78446), (53, 78527), (55, 78557), (57, 78614), (58, 78647), (61, 78713), (62, 78725), (63, 78728), (67, 78812), (70, 78866), (74, 78944),

Gene: Pupusa\_143 Start: 80230, Stop: 81696, Start Num: 6

Candidate Starts for Pupusa\_143:

(1, 79747), (2, 79786), (3, 79930), (4, 79957), (Start: 5 @80227 has 32 MA's), (Start: 6 @80230 has 149 MA's), (9, 80269), (16, 80347), (19, 80431), (24, 80503), (34, 80755), (35, 80764), (41, 80956), (45, 81037), (48, 81142), (51, 81163), (53, 81244), (55, 81274), (57, 81331), (62, 81442), (63, 81445), (67, 81529), (70, 81583), (74, 81661),

Gene: PurduePete\_137 Start: 79275, Stop: 80741, Start Num: 6

Candidate Starts for PurduePete\_137:

(1, 78792), (2, 78831), (3, 78975), (4, 79002), (Start: 5 @79272 has 32 MA's), (Start: 6 @79275 has 149 MA's), (9, 79314), (16, 79392), (19, 79476), (24, 79548), (34, 79800), (35, 79809), (41, 80001), (45, 80082), (48, 80187), (51, 80208), (53, 80289), (55, 80319), (57, 80376), (58, 80409), (62, 80487), (63, 80490), (67, 80574), (70, 80628), (74, 80706),

Gene: QBert\_131 Start: 77865, Stop: 79331, Start Num: 6

Candidate Starts for QBert\_131:

(1, 77382), (2, 77421), (3, 77565), (4, 77592), (Start: 5 @77862 has 32 MA's), (Start: 6 @77865 has 149 MA's), (9, 77904), (16, 77982), (19, 78066), (24, 78138), (34, 78390), (35, 78399), (41, 78591), (45, 78672), (48, 78777), (51, 78798), (53, 78879), (55, 78909), (57, 78966), (58, 78999), (62, 79077), (63, 79080), (67, 79164), (70, 79218), (74, 79296),

Gene: Quasimodo\_139 Start: 79289, Stop: 80755, Start Num: 6

Candidate Starts for Quasimodo\_139:

(1, 78806), (2, 78845), (3, 78989), (4, 79016), (Start: 5 @79286 has 32 MA's), (Start: 6 @79289 has 149 MA's), (9, 79328), (16, 79406), (19, 79490), (24, 79562), (34, 79814), (35, 79823), (41, 80015), (45, 80096), (48, 80201), (51, 80222), (53, 80303), (55, 80333), (57, 80390), (58, 80423), (62, 80501), (63, 80504), (67, 80588), (70, 80642), (74, 80720),

Gene: Rabinovish\_136 Start: 79473, Stop: 80939, Start Num: 6

Candidate Starts for Rabinovish\_136:

(1, 78990), (2, 79029), (3, 79173), (4, 79200), (Start: 5 @79470 has 32 MA's), (Start: 6 @79473 has 149 MA's), (9, 79512), (16, 79590), (19, 79674), (24, 79746), (34, 79998), (35, 80007), (41, 80199), (45, 80280), (48, 80385), (51, 80406), (53, 80487), (55, 80517), (57, 80574), (58, 80607), (62, 80685), (63, 80688), (67, 80772), (70, 80826), (74, 80904),

Gene: Rahel\_136 Start: 77750, Stop: 79216, Start Num: 6

Candidate Starts for Rahel\_136:

(1, 77267), (2, 77306), (3, 77450), (4, 77477), (Start: 5 @77747 has 32 MA's), (Start: 6 @77750 has 149 MA's), (9, 77789), (16, 77867), (19, 77951), (24, 78023), (34, 78275), (35, 78284), (41, 78476), (45, 78557), (48, 78662), (51, 78683), (53, 78764), (55, 78794), (57, 78851), (58, 78884), (62, 78962), (63, 78965), (67, 79049), (70, 79103), (74, 79181),

Gene: Rizal\_132 Start: 76895, Stop: 78364, Start Num: 5

Candidate Starts for Rizal\_132:

(1, 76415), (2, 76454), (3, 76598), (4, 76625), (Start: 5 @76895 has 32 MA's), (Start: 6 @76898 has 149 MA's), (9, 76937), (16, 77015), (19, 77099), (24, 77171), (34, 77423), (35, 77432), (41, 77624), (45, 77705), (48, 77810), (51, 77831), (53, 77912), (55, 77942), (57, 77999), (62, 78110), (63, 78113), (67, 78197), (70, 78251), (74, 78329),

Gene: RoMag\_132 Start: 78062, Stop: 79528, Start Num: 6

Candidate Starts for RoMag\_132:

(1, 77579), (2, 77618), (3, 77762), (4, 77789), (Start: 5 @78059 has 32 MA's), (Start: 6 @78062 has 149 MA's), (9, 78101), (16, 78179), (19, 78263), (24, 78335), (34, 78587), (35, 78596), (41, 78788), (45, 78869), (48, 78974), (51, 78995), (53, 79076), (55, 79106), (57, 79163), (58, 79196), (62, 79274), (63, 79277), (67, 79361), (70, 79415), (74, 79493),

Gene: Rocha\_135 Start: 78315, Stop: 79781, Start Num: 6

Candidate Starts for Rocha\_135:

(1, 77832), (2, 77871), (3, 78015), (4, 78042), (Start: 5 @78312 has 32 MA's), (Start: 6 @78315 has 149 MA's), (9, 78354), (16, 78432), (19, 78516), (20, 78528), (24, 78588), (34, 78840), (35, 78849), (41, 79041), (45, 79122), (48, 79227), (51, 79248), (53, 79329), (55, 79359), (57, 79416), (58, 79449), (62, 79527), (63, 79530), (67, 79614), (70, 79668), (74, 79746),

Gene: Ronan\_131 Start: 76011, Stop: 77477, Start Num: 6

Candidate Starts for Ronan\_131:

(1, 75528), (2, 75567), (3, 75711), (4, 75738), (Start: 5 @76008 has 32 MA's), (Start: 6 @76011 has 149 MA's), (9, 76050), (16, 76128), (19, 76212), (24, 76284), (34, 76536), (35, 76545), (41, 76737), (45, 76818), (48, 76923), (51, 76944), (53, 77025), (55, 77055), (57, 77112), (58, 77145), (62, 77223), (63, 77226), (67, 77310), (70, 77364), (74, 77442),

Gene: Roots515\_136 Start: 79524, Stop: 80993, Start Num: 5

Candidate Starts for Roots515\_136:

(1, 79044), (2, 79083), (3, 79227), (4, 79254), (Start: 5 @79524 has 32 MA's), (Start: 6 @79527 has 149 MA's), (9, 79566), (16, 79644), (19, 79728), (24, 79800), (34, 80052), (35, 80061), (41, 80253), (45, 80334), (48, 80439), (51, 80460), (53, 80541), (55, 80571), (57, 80628), (58, 80661), (62, 80739), (63, 80742), (67, 80826), (70, 80880), (74, 80958),

Gene: SVoro\_135 Start: 79235, Stop: 80701, Start Num: 6

Candidate Starts for SVoro\_135:

(1, 78752), (2, 78791), (3, 78935), (4, 78962), (Start: 5 @79232 has 32 MA's), (Start: 6 @79235 has 149 MA's), (9, 79274), (16, 79352), (19, 79436), (24, 79508), (34, 79760), (35, 79769), (41, 79961), (45, 80042), (48, 80147), (51, 80168), (53, 80249), (55, 80279), (57, 80336), (58, 80369), (62, 80447), (63, 80450), (67, 80534), (70, 80588), (74, 80666),

Gene: Salacia\_141 Start: 79189, Stop: 80655, Start Num: 6

Candidate Starts for Salacia\_141:

(1, 78706), (2, 78745), (3, 78889), (4, 78916), (Start: 5 @79186 has 32 MA's), (Start: 6 @79189 has 149 MA's), (9, 79228), (16, 79306), (19, 79390), (24, 79462), (34, 79714), (35, 79723), (41, 79915), (45, 79996), (48, 80101), (51, 80122), (53, 80203), (55, 80233), (57, 80290), (58, 80323), (62, 80401), (63, 80404), (67, 80488), (70, 80542), (74, 80620),

Gene: Sauce\_137 Start: 77805, Stop: 79271, Start Num: 6

Candidate Starts for Sauce\_137:

(1, 77322), (2, 77361), (3, 77505), (4, 77532), (Start: 5 @77802 has 32 MA's), (Start: 6 @77805 has 149 MA's), (9, 77844), (16, 77922), (19, 78006), (24, 78078), (34, 78330), (35, 78339), (41, 78531), (45, 78612), (48, 78717), (51, 78738), (53, 78819), (55, 78849), (57, 78906), (58, 78939), (62, 79017), (63, 79020), (68, 79125), (69, 79143), (73, 79212), (74, 79236),

Gene: ScottMcG\_133 Start: 77811, Stop: 79277, Start Num: 6

Candidate Starts for ScottMcG\_133:

(1, 77328), (2, 77367), (3, 77511), (4, 77538), (Start: 5 @77808 has 32 MA's), (Start: 6 @77811 has 149 MA's), (9, 77850), (16, 77928), (19, 78012), (24, 78084), (34, 78336), (35, 78345), (41, 78537), (45, 78618), (48, 78723), (51, 78744), (53, 78825), (55, 78855), (57, 78912), (58, 78945), (62, 79023), (63, 79026), (67, 79110), (70, 79164), (74, 79242),

Gene: Sebata\_137 Start: 79271, Stop: 80740, Start Num: 5

Candidate Starts for Sebata\_137:

(1, 78791), (2, 78830), (3, 78974), (4, 79001), (Start: 5 @79271 has 32 MA's), (Start: 6 @79274 has 149 MA's), (9, 79313), (16, 79391), (19, 79475), (24, 79547), (34, 79799), (35, 79808), (41, 80000), (45, 80081), (48, 80186), (51, 80207), (53, 80288), (55, 80318), (57, 80375), (62, 80486), (63, 80489), (68, 80594), (69, 80612), (73, 80681), (74, 80705),

Gene: Shaqnato\_130 Start: 76855, Stop: 78321, Start Num: 6

Candidate Starts for Shaqnato\_130:

(1, 76372), (2, 76411), (3, 76555), (4, 76582), (Start: 5 @76852 has 32 MA's), (Start: 6 @76855 has 149 MA's), (9, 76894), (16, 76972), (19, 77056), (24, 77128), (34, 77380), (35, 77389), (41, 77581), (45, 77662), (48, 77767), (51, 77788), (53, 77869), (55, 77899), (57, 77956), (58, 77989), (62, 78067), (63, 78070), (67, 78154), (70, 78208), (74, 78286),

Gene: Shelob\_139 Start: 79657, Stop: 81123, Start Num: 6

Candidate Starts for Shelob\_139:

(1, 79174), (2, 79213), (3, 79357), (4, 79384), (Start: 5 @79654 has 32 MA's), (Start: 6 @79657 has 149 MA's), (9, 79696), (16, 79774), (19, 79858), (24, 79930), (34, 80182), (35, 80191), (41, 80383), (45, 80464), (48, 80569), (51, 80590), (53, 80671), (55, 80701), (57, 80758), (58, 80791), (62, 80869), (63, 80872), (67, 80956), (70, 81010), (74, 81088),

Gene: ShiaLabeouf\_136 Start: 78185, Stop: 79651, Start Num: 6

Candidate Starts for ShiaLabeouf\_136:

(1, 77702), (2, 77741), (3, 77885), (4, 77912), (Start: 5 @78182 has 32 MA's), (Start: 6 @78185 has 149 MA's), (9, 78224), (16, 78302), (19, 78386), (24, 78458), (34, 78710), (35, 78719), (41, 78911), (45, 78992), (48, 79097), (51, 79118), (53, 79199), (55, 79229), (57, 79286), (58, 79319), (62, 79397), (63, 79400), (67, 79484), (70, 79538), (74, 79616),

Gene: Shifa\_126 Start: 77081, Stop: 78547, Start Num: 6

Candidate Starts for Shifa\_126:

(1, 76598), (2, 76637), (3, 76781), (4, 76808), (Start: 5 @77078 has 32 MA's), (Start: 6 @77081 has 149 MA's), (9, 77120), (16, 77198), (19, 77282), (24, 77354), (34, 77606), (35, 77615), (41, 77807), (45, 77888), (48, 77993), (51, 78014), (53, 78095), (55, 78125), (57, 78182), (62, 78293), (63, 78296), (65, 78359), (68, 78401), (69, 78419), (73, 78488), (74, 78512),

Gene: Shnickers\_137 Start: 78149, Stop: 79615, Start Num: 6

Candidate Starts for Shnickers\_137:

(1, 77666), (2, 77705), (3, 77849), (4, 77876), (Start: 5 @78146 has 32 MA's), (Start: 6 @78149 has 149 MA's), (9, 78188), (16, 78266), (19, 78350), (24, 78422), (34, 78674), (35, 78683), (41, 78875), (45, 78956), (48, 79061), (51, 79082), (53, 79163), (55, 79193), (57, 79250), (58, 79283), (62, 79361), (63, 79364), (67, 79448), (70, 79502), (74, 79580),

Gene: Shrimp\_137 Start: 78865, Stop: 80334, Start Num: 5

Candidate Starts for Shrimp\_137:

(1, 78385), (2, 78424), (3, 78568), (4, 78595), (Start: 5 @78865 has 32 MA's), (Start: 6 @78868 has 149 MA's), (9, 78907), (16, 78985), (19, 79069), (24, 79141), (34, 79393), (35, 79402), (41, 79594), (45, 79675), (48, 79780), (51, 79801), (53, 79882), (55, 79912), (58, 80002), (62, 80080), (63, 80083), (67, 80167), (70, 80221), (74, 80299),

Gene: SilverDipper\_139 Start: 77872, Stop: 79338, Start Num: 6

Candidate Starts for SilverDipper\_139:

(1, 77389), (2, 77428), (3, 77572), (4, 77599), (Start: 5 @77869 has 32 MA's), (Start: 6 @77872 has 149 MA's), (9, 77911), (16, 77989), (19, 78073), (24, 78145), (30, 78286), (34, 78397), (35, 78406), (41, 78598), (45, 78679), (48, 78784), (51, 78805), (53, 78886), (55, 78916), (57, 78973), (62, 79084), (63, 79087), (67, 79171), (70, 79225), (74, 79303),

Gene: SmallFry\_137 Start: 77374, Stop: 78840, Start Num: 6

Candidate Starts for SmallFry\_137:

(1, 76891), (2, 76930), (3, 77074), (4, 77101), (Start: 5 @77371 has 32 MA's), (Start: 6 @77374 has 149 MA's), (9, 77413), (16, 77491), (19, 77575), (24, 77647), (34, 77899), (35, 77908), (41, 78100), (45, 78181), (48, 78286), (51, 78307), (53, 78388), (55, 78418), (57, 78475), (58, 78508), (62, 78586), (63, 78589), (67, 78673), (70, 78727), (74, 78805),

Gene: SoilZilla\_133 Start: 78148, Stop: 79614, Start Num: 6

Candidate Starts for SoilZilla\_133:

(1, 77665), (2, 77704), (3, 77848), (4, 77875), (Start: 5 @78145 has 32 MA's), (Start: 6 @78148 has 149 MA's), (9, 78187), (16, 78265), (19, 78349), (24, 78421), (34, 78673), (35, 78682), (41, 78874), (45, 78955), (48, 79060), (51, 79081), (53, 79162), (55, 79192), (57, 79249), (58, 79282), (62, 79360), (63, 79363), (67, 79447), (70, 79501), (74, 79579),

Gene: Spec\_133 Start: 77914, Stop: 79380, Start Num: 6

Candidate Starts for Spec\_133:

(1, 77431), (2, 77470), (3, 77614), (4, 77641), (Start: 5 @77911 has 32 MA's), (Start: 6 @77914 has 149 MA's), (9, 77953), (16, 78031), (19, 78115), (24, 78187), (34, 78439), (35, 78448), (41, 78640), (45, 78721), (48, 78826), (51, 78847), (53, 78928), (55, 78958), (57, 79015), (58, 79048), (62, 79126), (63, 79129), (67, 79213), (70, 79267), (74, 79345),

Gene: Specks\_142 Start: 80039, Stop: 81505, Start Num: 6

Candidate Starts for Specks\_142:

(1, 79556), (2, 79595), (3, 79739), (4, 79766), (Start: 5 @80036 has 32 MA's), (Start: 6 @80039 has 149 MA's), (9, 80078), (16, 80156), (19, 80240), (24, 80312), (34, 80564), (35, 80573), (41, 80765), (45, 80846), (48, 80951), (51, 80972), (53, 81053), (55, 81083), (57, 81140), (58, 81173), (61, 81239), (62, 81251), (63, 81254), (67, 81338), (70, 81392), (74, 81470),

Gene: Sprinklers\_133 Start: 77430, Stop: 78896, Start Num: 6

Candidate Starts for Sprinklers\_133:

(1, 76947), (2, 76986), (3, 77130), (4, 77157), (Start: 5 @77427 has 32 MA's), (Start: 6 @77430 has 149 MA's), (9, 77469), (16, 77547), (19, 77631), (24, 77703), (34, 77955), (35, 77964), (41, 78156), (45, 78237), (48, 78342), (51, 78363), (53, 78444), (55, 78474), (57, 78531), (58, 78564), (62, 78642), (63, 78645), (67, 78729), (70, 78783), (74, 78861),

Gene: Spud\_136 Start: 78935, Stop: 80401, Start Num: 6

Candidate Starts for Spud\_136:

(1, 78452), (2, 78491), (3, 78635), (4, 78662), (Start: 5 @78932 has 32 MA's), (Start: 6 @78935 has 149 MA's), (9, 78974), (16, 79052), (19, 79136), (24, 79208), (34, 79460), (35, 79469), (41, 79661), (45, 79742), (48, 79847), (51, 79868), (53, 79949), (55, 79979), (57, 80036), (58, 80069), (62, 80147), (63, 80150), (67, 80234), (70, 80288), (74, 80366),

Gene: SrishMeg2525\_136 Start: 78957, Stop: 80423, Start Num: 6

Candidate Starts for SrishMeg2525\_136:

(1, 78474), (2, 78513), (3, 78657), (4, 78684), (Start: 5 @78954 has 32 MA's), (Start: 6 @78957 has 149 MA's), (9, 78996), (16, 79074), (19, 79158), (20, 79170), (24, 79230), (34, 79482), (35, 79491), (41, 79683), (45, 79764), (48, 79869), (51, 79890), (53, 79971), (55, 80001), (57, 80058), (62, 80169), (63, 80172), (67, 80256), (70, 80310), (74, 80388),

Gene: StephanieG\_135 Start: 79767, Stop: 81233, Start Num: 6

Candidate Starts for StephanieG\_135:

(1, 79284), (2, 79323), (3, 79467), (4, 79494), (Start: 5 @79764 has 32 MA's), (Start: 6 @79767 has 149 MA's), (9, 79806), (16, 79884), (19, 79968), (24, 80040), (34, 80292), (35, 80301), (41, 80493), (45, 80574), (48, 80679), (51, 80700), (53, 80781), (55, 80811), (57, 80868), (58, 80901), (62, 80979), (63, 80982), (67, 81066), (70, 81120), (74, 81198),

Gene: Stubby\_130 Start: 77397, Stop: 78863, Start Num: 6

Candidate Starts for Stubby\_130:

(1, 76914), (2, 76953), (3, 77097), (4, 77124), (Start: 5 @77394 has 32 MA's), (Start: 6 @77397 has 149 MA's), (9, 77436), (16, 77514), (19, 77598), (24, 77670), (30, 77811), (34, 77922), (35, 77931), (41, 78123), (45, 78204), (48, 78309), (51, 78330), (53, 78411), (55, 78441), (57, 78498), (62, 78609), (63, 78612), (67, 78696), (70, 78750), (74, 78828),

Gene: StubbySaigey\_141 Start: 78032, Stop: 79498, Start Num: 6

Candidate Starts for StubbySaigey\_141:

(1, 77549), (2, 77588), (3, 77732), (4, 77759), (Start: 5 @78029 has 32 MA's), (Start: 6 @78032 has 149 MA's), (9, 78071), (16, 78149), (19, 78233), (24, 78305), (34, 78557), (35, 78566), (41, 78758), (45, 78839), (48, 78944), (51, 78965), (53, 79046), (55, 79076), (57, 79133), (58, 79166), (62, 79244), (63, 79247), (67, 79331), (70, 79385), (74, 79463),

Gene: Substance289\_135 Start: 77667, Stop: 79133, Start Num: 6

Candidate Starts for Substance289\_135:

(1, 77184), (2, 77223), (3, 77367), (4, 77394), (Start: 5 @77664 has 32 MA's), (Start: 6 @77667 has 149 MA's), (9, 77706), (16, 77784), (19, 77868), (24, 77940), (34, 78192), (35, 78201), (41, 78393), (45, 78474), (48, 78579), (51, 78600), (53, 78681), (55, 78711), (57, 78768), (58, 78801), (62, 78879), (63, 78882), (67, 78966), (70, 79020), (74, 79098),

Gene: Tainan\_140 Start: 79362, Stop: 80828, Start Num: 6

Candidate Starts for Tainan\_140:

(1, 78879), (2, 78918), (3, 79062), (4, 79089), (Start: 5 @79359 has 32 MA's), (Start: 6 @79362 has 149 MA's), (9, 79401), (16, 79479), (19, 79563), (24, 79635), (34, 79887), (35, 79896), (41, 80088), (45, 80169), (48, 80274), (51, 80295), (53, 80376), (55, 80406), (57, 80463), (62, 80574), (63, 80577), (67, 80661), (70, 80715), (74, 80793),

Gene: Teardrop\_136 Start: 77363, Stop: 78829, Start Num: 6

Candidate Starts for Teardrop\_136:

(1, 76880), (2, 76919), (3, 77063), (4, 77090), (Start: 5 @77360 has 32 MA's), (Start: 6 @77363 has 149 MA's), (9, 77402), (16, 77480), (19, 77564), (24, 77636), (34, 77888), (35, 77897), (41, 78089), (45, 78170), (48, 78275), (51, 78296), (53, 78377), (55, 78407), (57, 78464), (58, 78497), (61, 78563), (62, 78575), (63, 78578), (67, 78662), (70, 78716), (74, 78794),

Gene: TinyTim\_137 Start: 78615, Stop: 80081, Start Num: 6

Candidate Starts for TinyTim\_137:

(1, 78132), (2, 78171), (3, 78315), (4, 78342), (Start: 5 @78612 has 32 MA's), (Start: 6 @78615 has 149 MA's), (9, 78654), (16, 78732), (19, 78816), (24, 78888), (34, 79140), (35, 79149), (41, 79341), (45, 79422), (48, 79527), (51, 79548), (53, 79629), (55, 79659), (57, 79716), (58, 79749), (62, 79827), (63, 79830), (67, 79914), (70, 79968), (74, 80046),

Gene: Tonenili\_150 Start: 81372, Stop: 82838, Start Num: 6

Candidate Starts for Tonenili\_150:

(2, 80928), (4, 81099), (Start: 5 @81369 has 32 MA's), (Start: 6 @81372 has 149 MA's), (10, 81426), (11, 81429), (16, 81489), (17, 81513), (19, 81573), (26, 81708), (28, 81723), (29, 81777), (35, 81906), (37, 82017), (40, 82080), (41, 82098), (43, 82122), (45, 82179), (47, 82242), (50, 82293), (51, 82305), (53, 82386), (55, 82416), (56, 82452), (58, 82506), (62, 82584), (69, 82710), (73, 82779), (74, 82803),

Gene: Tortoise16\_134 Start: 77974, Stop: 79440, Start Num: 6

Candidate Starts for Tortoise16\_134:

(1, 77491), (2, 77530), (3, 77674), (4, 77701), (Start: 5 @77971 has 32 MA's), (Start: 6 @77974 has 149 MA's), (9, 78013), (16, 78091), (19, 78175), (24, 78247), (30, 78388), (34, 78499), (35, 78508), (41, 78700), (45, 78781), (48, 78886), (51, 78907), (53, 78988), (55, 79018), (57, 79075), (62, 79186), (63, 79189), (67, 79273), (70, 79327), (74, 79405),

Gene: Trinitium\_135 Start: 77798, Stop: 79264, Start Num: 6

Candidate Starts for Trinitium\_135:

(1, 77315), (2, 77354), (3, 77498), (4, 77525), (Start: 5 @77795 has 32 MA's), (Start: 6 @77798 has 149 MA's), (9, 77837), (16, 77915), (19, 77999), (24, 78071), (34, 78323), (35, 78332), (41, 78524), (45, 78605), (48, 78710), (51, 78731), (53, 78812), (55, 78842), (57, 78899), (58, 78932), (62, 79010), (63, 79013), (67, 79097), (70, 79151), (74, 79229),

Gene: Turret\_133 Start: 77243, Stop: 78709, Start Num: 6

Candidate Starts for Turret\_133:

(1, 76760), (2, 76799), (3, 76943), (4, 76970), (Start: 5 @77240 has 32 MA's), (Start: 6 @77243 has 149 MA's), (9, 77282), (16, 77360), (19, 77444), (24, 77516), (34, 77768), (35, 77777), (41, 77969), (45, 78050), (48, 78155), (51, 78176), (53, 78257), (55, 78287), (57, 78344), (62, 78455), (63, 78458), (67, 78542), (70, 78596), (74, 78674),

Gene: Tyke\_137 Start: 79270, Stop: 80736, Start Num: 6

Candidate Starts for Tyke\_137:

(1, 78787), (2, 78826), (3, 78970), (4, 78997), (Start: 5 @79267 has 32 MA's), (Start: 6 @79270 has 149 MA's), (9, 79309), (16, 79387), (19, 79471), (24, 79543), (34, 79795), (35, 79804), (41, 79996), (45, 80077), (48, 80182), (51, 80203), (53, 80284), (55, 80314), (57, 80371), (58, 80404), (62, 80482), (63, 80485), (67, 80569), (70, 80623), (74, 80701),

Gene: ValleyTerrace\_138 Start: 77872, Stop: 79338, Start Num: 6

Candidate Starts for ValleyTerrace\_138:

(1, 77389), (2, 77428), (3, 77572), (4, 77599), (Start: 5 @77869 has 32 MA's), (Start: 6 @77872 has 149 MA's), (9, 77911), (16, 77989), (19, 78073), (24, 78145), (30, 78286), (34, 78397), (35, 78406), (41, 78598), (45, 78679), (48, 78784), (51, 78805), (53, 78886), (55, 78916), (57, 78973), (62, 79084), (63, 79087), (67, 79171), (70, 79225), (74, 79303),

Gene: Vortrix\_149 Start: 80685, Stop: 82151, Start Num: 6

Candidate Starts for Vortrix\_149:

(2, 80241), (4, 80412), (Start: 5 @80682 has 32 MA's), (Start: 6 @80685 has 149 MA's), (10, 80739), (11, 80742), (16, 80802), (17, 80826), (19, 80886), (26, 81021), (28, 81036), (29, 81090), (35, 81219), (37, 81330), (40, 81393), (41, 81411), (43, 81435), (45, 81492), (47, 81555), (50, 81606), (51, 81618), (53, 81699), (55, 81729), (56, 81765), (58, 81819), (62, 81897), (69, 82023), (73, 82092), (74, 82116),

Gene: Wally\_136 Start: 77393, Stop: 78859, Start Num: 6

Candidate Starts for Wally\_136:

(1, 76910), (2, 76949), (3, 77093), (4, 77120), (Start: 5 @77390 has 32 MA's), (Start: 6 @77393 has 149 MA's), (9, 77432), (16, 77510), (19, 77594), (24, 77666), (34, 77918), (35, 77927), (41, 78119), (45, 78200), (48, 78305), (51, 78326), (53, 78407), (55, 78437), (57, 78494), (58, 78527), (62, 78605), (63, 78608), (67, 78692), (70, 78746), (74, 78824),

Gene: Weasels2\_73 Start: 32821, Stop: 34239, Start Num: 8

Candidate Starts for Weasels2\_73:

(Start: 8 @32821 has 4 MA's), (22, 33031), (37, 33409), (44, 33517), (49, 33685), (60, 33967), (64, 34018),

Gene: Weasels2\_74 Start: 34258, Stop: 35649, Start Num: 8

Candidate Starts for Weasels2\_74:

(Start: 8 @34258 has 4 MA's), (15, 34333), (32, 34654), (36, 34759), (42, 34918), (46, 35011), (54, 35215), (59, 35350), (64, 35437), (67, 35497),

Gene: Willis\_138 Start: 78757, Stop: 80226, Start Num: 5

Candidate Starts for Willis\_138:

(1, 78277), (2, 78316), (3, 78460), (4, 78487), (Start: 5 @78757 has 32 MA's), (Start: 6 @78760 has 149 MA's), (9, 78799), (16, 78877), (19, 78961), (24, 79033), (34, 79285), (35, 79294), (41, 79486), (45, 79567), (48, 79672), (51, 79693), (53, 79774), (55, 79804), (57, 79861), (62, 79972), (63, 79975), (67, 80059), (70, 80113), (74, 80191),

Gene: Yassified\_134 Start: 77470, Stop: 78936, Start Num: 6

Candidate Starts for Yassified\_134:

(1, 76987), (2, 77026), (3, 77170), (4, 77197), (Start: 5 @77467 has 32 MA's), (Start: 6 @77470 has 149 MA's), (9, 77509), (16, 77587), (19, 77671), (24, 77743), (34, 77995), (35, 78004), (41, 78196), (45, 78277), (48, 78382), (51, 78403), (53, 78484), (55, 78514), (57, 78571), (62, 78682), (63, 78685), (67, 78769), (70, 78823), (73, 78877), (74, 78901),

Gene: YemiJoy2021\_138 Start: 78852, Stop: 80318, Start Num: 6

Candidate Starts for YemiJoy2021\_138:

(1, 78369), (2, 78408), (3, 78552), (4, 78579), (Start: 5 @78849 has 32 MA's), (Start: 6 @78852 has 149 MA's), (9, 78891), (16, 78969), (19, 79053), (20, 79065), (24, 79125), (34, 79377), (35, 79386), (41, 79578), (45, 79659), (48, 79764), (51, 79785), (53, 79866), (55, 79896), (57, 79953), (62, 80064), (63, 80067), (67, 80151), (70, 80205), (74, 80283),

Gene: YoungMoneyMata\_139 Start: 78498, Stop: 79964, Start Num: 6

Candidate Starts for YoungMoneyMata\_139:

(1, 78015), (2, 78054), (3, 78198), (4, 78225), (Start: 5 @78495 has 32 MA's), (Start: 6 @78498 has 149 MA's), (9, 78537), (16, 78615), (19, 78699), (24, 78771), (34, 79023), (35, 79032), (41, 79224), (45, 79305), (48, 79410), (51, 79431), (53, 79512), (55, 79542), (57, 79599), (58, 79632), (62, 79710), (63, 79713), (67, 79797), (70, 79851), (74, 79929),

Gene: Yucca\_136 Start: 78534, Stop: 80000, Start Num: 6

Candidate Starts for Yucca\_136:

(1, 78051), (2, 78090), (3, 78234), (4, 78261), (Start: 5 @78531 has 32 MA's), (Start: 6 @78534 has 149 MA's), (9, 78573), (16, 78651), (19, 78735), (20, 78747), (24, 78807), (34, 79059), (35, 79068), (41, 79260), (45, 79341), (48, 79446), (51, 79467), (53, 79548), (55, 79578), (57, 79635), (62, 79746), (63, 79749), (67, 79833), (70, 79887), (74, 79965),

Gene: Zalkecks\_138 Start: 78535, Stop: 80001, Start Num: 6

Candidate Starts for Zalkecks\_138:

(1, 78052), (2, 78091), (3, 78235), (4, 78262), (Start: 5 @78532 has 32 MA's), (Start: 6 @78535 has 149 MA's), (9, 78574), (16, 78652), (19, 78736), (20, 78748), (24, 78808), (34, 79060), (35, 79069), (41, 79261), (45, 79342), (48, 79447), (51, 79468), (53, 79549), (55, 79579), (57, 79636), (62, 79747), (63, 79750), (67, 79834), (70, 79888), (74, 79966),

Gene: Zeenon\_138 Start: 78617, Stop: 80086, Start Num: 5

Candidate Starts for Zeenon\_138:

(1, 78137), (2, 78176), (3, 78320), (4, 78347), (Start: 5 @78617 has 32 MA's), (Start: 6 @78620 has 149 MA's), (9, 78659), (16, 78737), (19, 78821), (20, 78833), (24, 78893), (34, 79145), (35, 79154), (41, 79346), (45, 79427), (48, 79532), (51, 79553), (53, 79634), (55, 79664), (57, 79721), (62, 79832), (63, 79835), (67, 79919), (70, 79973), (74, 80051),

Gene: ZygoTaiga\_135 Start: 79780, Stop: 81246, Start Num: 6

Candidate Starts for ZygoTaiga\_135:

(1, 79297), (2, 79336), (3, 79480), (4, 79507), (Start: 5 @79777 has 32 MA's), (Start: 6 @79780 has 149 MA's), (9, 79819), (16, 79897), (19, 79981), (24, 80053), (34, 80305), (35, 80314), (41, 80506), (45, 80587), (48, 80692), (51, 80713), (53, 80794), (55, 80824), (57, 80881), (58, 80914), (62, 80992), (63, 80995), (67, 81079), (70, 81133), (74, 81211),

