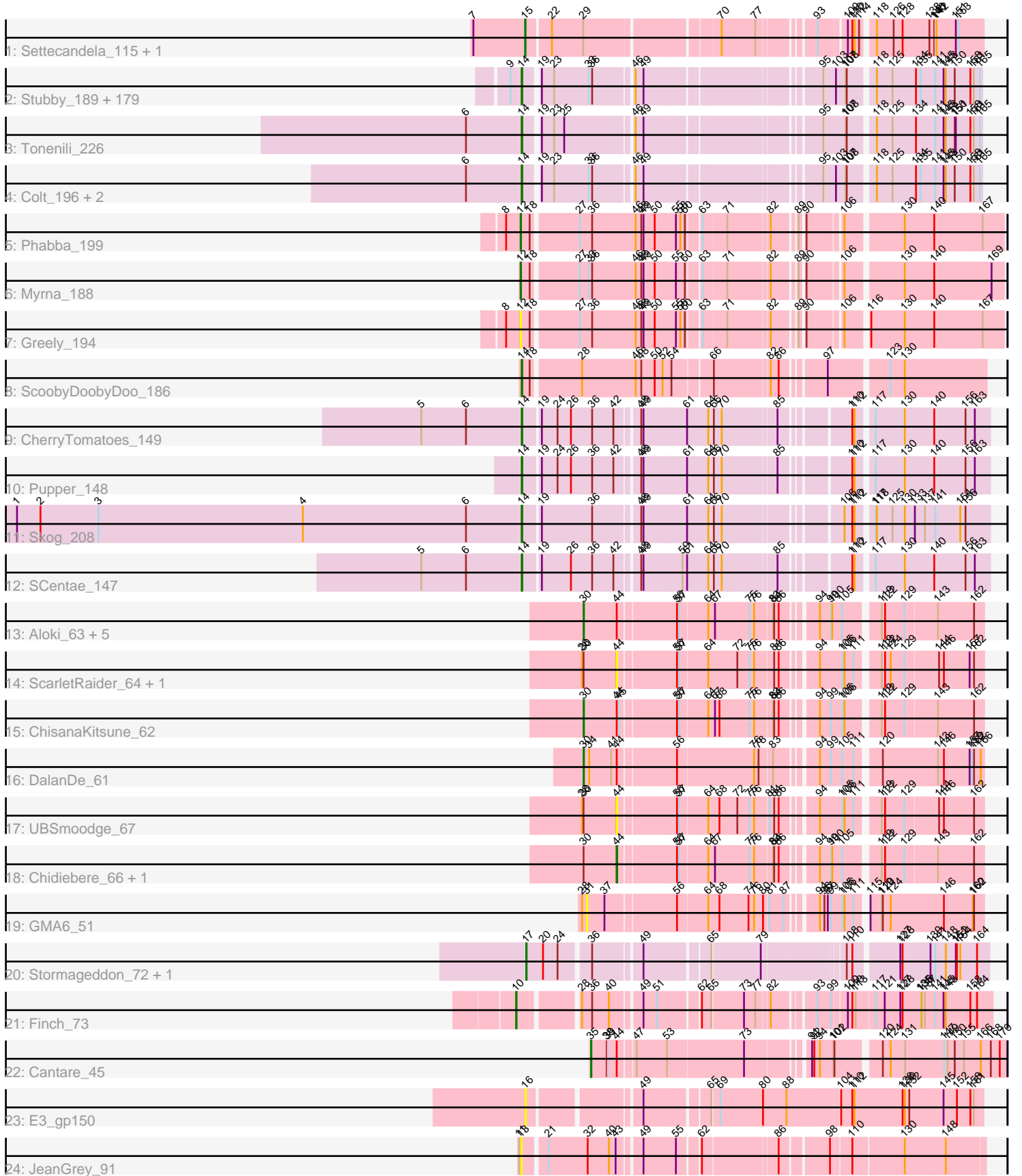


# Pham 171195



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 171195 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171195 has 214 members, 27 are drafts.

Phages represented in each track:

- Track 1 : Settecandela\_115, Phrappuccino\_115
- Track 2 : Stubby\_189, Amataga\_206, Burrough\_207, Napoleon13\_202, InigoMontoya\_208, Bigswole\_210, CindyLou\_206, Willis\_206, Spec\_200, Breeniome\_204, Shelob\_206, Gizmo\_211, NuevoMundo\_208, Cactojaque\_200, Bonray\_207, Blackbrain\_202, MikeLiesIn\_207, Cali\_198, Derek\_202, RoMag\_200, JPickles\_201, Rizal\_197, LifeSavor\_204, SilverDipper\_209, Basquiat\_202, Littleton\_208, Yassified\_202, Patter\_206, Rahel\_206, I3\_215, Latch\_205, SmallFry\_205, Ngannou\_202, LolaVinca\_203, MoMoMixon\_203, Babyland\_208, Astraea\_199, Concombre\_210, Teardrop\_202, Daffodil\_210, Bread\_200, Quasimodo\_207, Khaleesi\_204, Morizzled23\_202, Grasshills\_213, Naval22\_210, Dietrick\_194, Ading\_206, BadAgartude\_199, Dandelion\_213, Darko\_204, YemiJoy2021\_206, Phlegm\_209, Norm\_205, Pio\_213, Janiyra\_208, Capablanca\_210, Sprinklers\_203, Audrick\_207, ZygoTaiga\_202, Koguma\_204, Erdmann\_206, Phusco\_203, InterFolia\_208, ChickenPhender\_201, Zeenon\_207, Issimir\_201, Melpomini\_200, Salacia\_205, Gabriel\_208, BananaFence\_202, Turret\_198, JayJay\_203, Blackdragon\_200, Bipolarisk\_203, EmToTheThree\_205, ET08\_193, ErnieJ\_198, Chargie21\_202, FrayBell\_208, Mikro\_201, Delylah\_207, Catera\_198, ChaylaJr\_202, Delilah\_203, Lukilu\_196, Halldule\_198, ArcherS7\_205, Maby2021\_205, Ava3\_204, EmmaElysia\_208, Shaqnato\_196, EasyJones\_208, DrPhinkDaddy\_202, EggyFarm\_214, StubbySaigey\_210, Asterius\_201, FudgeTart\_200, Sauce\_201, Iota\_200, Ghost\_205, NoodleTree\_211, Momo\_206, Flabslab\_200, Alice\_192, Pleione\_209, Mangeria\_206, DirtMonster\_198, Shrimp\_207, StephanieG\_201, BackyardAgain\_200, BigCity\_214, TinyTim\_203, Chomp\_204, Spud\_199, Grungle\_189, Ronan\_201, Wally\_203, Drazdys\_203, Gamgam\_206, Yucca\_205, Jemmno\_204, Pier\_206, Jaygup\_201, Bxz1\_195, Phox\_206, QBert\_197, BeanWater\_197, McGee\_204, Atlantean\_205, Shnickers\_203, Zalkecks\_204, Bangla1971\_205, HyRo\_193, Naija\_206, DTDevon\_207, FoxtrotP1\_203, Trinitium\_201, Izajani\_203, Ewok\_204, Tortoise16\_203, LordLeafolot\_207, NedWong\_204, JulietS\_198, Kamryn\_204, Pivoine\_206, YoungMoneyMata\_203, Loanshark\_202, LRRHood\_198, Jessibeth14\_205, LinStu\_204, CharlieB\_199, PurduePete\_205, Sebata\_206, Jedediah\_205, Lee7\_205, Essence\_202, Specks\_209, SrishMeg2525\_202, Shifa\_182, Fludd\_205, IkeLoa\_197, ShiaLabeouf\_202, Roots515\_207, Guwapp\_200, McWolfish\_202, Nidhogg\_206, Megamind\_202, Adlitam\_204, Tyke\_203, ValleyTerrace\_206, Kboogie\_209, Matsumoto\_204, ScottMcG\_198, JustHall\_199, ParkTD\_204, Nappy\_206, Caravan\_196, Rabinovish\_198, Pinkcreek\_189
- Track 3 : Tonenili\_226

- Track 4 : Colt\_196, Cane17\_196, Blubba\_201
- Track 5 : Phabba\_199
- Track 6 : Myrna\_188
- Track 7 : Greely\_194
- Track 8 : ScoobyDoobyDoo\_186
- Track 9 : CherryTomatoes\_149
- Track 10 : Pupper\_148
- Track 11 : Skog\_208
- Track 12 : SCentae\_147
- Track 13 : Alok\_63, Gray\_66, Kabocha\_67, Oogie\_65, Pakusa\_63, Schomber\_64
- Track 14 : ScarletRaider\_64, FlyingTortilla\_65
- Track 15 : ChisanaKitsune\_62
- Track 16 : DalanDe\_61
- Track 17 : UBSmoodge\_67
- Track 18 : Chidiebere\_66, Hanem\_65
- Track 19 : GMA6\_51
- Track 20 : Stormageddon\_72, RedWattleHog\_75
- Track 21 : Finch\_73
- Track 22 : Cantare\_45
- Track 23 : E3\_gp150
- Track 24 : JeanGrey\_91

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

The start number called the most often in the published annotations is 14, it was called in 172 of the 187 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ading\_206, Adlitam\_204, Alice\_192, Amataga\_206, ArcherS7\_205, Asterius\_201, Astraea\_199, Atlantean\_205, Audrick\_207, Ava3\_204, Babyland\_208, BackyardAgain\_200, BadAgartude\_199, BananaFence\_202, Bangla1971\_205, Basquiat\_202, BeanWater\_197, BigCity\_214, Bigswole\_210, Bipolarisk\_203, Blackbrain\_202, Blackdragon\_200, Blubba\_201, Bonray\_207, Bread\_200, Breeniome\_204, Burrough\_207, Bxz1\_195, Cactojaque\_200, Cali\_198, Cane17\_196, Capablanca\_210, Caravan\_196, Catera\_198, Chergie21\_202, CharlieB\_199, ChaylaJr\_202, CherryTomatoes\_149, ChickenPhender\_201, Chomp\_204, CindyLou\_206, Colt\_196, Concombre\_210, DTDevon\_207, Daffodil\_210, Dandelion\_213, Darko\_204, Delilah\_203, Delylah\_207, Derek\_202, Dietrick\_194, DirtMonster\_198, DrPhinkDaddy\_202, Drazdys\_203, ET08\_193, EasyJones\_208, EggFarm\_214, EmToTheThree\_205, EmmaElysia\_208, Erdmann\_206, ErnieJ\_198, Essence\_202, Ewok\_204, Flabslab\_200, Fludd\_205, FoxtrotP1\_203, FrayBell\_208, FudgeTart\_200, Gabriel\_208, Gamgam\_206, Ghost\_205, Gizmo\_211, Grasshills\_213, Grungle\_189, Guwapp\_200, Halldule\_198, HyRo\_193, I3\_215, IkeLoa\_197, InigoMontoya\_208, InterFolia\_208, Iota\_200, Issimir\_201, Izajani\_203, JPickles\_201, Janiyra\_208, JayJay\_203, Jaygup\_201, Jedediah\_205, Jemmno\_204, Jessibeth14\_205, JulietS\_198, JustHall\_199, Kamryn\_204, Kboogie\_209, Khaleesi\_204, Koguma\_204, LRRHood\_198, Latch\_205, Lee7\_205, LifeSavor\_204, LinStu\_204, Littleton\_208, Loanshark\_202, LolaVinca\_203, LordLeafolot\_207, Lukilu\_196, Maby2021\_205, Mangeria\_206, Matsumoto\_204, McGee\_204, McWolfish\_202, Megamind\_202, Melpomini\_200, MikeLiesIn\_207, Mikro\_201,

MoMoMixon\_203, Momo\_206, Morizzled23\_202, Naija\_206, Napoleon13\_202, Nappy\_206, Naval22\_210, NedWong\_204, Ngannou\_202, Nidhogg\_206, NoodleTree\_211, Norm\_205, NuevoMundo\_208, ParkTD\_204, Patter\_206, Phlegm\_209, Phox\_206, Phusco\_203, Pier\_206, Pinkcreek\_189, Pio\_213, Pivoine\_206, Pleione\_209, Pupper\_148, PurduePete\_205, QBert\_197, Quasimodo\_207, Rabinovish\_198, Rahel\_206, Rizal\_197, RoMag\_200, Ronan\_201, Roots515\_207, SCentae\_147, Salacia\_205, Sauce\_201, ScoobyDoobyDoo\_186, ScottMcG\_198, Sebata\_206, Shaqnato\_196, Shelob\_206, ShiaLabeouf\_202, Shifa\_182, Shnickers\_203, Shrimp\_207, SilverDipper\_209, Skog\_208, SmallFry\_205, Spec\_200, Specks\_209, Sprinklers\_203, Spud\_199, SrishMeg2525\_202, StephanieG\_201, StubbySaigey\_210, Stubby\_189, Teardrop\_202, TinyTim\_203, Tonenili\_226, Tortoise16\_203, Trinitium\_201, Turret\_198, Tyke\_203, ValleyTerrace\_206, Wally\_203, Willis\_206, Yassified\_202, YemiJoy2021\_206, YoungMoneyMata\_203, Yucca\_205, Zalkecks\_204, Zeenon\_207, ZygoTaiga\_202,

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

- 

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

- Alok\_i\_63, Cantare\_45, Chidiebere\_66, ChisanaKitsune\_62, DalanDe\_61, E3\_gp150, Finch\_73, FlyingTortilla\_65, GMA6\_51, Gray\_66, Greely\_194, Hanem\_65, JeanGrey\_91, Kabocha\_67, Myrna\_188, Oogie\_65, Pakusa\_63, Phabba\_199, Phrappuccino\_115, RedWattleHog\_75, ScarletRaider\_64, Schomber\_64, Settecandela\_115, Stormageddon\_72, UBSmoodge\_67,

### Summary by start number:

Start 10:

- Found in 1 of 214 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 1 of 187
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finch\_73 (singleton),

Start 12:

- Found in 3 of 214 ( 1.4% ) 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: Greely\_194 (C2), Myrna\_188 (C2), Phabba\_199 (C2),

Start 13:

- Found in 1 of 214 ( 0.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JeanGrey\_91 (singleton),

Start 14:

- Found in 189 of 214 ( 88.3% ) of genes in pham
- Manual Annotations of this start: 172 of 187
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ading\_206 (C1), Adlitam\_204 (C1), Alice\_192 (C1), Amataga\_206 (C1), ArcherS7\_205 (C1), Asterius\_201 (C1), Astraea\_199 (C1), Atlantean\_205 (C1), Audrick\_207 (C1), Ava3\_204 (C1),

Babyland\_208 (C1), BackyardAgain\_200 (C1), BadAgartude\_199 (C1),  
 BananaFence\_202 (C1), Bangla1971\_205 (C1), Basquiat\_202 (C1), BeanWater\_197  
 (C1), BigCity\_214 (C1), Bigswole\_210 (C1), Bipolarisk\_203 (C1), Blackbrain\_202  
 (C1), Blackdragon\_200 (C1), Blubba\_201 (C1), Bonray\_207 (C1), Bread\_200 (C1),  
 Breeniome\_204 (C1), Burrough\_207 (C1), Bxz1\_195 (C1), Cactojaque\_200 (C1),  
 Cali\_198 (C1), Cane17\_196 (C1), Capablanca\_210 (C1), Caravan\_196 (C1),  
 Catera\_198 (C1), Chargie21\_202 (C1), CharlieB\_199 (C1), ChaylaJr\_202 (C1),  
 CherryTomatoes\_149 (DO), ChickenPhender\_201 (C1), Chomp\_204 (C1),  
 CindyLou\_206 (C1), Colt\_196 (C1), Concombre\_210 (C1), DTDevon\_207 (C1),  
 Daffodil\_210 (C1), Dandelion\_213 (C1), Darko\_204 (C1), Delilah\_203 (C1),  
 Delylah\_207 (C1), Derek\_202 (C1), Dietrick\_194 (C1), DirtMonster\_198 (C1),  
 DrPhinkDaddy\_202 (C1), Drazdys\_203 (C1), ET08\_193 (C1), EasyJones\_208 (C1),  
 EggyFarm\_214 (C1), EmToTheThree\_205 (C1), EmmaElysia\_208 (C1),  
 Erdmann\_206 (C1), ErnieJ\_198 (C1), Essence\_202 (C1), Ewok\_204 (C1),  
 Flabslab\_200 (C1), Fludd\_205 (C1), FoxtrotP1\_203 (C1), FrayBell\_208 (C1),  
 FudgeTart\_200 (C1), Gabriel\_208 (C1), Gamgam\_206 (C1), Ghost\_205 (C1),  
 Gizmo\_211 (C1), Grasshills\_213 (C1), Grungle\_189 (C1), Guwapp\_200 (C1),  
 Haldule\_198 (C1), HyRo\_193 (C1), I3\_215 (C1), IkeLoa\_197 (C1),  
 InigoMontoya\_208 (C1), InterFolia\_208 (C1), Iota\_200 (C1), Issimir\_201 (C1),  
 Izajani\_203 (C1), JPickles\_201 (C1), Janiyr\_208 (C1), JayJay\_203 (C1),  
 Jaygup\_201 (C1), Jedediah\_205 (C1), Jemmno\_204 (C1), Jessibeth14\_205 (C1),  
 JulietS\_198 (C1), JustHall\_199 (C1), Kamryn\_204 (C1), Kboogie\_209 (C1),  
 Khaleesi\_204 (C1), Koguma\_204 (C1), LRRHood\_198 (C1), Latch\_205 (C1),  
 Lee7\_205 (C1), LifeSavor\_204 (C1), LinStu\_204 (C1), Littleton\_208 (C1),  
 Loanshark\_202 (C1), LolaVinca\_203 (C1), LordLeafolot\_207 (C1), Lukilu\_196 (C1),  
 Maby2021\_205 (C1), Mangeria\_206 (C1), Matsumoto\_204 (C1), McGee\_204 (C1),  
 McWolfish\_202 (C1), Megamind\_202 (C1), Melpomini\_200 (C1), MikeLiesIn\_207  
 (C1), Mikro\_201 (C1), MoMoMixon\_203 (C1), Momo\_206 (C1), Morizzled23\_202  
 (C1), Naija\_206 (C1), Napoleon13\_202 (C1), Nappy\_206 (C1), Naval22\_210 (C1),  
 NedWong\_204 (C1), Ngannou\_202 (C1), Nidhogg\_206 (C1), NoodleTree\_211 (C1),  
 Norm\_205 (C1), NuevoMundo\_208 (C1), ParkTD\_204 (C1), Patter\_206 (C1),  
 Phlegm\_209 (C1), Phox\_206 (C1), Phusco\_203 (C1), Pier\_206 (C1), Pinkcreek\_189  
 (C1), Pio\_213 (C1), Pivoine\_206 (C1), Pleione\_209 (C1), Pupper\_148 (DO),  
 PurduePete\_205 (C1), QBert\_197 (C1), Quasimodo\_207 (C1), Rabinovish\_198 (C1),  
 Rahel\_206 (C1), Rizal\_197 (C1), RoMag\_200 (C1), Ronan\_201 (C1), Roots515\_207  
 (C1), SCentae\_147 (DO), Salacia\_205 (C1), Sauce\_201 (C1),  
 ScoobyDoobyDoo\_186 (C2), ScottMcG\_198 (C1), Sebata\_206 (C1), Shaqnato\_196  
 (C1), Shelob\_206 (C1), ShiaLabeouf\_202 (C1), Shifa\_182 (C1), Shnickers\_203 (C1),  
 Shrimp\_207 (C1), SilverDipper\_209 (C1), Skog\_208 (DO), SmallFry\_205 (C1),  
 Spec\_200 (C1), Specks\_209 (C1), Sprinklers\_203 (C1), Spud\_199 (C1),  
 SrishMeg2525\_202 (C1), StephanieG\_201 (C1), StubbySaigey\_210 (C1),  
 Stubby\_189 (C1), Teardrop\_202 (C1), TinyTim\_203 (C1), Tonenili\_226 (C1),  
 Tortoise16\_203 (C1), Trinitium\_201 (C1), Turret\_198 (C1), Tyke\_203 (C1),  
 ValleyTerrace\_206 (C1), Wally\_203 (C1), Willis\_206 (C1), Yassified\_202 (C1),  
 YemiJoy2021\_206 (C1), YoungMoneyMata\_203 (C1), Yucca\_205 (C1),  
 Zalkecks\_204 (C1), Zeenon\_207 (C1), ZygoTaiga\_202 (C1),

Start 15:

- Found in 2 of 214 ( 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: Phrappuccino\_115 (AA),  
Settecandela\_115 (AA),

Start 16:

- Found in 1 of 214 ( 0.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: E3\_gp150 (singleton),

Start 17:

- Found in 2 of 214 ( 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: RedWattleHog\_75 (DX), Stormageddon\_72 (DX),

Start 30:

- Found in 13 of 214 ( 6.1% ) of genes in pham
- Manual Annotations of this start: 5 of 187
- Called 61.5% of time when present
- Phage (with cluster) where this start called: Aloki\_63 (DQ), ChisanaKitsune\_62 (DQ), DalanDe\_61 (DQ), Gray\_66 (DQ), Kabocha\_67 (DQ), Oogie\_65 (DQ), Pakusa\_63 (DQ), Schomber\_64 (DQ),

Start 31:

- Found in 1 of 214 ( 0.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA6\_51 (DQ),

Start 35:

- Found in 1 of 214 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 1 of 187
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cantare\_45 (singleton),

Start 44:

- Found in 14 of 214 ( 6.5% ) of genes in pham
- Manual Annotations of this start: 2 of 187
- Called 35.7% of time when present
- Phage (with cluster) where this start called: Chidiebere\_66 (DQ), FlyingTortilla\_65 (DQ), Hanem\_65 (DQ), ScarletRaider\_64 (DQ), UBSmoodge\_67 (DQ),

**Summary by clusters:**

There are 7 clusters represented in this pham: AA, DO, singleton, DX, C2, C1, DQ,

Info for manual annotations of cluster AA:

- Start number 15 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster C1:

- Start number 14 was manually annotated 167 times for cluster C1.

Info for manual annotations of cluster C2:

- Start number 12 was manually annotated 2 times for cluster C2.

- Start number 14 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster DO:

- Start number 14 was manually annotated 4 times for cluster DO.

Info for manual annotations of cluster DQ:

- Start number 30 was manually annotated 5 times for cluster DQ.
- Start number 44 was manually annotated 2 times for cluster DQ.

Info for manual annotations of cluster DX:

- Start number 17 was manually annotated 2 times for cluster DX.

### **Gene Information:**

Gene: Ading\_206 Start: 110649, Stop: 111722, Start Num: 14

Candidate Starts for Ading\_206:

(9, 110622), (Start: 14 @110649 has 172 MA's), (19, 110682), (23, 110715), (33, 110805), (36, 110814), (46, 110910), (49, 110931), (95, 111339), (103, 111369), (107, 111393), (108, 111396), (118, 111456), (125, 111498), (134, 111558), (135, 111570), (141, 111609), (145, 111627), (148, 111633), (150, 111657), (158, 111693), (161, 111702), (165, 111717),

Gene: Adlitam\_204 Start: 109253, Stop: 110326, Start Num: 14

Candidate Starts for Adlitam\_204:

(9, 109226), (Start: 14 @109253 has 172 MA's), (19, 109286), (23, 109319), (33, 109409), (36, 109418), (46, 109514), (49, 109535), (95, 109943), (103, 109973), (107, 109997), (108, 110000), (118, 110060), (125, 110102), (134, 110162), (135, 110174), (141, 110213), (145, 110231), (148, 110237), (150, 110261), (158, 110297), (161, 110306), (165, 110321),

Gene: Alice\_192 Start: 109221, Stop: 110294, Start Num: 14

Candidate Starts for Alice\_192:

(9, 109194), (Start: 14 @109221 has 172 MA's), (19, 109254), (23, 109287), (33, 109377), (36, 109386), (46, 109482), (49, 109503), (95, 109911), (103, 109941), (107, 109965), (108, 109968), (118, 110028), (125, 110070), (134, 110130), (135, 110142), (141, 110181), (145, 110199), (148, 110205), (150, 110229), (158, 110265), (161, 110274), (165, 110289),

Gene: Alok\_i\_63 Start: 52730, Stop: 51792, Start Num: 30

Candidate Starts for Alok\_i\_63:

(Start: 30 @52730 has 5 MA's), (Start: 44 @52643 has 2 MA's), (56, 52502), (57, 52496), (64, 52430), (67, 52412), (75, 52325), (76, 52313), (83, 52271), (84, 52268), (86, 52256), (94, 52181), (99, 52151), (100, 52148), (105, 52121), (119, 52040), (122, 52031), (129, 51980), (143, 51902), (162, 51818),

Gene: Amataga\_206 Start: 109065, Stop: 110138, Start Num: 14

Candidate Starts for Amataga\_206:

(9, 109038), (Start: 14 @109065 has 172 MA's), (19, 109098), (23, 109131), (33, 109221), (36, 109230), (46, 109326), (49, 109347), (95, 109755), (103, 109785), (107, 109809), (108, 109812), (118, 109872), (125, 109914), (134, 109974), (135, 109986), (141, 110025), (145, 110043), (148, 110049), (150, 110073), (158, 110109), (161, 110118), (165, 110133),

Gene: ArcherS7\_205 Start: 110107, Stop: 111180, Start Num: 14

Candidate Starts for ArcherS7\_205:

(9, 110080), (Start: 14 @110107 has 172 MA's), (19, 110140), (23, 110173), (33, 110263), (36, 110272), (46, 110368), (49, 110389), (95, 110797), (103, 110827), (107, 110851), (108, 110854), (118, 110914), (125, 110956), (134, 111016), (135, 111028), (141, 111067), (145, 111085), (148, 111091), (150, 111115), (158, 111151), (161, 111160), (165, 111175),

Gene: Asterius\_201 Start: 109474, Stop: 110547, Start Num: 14

Candidate Starts for Asterius\_201:

(9, 109447), (Start: 14 @109474 has 172 MA's), (19, 109507), (23, 109540), (33, 109630), (36, 109639), (46, 109735), (49, 109756), (95, 110164), (103, 110194), (107, 110218), (108, 110221), (118, 110281), (125, 110323), (134, 110383), (135, 110395), (141, 110434), (145, 110452), (148, 110458), (150, 110482), (158, 110518), (161, 110527), (165, 110542),

Gene: Astraea\_199 Start: 108669, Stop: 109742, Start Num: 14

Candidate Starts for Astraea\_199:

(9, 108642), (Start: 14 @108669 has 172 MA's), (19, 108702), (23, 108735), (33, 108825), (36, 108834), (46, 108930), (49, 108951), (95, 109359), (103, 109389), (107, 109413), (108, 109416), (118, 109476), (125, 109518), (134, 109578), (135, 109590), (141, 109629), (145, 109647), (148, 109653), (150, 109677), (158, 109713), (161, 109722), (165, 109737),

Gene: Atlantean\_205 Start: 109065, Stop: 110138, Start Num: 14

Candidate Starts for Atlantean\_205:

(9, 109038), (Start: 14 @109065 has 172 MA's), (19, 109098), (23, 109131), (33, 109221), (36, 109230), (46, 109326), (49, 109347), (95, 109755), (103, 109785), (107, 109809), (108, 109812), (118, 109872), (125, 109914), (134, 109974), (135, 109986), (141, 110025), (145, 110043), (148, 110049), (150, 110073), (158, 110109), (161, 110118), (165, 110133),

Gene: Audrick\_207 Start: 108955, Stop: 110028, Start Num: 14

Candidate Starts for Audrick\_207:

(9, 108928), (Start: 14 @108955 has 172 MA's), (19, 108988), (23, 109021), (33, 109111), (36, 109120), (46, 109216), (49, 109237), (95, 109645), (103, 109675), (107, 109699), (108, 109702), (118, 109762), (125, 109804), (134, 109864), (135, 109876), (141, 109915), (145, 109933), (148, 109939), (150, 109963), (158, 109999), (161, 110008), (165, 110023),

Gene: Ava3\_204 Start: 109499, Stop: 110572, Start Num: 14

Candidate Starts for Ava3\_204:

(9, 109472), (Start: 14 @109499 has 172 MA's), (19, 109532), (23, 109565), (33, 109655), (36, 109664), (46, 109760), (49, 109781), (95, 110189), (103, 110219), (107, 110243), (108, 110246), (118, 110306), (125, 110348), (134, 110408), (135, 110420), (141, 110459), (145, 110477), (148, 110483), (150, 110507), (158, 110543), (161, 110552), (165, 110567),

Gene: Babyland\_208 Start: 109842, Stop: 110915, Start Num: 14

Candidate Starts for Babyland\_208:

(9, 109815), (Start: 14 @109842 has 172 MA's), (19, 109875), (23, 109908), (33, 109998), (36, 110007), (46, 110103), (49, 110124), (95, 110532), (103, 110562), (107, 110586), (108, 110589), (118, 110649), (125, 110691), (134, 110751), (135, 110763), (141, 110802), (145, 110820), (148, 110826), (150, 110850), (158, 110886), (161, 110895), (165, 110910),

Gene: BackyardAgain\_200 Start: 107751, Stop: 108824, Start Num: 14

Candidate Starts for BackyardAgain\_200:

(9, 107724), (Start: 14 @107751 has 172 MA's), (19, 107784), (23, 107817), (33, 107907), (36, 107916), (46, 108012), (49, 108033), (95, 108441), (103, 108471), (107, 108495), (108, 108498), (118, 108558), (125, 108600), (134, 108660), (135, 108672), (141, 108711), (145, 108729), (148, 108735), (150, 108759), (158, 108795), (161, 108804), (165, 108819),



Gene: BadAgartude\_199 Start: 109164, Stop: 110237, Start Num: 14

Candidate Starts for BadAgartude\_199:

(9, 109137), (Start: 14 @109164 has 172 MA's), (19, 109197), (23, 109230), (33, 109320), (36, 109329), (46, 109425), (49, 109446), (95, 109854), (103, 109884), (107, 109908), (108, 109911), (118, 109971), (125, 110013), (134, 110073), (135, 110085), (141, 110124), (145, 110142), (148, 110148), (150, 110172), (158, 110208), (161, 110217), (165, 110232),

Gene: BananaFence\_202 Start: 109298, Stop: 110371, Start Num: 14

Candidate Starts for BananaFence\_202:

(9, 109271), (Start: 14 @109298 has 172 MA's), (19, 109331), (23, 109364), (33, 109454), (36, 109463), (46, 109559), (49, 109580), (95, 109988), (103, 110018), (107, 110042), (108, 110045), (118, 110105), (125, 110147), (134, 110207), (135, 110219), (141, 110258), (145, 110276), (148, 110282), (150, 110306), (158, 110342), (161, 110351), (165, 110366),

Gene: Bangla1971\_205 Start: 109071, Stop: 110144, Start Num: 14

Candidate Starts for Bangla1971\_205:

(9, 109044), (Start: 14 @109071 has 172 MA's), (19, 109104), (23, 109137), (33, 109227), (36, 109236), (46, 109332), (49, 109353), (95, 109761), (103, 109791), (107, 109815), (108, 109818), (118, 109878), (125, 109920), (134, 109980), (135, 109992), (141, 110031), (145, 110049), (148, 110055), (150, 110079), (158, 110115), (161, 110124), (165, 110139),

Gene: Basquiat\_202 Start: 108577, Stop: 109650, Start Num: 14

Candidate Starts for Basquiat\_202:

(9, 108550), (Start: 14 @108577 has 172 MA's), (19, 108610), (23, 108643), (33, 108733), (36, 108742), (46, 108838), (49, 108859), (95, 109267), (103, 109297), (107, 109321), (108, 109324), (118, 109384), (125, 109426), (134, 109486), (135, 109498), (141, 109537), (145, 109555), (148, 109561), (150, 109585), (158, 109621), (161, 109630), (165, 109645),

Gene: BeanWater\_197 Start: 109103, Stop: 110176, Start Num: 14

Candidate Starts for BeanWater\_197:

(9, 109076), (Start: 14 @109103 has 172 MA's), (19, 109136), (23, 109169), (33, 109259), (36, 109268), (46, 109364), (49, 109385), (95, 109793), (103, 109823), (107, 109847), (108, 109850), (118, 109910), (125, 109952), (134, 110012), (135, 110024), (141, 110063), (145, 110081), (148, 110087), (150, 110111), (158, 110147), (161, 110156), (165, 110171),

Gene: BigCity\_214 Start: 112674, Stop: 113747, Start Num: 14

Candidate Starts for BigCity\_214:

(9, 112647), (Start: 14 @112674 has 172 MA's), (19, 112707), (23, 112740), (33, 112830), (36, 112839), (46, 112935), (49, 112956), (95, 113364), (103, 113394), (107, 113418), (108, 113421), (118, 113481), (125, 113523), (134, 113583), (135, 113595), (141, 113634), (145, 113652), (148, 113658), (150, 113682), (158, 113718), (161, 113727), (165, 113742),

Gene: Bigswole\_210 Start: 112525, Stop: 113598, Start Num: 14

Candidate Starts for Bigswole\_210:

(9, 112498), (Start: 14 @112525 has 172 MA's), (19, 112558), (23, 112591), (33, 112681), (36, 112690), (46, 112786), (49, 112807), (95, 113215), (103, 113245), (107, 113269), (108, 113272), (118, 113332), (125, 113374), (134, 113434), (135, 113446), (141, 113485), (145, 113503), (148, 113509), (150, 113533), (158, 113569), (161, 113578), (165, 113593),

Gene: Bipolarisk\_203 Start: 109768, Stop: 110841, Start Num: 14

Candidate Starts for Bipolarisk\_203:

(9, 109741), (Start: 14 @109768 has 172 MA's), (19, 109801), (23, 109834), (33, 109924), (36, 109933), (46, 110029), (49, 110050), (95, 110458), (103, 110488), (107, 110512), (108, 110515), (118, 110575), (125, 110617), (134, 110677), (135, 110689), (141, 110728), (145, 110746), (148, 110752), (150, 110776), (158, 110812), (161, 110821), (165, 110836),

Gene: Blackbrain\_202 Start: 109662, Stop: 110735, Start Num: 14

Candidate Starts for Blackbrain\_202:

(9, 109635), (Start: 14 @109662 has 172 MA's), (19, 109695), (23, 109728), (33, 109818), (36, 109827), (46, 109923), (49, 109944), (95, 110352), (103, 110382), (107, 110406), (108, 110409), (118, 110469), (125, 110511), (134, 110571), (135, 110583), (141, 110622), (145, 110640), (148, 110646), (150, 110670), (158, 110706), (161, 110715), (165, 110730),

Gene: Blackdragon\_200 Start: 109401, Stop: 110474, Start Num: 14

Candidate Starts for Blackdragon\_200:

(9, 109374), (Start: 14 @109401 has 172 MA's), (19, 109434), (23, 109467), (33, 109557), (36, 109566), (46, 109662), (49, 109683), (95, 110091), (103, 110121), (107, 110145), (108, 110148), (118, 110208), (125, 110250), (134, 110310), (135, 110322), (141, 110361), (145, 110379), (148, 110385), (150, 110409), (158, 110445), (161, 110454), (165, 110469),

Gene: Blubba\_201 Start: 112787, Stop: 113860, Start Num: 14

Candidate Starts for Blubba\_201:

(6, 112637), (Start: 14 @112787 has 172 MA's), (19, 112820), (23, 112853), (33, 112943), (36, 112952), (46, 113048), (49, 113069), (95, 113477), (103, 113507), (107, 113531), (108, 113534), (118, 113594), (125, 113636), (134, 113696), (135, 113708), (141, 113747), (145, 113765), (148, 113771), (150, 113795), (158, 113831), (161, 113840), (165, 113855),

Gene: Bonray\_207 Start: 111170, Stop: 112243, Start Num: 14

Candidate Starts for Bonray\_207:

(9, 111143), (Start: 14 @111170 has 172 MA's), (19, 111203), (23, 111236), (33, 111326), (36, 111335), (46, 111431), (49, 111452), (95, 111860), (103, 111890), (107, 111914), (108, 111917), (118, 111977), (125, 112019), (134, 112079), (135, 112091), (141, 112130), (145, 112148), (148, 112154), (150, 112178), (158, 112214), (161, 112223), (165, 112238),

Gene: Bread\_200 Start: 109168, Stop: 110241, Start Num: 14

Candidate Starts for Bread\_200:

(9, 109141), (Start: 14 @109168 has 172 MA's), (19, 109201), (23, 109234), (33, 109324), (36, 109333), (46, 109429), (49, 109450), (95, 109858), (103, 109888), (107, 109912), (108, 109915), (118, 109975), (125, 110017), (134, 110077), (135, 110089), (141, 110128), (145, 110146), (148, 110152), (150, 110176), (158, 110212), (161, 110221), (165, 110236),

Gene: Breeniome\_204 Start: 108622, Stop: 109695, Start Num: 14

Candidate Starts for Breeniome\_204:

(9, 108595), (Start: 14 @108622 has 172 MA's), (19, 108655), (23, 108688), (33, 108778), (36, 108787), (46, 108883), (49, 108904), (95, 109312), (103, 109342), (107, 109366), (108, 109369), (118, 109429), (125, 109471), (134, 109531), (135, 109543), (141, 109582), (145, 109600), (148, 109606), (150, 109630), (158, 109666), (161, 109675), (165, 109690),

Gene: Burrough\_207 Start: 110938, Stop: 112011, Start Num: 14

Candidate Starts for Burrough\_207:

(9, 110911), (Start: 14 @110938 has 172 MA's), (19, 110971), (23, 111004), (33, 111094), (36, 111103), (46, 111199), (49, 111220), (95, 111628), (103, 111658), (107, 111682), (108, 111685), (118, 111745), (125, 111787), (134, 111847), (135, 111859), (141, 111898), (145, 111916), (148, 111922), (150, 111946), (158, 111982), (161, 111991), (165, 112006),

Gene: Bxz1\_195 Start: 112137, Stop: 113210, Start Num: 14

Candidate Starts for Bxz1\_195:

(9, 112110), (Start: 14 @112137 has 172 MA's), (19, 112170), (23, 112203), (33, 112293), (36, 112302), (46, 112398), (49, 112419), (95, 112827), (103, 112857), (107, 112881), (108, 112884), (118, 112944), (125, 112986), (134, 113046), (135, 113058), (141, 113097), (145, 113115), (148, 113121), (150, 113145), (158, 113181), (161, 113190), (165, 113205),

Gene: Cactojaque\_200 Start: 108597, Stop: 109670, Start Num: 14

Candidate Starts for Cactojaque\_200:

(9, 108570), (Start: 14 @108597 has 172 MA's), (19, 108630), (23, 108663), (33, 108753), (36, 108762), (46, 108858), (49, 108879), (95, 109287), (103, 109317), (107, 109341), (108, 109344), (118, 109404), (125, 109446), (134, 109506), (135, 109518), (141, 109557), (145, 109575), (148, 109581), (150, 109605), (158, 109641), (161, 109650), (165, 109665),

Gene: Cali\_198 Start: 110544, Stop: 111617, Start Num: 14

Candidate Starts for Cali\_198:

(9, 110517), (Start: 14 @110544 has 172 MA's), (19, 110577), (23, 110610), (33, 110700), (36, 110709), (46, 110805), (49, 110826), (95, 111234), (103, 111264), (107, 111288), (108, 111291), (118, 111351), (125, 111393), (134, 111453), (135, 111465), (141, 111504), (145, 111522), (148, 111528), (150, 111552), (158, 111588), (161, 111597), (165, 111612),

Gene: Cane17\_196 Start: 113196, Stop: 114269, Start Num: 14

Candidate Starts for Cane17\_196:

(6, 113046), (Start: 14 @113196 has 172 MA's), (19, 113229), (23, 113262), (33, 113352), (36, 113361), (46, 113457), (49, 113478), (95, 113886), (103, 113916), (107, 113940), (108, 113943), (118, 114003), (125, 114045), (134, 114105), (135, 114117), (141, 114156), (145, 114174), (148, 114180), (150, 114204), (158, 114240), (161, 114249), (165, 114264),

Gene: Cantare\_45 Start: 41518, Stop: 40511, Start Num: 35

Candidate Starts for Cantare\_45:

(Start: 35 @41518 has 1 MA's), (38, 41479), (39, 41476), (Start: 44 @41452 has 2 MA's), (47, 41413), (53, 41332), (73, 41143), (91, 41005), (92, 40999), (94, 40984), (101, 40948), (102, 40945), (120, 40840), (124, 40819), (131, 40780), (147, 40675), (149, 40666), (150, 40648), (155, 40627), (166, 40582), (168, 40555), (170, 40531),

Gene: Capablanca\_210 Start: 111765, Stop: 112838, Start Num: 14

Candidate Starts for Capablanca\_210:

(9, 111738), (Start: 14 @111765 has 172 MA's), (19, 111798), (23, 111831), (33, 111921), (36, 111930), (46, 112026), (49, 112047), (95, 112455), (103, 112485), (107, 112509), (108, 112512), (118, 112572), (125, 112614), (134, 112674), (135, 112686), (141, 112725), (145, 112743), (148, 112749), (150, 112773), (158, 112809), (161, 112818), (165, 112833),

Gene: Caravan\_196 Start: 109885, Stop: 110958, Start Num: 14

Candidate Starts for Caravan\_196:

(9, 109858), (Start: 14 @109885 has 172 MA's), (19, 109918), (23, 109951), (33, 110041), (36, 110050), (46, 110146), (49, 110167), (95, 110575), (103, 110605), (107, 110629), (108, 110632), (118, 110692), (125, 110734), (134, 110794), (135, 110806), (141, 110845), (145, 110863), (148, 110869), (150, 110893), (158, 110929), (161, 110938), (165, 110953),

Gene: Catera\_198 Start: 108278, Stop: 109351, Start Num: 14

Candidate Starts for Catera\_198:

(9, 108251), (Start: 14 @108278 has 172 MA's), (19, 108311), (23, 108344), (33, 108434), (36, 108443), (46, 108539), (49, 108560), (95, 108968), (103, 108998), (107, 109022), (108, 109025), (118, 109085), (125, 109127), (134, 109187), (135, 109199), (141, 109238), (145, 109256), (148, 109262), (150, 109286), (158, 109322), (161, 109331), (165, 109346),

Gene: Chargie21\_202 Start: 108577, Stop: 109650, Start Num: 14

Candidate Starts for Chargie21\_202:

(9, 108550), (Start: 14 @108577 has 172 MA's), (19, 108610), (23, 108643), (33, 108733), (36, 108742), (46, 108838), (49, 108859), (95, 109267), (103, 109297), (107, 109321), (108, 109324), (118, 109384), (125, 109426), (134, 109486), (135, 109498), (141, 109537), (145, 109555), (148, 109561), (150, 109585), (158, 109621), (161, 109630), (165, 109645),

Gene: CharlieB\_199 Start: 109305, Stop: 110378, Start Num: 14

Candidate Starts for CharlieB\_199:

(9, 109278), (Start: 14 @109305 has 172 MA's), (19, 109338), (23, 109371), (33, 109461), (36, 109470), (46, 109566), (49, 109587), (95, 109995), (103, 110025), (107, 110049), (108, 110052), (118, 110112), (125, 110154), (134, 110214), (135, 110226), (141, 110265), (145, 110283), (148, 110289), (150, 110313), (158, 110349), (161, 110358), (165, 110373),

Gene: ChaylaJr\_202 Start: 109005, Stop: 110078, Start Num: 14

Candidate Starts for ChaylaJr\_202:

(9, 108978), (Start: 14 @109005 has 172 MA's), (19, 109038), (23, 109071), (33, 109161), (36, 109170), (46, 109266), (49, 109287), (95, 109695), (103, 109725), (107, 109749), (108, 109752), (118, 109812), (125, 109854), (134, 109914), (135, 109926), (141, 109965), (145, 109983), (148, 109989), (150, 110013), (158, 110049), (161, 110058), (165, 110073),

Gene: CherryTomatoes\_149 Start: 102880, Stop: 103995, Start Num: 14

Candidate Starts for CherryTomatoes\_149:

(5, 102616), (6, 102736), (Start: 14 @102880 has 172 MA's), (19, 102922), (24, 102964), (26, 103000), (36, 103057), (42, 103114), (48, 103168), (49, 103174), (61, 103288), (64, 103345), (66, 103360), (70, 103381), (85, 103516), (110, 103663), (112, 103669), (117, 103705), (130, 103783), (140, 103855), (156, 103933), (163, 103957),

Gene: ChickenPhender\_201 Start: 108724, Stop: 109797, Start Num: 14

Candidate Starts for ChickenPhender\_201:

(9, 108697), (Start: 14 @108724 has 172 MA's), (19, 108757), (23, 108790), (33, 108880), (36, 108889), (46, 108985), (49, 109006), (95, 109414), (103, 109444), (107, 109468), (108, 109471), (118, 109531), (125, 109573), (134, 109633), (135, 109645), (141, 109684), (145, 109702), (148, 109708), (150, 109732), (158, 109768), (161, 109777), (165, 109792),

Gene: Chidiebere\_66 Start: 53174, Stop: 52323, Start Num: 44

Candidate Starts for Chidiebere\_66:

(Start: 30 @53261 has 5 MA's), (Start: 44 @53174 has 2 MA's), (56, 53033), (57, 53027), (64, 52961), (67, 52943), (75, 52856), (76, 52844), (83, 52802), (84, 52799), (86, 52787), (94, 52712), (99, 52682), (100, 52679), (105, 52652), (119, 52571), (122, 52562), (129, 52511), (143, 52433), (162, 52349),

Gene: ChisanaKitsune\_62 Start: 52034, Stop: 51096, Start Num: 30

Candidate Starts for ChisanaKitsune\_62:

(Start: 30 @52034 has 5 MA's), (Start: 44 @51947 has 2 MA's), (45, 51941), (56, 51806), (57, 51800), (64, 51734), (67, 51716), (68, 51704), (75, 51629), (76, 51617), (83, 51575), (84, 51572), (86, 51560), (94, 51485), (99, 51455), (105, 51425), (106, 51419), (119, 51344), (122, 51335), (129, 51284), (143, 51206), (162, 51122),

Gene: Chomp\_204 Start: 110354, Stop: 111427, Start Num: 14

Candidate Starts for Chomp\_204:

(9, 110327), (Start: 14 @110354 has 172 MA's), (19, 110387), (23, 110420), (33, 110510), (36, 110519), (46, 110615), (49, 110636), (95, 111044), (103, 111074), (107, 111098), (108, 111101), (118, 111161), (125, 111203), (134, 111263), (135, 111275), (141, 111314), (145, 111332), (148, 111338), (150, 111362), (158, 111398), (161, 111407), (165, 111422),

Gene: CindyLou\_206 Start: 110614, Stop: 111687, Start Num: 14

Candidate Starts for CindyLou\_206:

(9, 110587), (Start: 14 @110614 has 172 MA's), (19, 110647), (23, 110680), (33, 110770), (36, 110779), (46, 110875), (49, 110896), (95, 111304), (103, 111334), (107, 111358), (108, 111361), (118, 111421), (125, 111463), (134, 111523), (135, 111535), (141, 111574), (145, 111592), (148, 111598), (150, 111622), (158, 111658), (161, 111667), (165, 111682),

Gene: Colt\_196 Start: 112427, Stop: 113500, Start Num: 14

Candidate Starts for Colt\_196:

(6, 112277), (Start: 14 @112427 has 172 MA's), (19, 112460), (23, 112493), (33, 112583), (36, 112592), (46, 112688), (49, 112709), (95, 113117), (103, 113147), (107, 113171), (108, 113174), (118, 113234), (125, 113276), (134, 113336), (135, 113348), (141, 113387), (145, 113405), (148, 113411), (150, 113435), (158, 113471), (161, 113480), (165, 113495),

Gene: Concombres\_210 Start: 112217, Stop: 113290, Start Num: 14

Candidate Starts for Concombres\_210:

(9, 112190), (Start: 14 @112217 has 172 MA's), (19, 112250), (23, 112283), (33, 112373), (36, 112382), (46, 112478), (49, 112499), (95, 112907), (103, 112937), (107, 112961), (108, 112964), (118, 113024), (125, 113066), (134, 113126), (135, 113138), (141, 113177), (145, 113195), (148, 113201), (150, 113225), (158, 113261), (161, 113270), (165, 113285),

Gene: DTDevon\_207 Start: 111103, Stop: 112176, Start Num: 14

Candidate Starts for DTDevon\_207:

(9, 111076), (Start: 14 @111103 has 172 MA's), (19, 111136), (23, 111169), (33, 111259), (36, 111268), (46, 111364), (49, 111385), (95, 111793), (103, 111823), (107, 111847), (108, 111850), (118, 111910), (125, 111952), (134, 112012), (135, 112024), (141, 112063), (145, 112081), (148, 112087), (150, 112111), (158, 112147), (161, 112156), (165, 112171),

Gene: Daffodil\_210 Start: 110068, Stop: 111141, Start Num: 14

Candidate Starts for Daffodil\_210:

(9, 110041), (Start: 14 @110068 has 172 MA's), (19, 110101), (23, 110134), (33, 110224), (36, 110233), (46, 110329), (49, 110350), (95, 110758), (103, 110788), (107, 110812), (108, 110815), (118, 110875), (125, 110917), (134, 110977), (135, 110989), (141, 111028), (145, 111046), (148, 111052), (150, 111076), (158, 111112), (161, 111121), (165, 111136),

Gene: DalanDe\_61 Start: 55926, Stop: 54979, Start Num: 30

Candidate Starts for DalanDe\_61:

(Start: 30 @55926 has 5 MA's), (34, 55911), (41, 55854), (Start: 44 @55839 has 2 MA's), (56, 55698), (76, 55506), (78, 55494), (83, 55464), (94, 55374), (99, 55344), (105, 55314), (111, 55284), (120, 55230), (143, 55089), (146, 55077), (157, 55017), (159, 55011), (162, 55005), (166, 54987),

Gene: Dandelion\_213 Start: 113701, Stop: 114774, Start Num: 14

Candidate Starts for Dandelion\_213:

(9, 113674), (Start: 14 @113701 has 172 MA's), (19, 113734), (23, 113767), (33, 113857), (36, 113866), (46, 113962), (49, 113983), (95, 114391), (103, 114421), (107, 114445), (108, 114448), (118, 114508), (125, 114550), (134, 114610), (135, 114622), (141, 114661), (145, 114679), (148, 114685),

(150, 114709), (158, 114745), (161, 114754), (165, 114769),

Gene: Darko\_204 Start: 109302, Stop: 110375, Start Num: 14

Candidate Starts for Darko\_204:

(9, 109275), (Start: 14 @109302 has 172 MA's), (19, 109335), (23, 109368), (33, 109458), (36, 109467), (46, 109563), (49, 109584), (95, 109992), (103, 110022), (107, 110046), (108, 110049), (118, 110109), (125, 110151), (134, 110211), (135, 110223), (141, 110262), (145, 110280), (148, 110286), (150, 110310), (158, 110346), (161, 110355), (165, 110370),

Gene: Delilah\_203 Start: 110186, Stop: 111259, Start Num: 14

Candidate Starts for Delilah\_203:

(9, 110159), (Start: 14 @110186 has 172 MA's), (19, 110219), (23, 110252), (33, 110342), (36, 110351), (46, 110447), (49, 110468), (95, 110876), (103, 110906), (107, 110930), (108, 110933), (118, 110993), (125, 111035), (134, 111095), (135, 111107), (141, 111146), (145, 111164), (148, 111170), (150, 111194), (158, 111230), (161, 111239), (165, 111254),

Gene: Delylah\_207 Start: 110475, Stop: 111548, Start Num: 14

Candidate Starts for Delylah\_207:

(9, 110448), (Start: 14 @110475 has 172 MA's), (19, 110508), (23, 110541), (33, 110631), (36, 110640), (46, 110736), (49, 110757), (95, 111165), (103, 111195), (107, 111219), (108, 111222), (118, 111282), (125, 111324), (134, 111384), (135, 111396), (141, 111435), (145, 111453), (148, 111459), (150, 111483), (158, 111519), (161, 111528), (165, 111543),

Gene: Derek\_202 Start: 109631, Stop: 110704, Start Num: 14

Candidate Starts for Derek\_202:

(9, 109604), (Start: 14 @109631 has 172 MA's), (19, 109664), (23, 109697), (33, 109787), (36, 109796), (46, 109892), (49, 109913), (95, 110321), (103, 110351), (107, 110375), (108, 110378), (118, 110438), (125, 110480), (134, 110540), (135, 110552), (141, 110591), (145, 110609), (148, 110615), (150, 110639), (158, 110675), (161, 110684), (165, 110699),

Gene: Dietrick\_194 Start: 108307, Stop: 109380, Start Num: 14

Candidate Starts for Dietrick\_194:

(9, 108280), (Start: 14 @108307 has 172 MA's), (19, 108340), (23, 108373), (33, 108463), (36, 108472), (46, 108568), (49, 108589), (95, 108997), (103, 109027), (107, 109051), (108, 109054), (118, 109114), (125, 109156), (134, 109216), (135, 109228), (141, 109267), (145, 109285), (148, 109291), (150, 109315), (158, 109351), (161, 109360), (165, 109375),

Gene: DirtMonster\_198 Start: 109547, Stop: 110620, Start Num: 14

Candidate Starts for DirtMonster\_198:

(9, 109520), (Start: 14 @109547 has 172 MA's), (19, 109580), (23, 109613), (33, 109703), (36, 109712), (46, 109808), (49, 109829), (95, 110237), (103, 110267), (107, 110291), (108, 110294), (118, 110354), (125, 110396), (134, 110456), (135, 110468), (141, 110507), (145, 110525), (148, 110531), (150, 110555), (158, 110591), (161, 110600), (165, 110615),

Gene: DrPhinkDaddy\_202 Start: 110846, Stop: 111919, Start Num: 14

Candidate Starts for DrPhinkDaddy\_202:

(9, 110819), (Start: 14 @110846 has 172 MA's), (19, 110879), (23, 110912), (33, 111002), (36, 111011), (46, 111107), (49, 111128), (95, 111536), (103, 111566), (107, 111590), (108, 111593), (118, 111653), (125, 111695), (134, 111755), (135, 111767), (141, 111806), (145, 111824), (148, 111830), (150, 111854), (158, 111890), (161, 111899), (165, 111914),

Gene: Drazdys\_203 Start: 109748, Stop: 110821, Start Num: 14

Candidate Starts for Drazdys\_203:

(9, 109721), (Start: 14 @109748 has 172 MA's), (19, 109781), (23, 109814), (33, 109904), (36, 109913), (46, 110009), (49, 110030), (95, 110438), (103, 110468), (107, 110492), (108, 110495), (118, 110555), (125, 110597), (134, 110657), (135, 110669), (141, 110708), (145, 110726), (148, 110732), (150, 110756), (158, 110792), (161, 110801), (165, 110816),

Gene: E3\_gp150 Start: 99938, Stop: 101044, Start Num: 16

Candidate Starts for E3\_gp150:

(16, 99938), (49, 100202), (65, 100355), (69, 100373), (80, 100487), (88, 100550), (104, 100682), (110, 100712), (112, 100718), (128, 100847), (130, 100853), (132, 100865), (145, 100949), (152, 100985), (158, 101015), (161, 101024),

Gene: ET08\_193 Start: 109339, Stop: 110412, Start Num: 14

Candidate Starts for ET08\_193:

(9, 109312), (Start: 14 @109339 has 172 MA's), (19, 109372), (23, 109405), (33, 109495), (36, 109504), (46, 109600), (49, 109621), (95, 110029), (103, 110059), (107, 110083), (108, 110086), (118, 110146), (125, 110188), (134, 110248), (135, 110260), (141, 110299), (145, 110317), (148, 110323), (150, 110347), (158, 110383), (161, 110392), (165, 110407),

Gene: EasyJones\_208 Start: 109820, Stop: 110893, Start Num: 14

Candidate Starts for EasyJones\_208:

(9, 109793), (Start: 14 @109820 has 172 MA's), (19, 109853), (23, 109886), (33, 109976), (36, 109985), (46, 110081), (49, 110102), (95, 110510), (103, 110540), (107, 110564), (108, 110567), (118, 110627), (125, 110669), (134, 110729), (135, 110741), (141, 110780), (145, 110798), (148, 110804), (150, 110828), (158, 110864), (161, 110873), (165, 110888),

Gene: EggyFarm\_214 Start: 112675, Stop: 113748, Start Num: 14

Candidate Starts for EggyFarm\_214:

(9, 112648), (Start: 14 @112675 has 172 MA's), (19, 112708), (23, 112741), (33, 112831), (36, 112840), (46, 112936), (49, 112957), (95, 113365), (103, 113395), (107, 113419), (108, 113422), (118, 113482), (125, 113524), (134, 113584), (135, 113596), (141, 113635), (145, 113653), (148, 113659), (150, 113683), (158, 113719), (161, 113728), (165, 113743),

Gene: EmToTheThree\_205 Start: 110219, Stop: 111292, Start Num: 14

Candidate Starts for EmToTheThree\_205:

(9, 110192), (Start: 14 @110219 has 172 MA's), (19, 110252), (23, 110285), (33, 110375), (36, 110384), (46, 110480), (49, 110501), (95, 110909), (103, 110939), (107, 110963), (108, 110966), (118, 111026), (125, 111068), (134, 111128), (135, 111140), (141, 111179), (145, 111197), (148, 111203), (150, 111227), (158, 111263), (161, 111272), (165, 111287),

Gene: EmmaElysia\_208 Start: 110238, Stop: 111311, Start Num: 14

Candidate Starts for EmmaElysia\_208:

(9, 110211), (Start: 14 @110238 has 172 MA's), (19, 110271), (23, 110304), (33, 110394), (36, 110403), (46, 110499), (49, 110520), (95, 110928), (103, 110958), (107, 110982), (108, 110985), (118, 111045), (125, 111087), (134, 111147), (135, 111159), (141, 111198), (145, 111216), (148, 111222), (150, 111246), (158, 111282), (161, 111291), (165, 111306),

Gene: Erdmann\_206 Start: 110177, Stop: 111250, Start Num: 14

Candidate Starts for Erdmann\_206:

(9, 110150), (Start: 14 @110177 has 172 MA's), (19, 110210), (23, 110243), (33, 110333), (36, 110342), (46, 110438), (49, 110459), (95, 110867), (103, 110897), (107, 110921), (108, 110924), (118, 110984), (125, 111026), (134, 111086), (135, 111098), (141, 111137), (145, 111155), (148, 111161), (150, 111185), (158, 111221), (161, 111230), (165, 111245),

Gene: ErnieJ\_198 Start: 107999, Stop: 109072, Start Num: 14

Candidate Starts for ErnieJ\_198:

(9, 107972), (Start: 14 @107999 has 172 MA's), (19, 108032), (23, 108065), (33, 108155), (36, 108164), (46, 108260), (49, 108281), (95, 108689), (103, 108719), (107, 108743), (108, 108746), (118, 108806), (125, 108848), (134, 108908), (135, 108920), (141, 108959), (145, 108977), (148, 108983), (150, 109007), (158, 109043), (161, 109052), (165, 109067),

Gene: Essence\_202 Start: 108960, Stop: 110033, Start Num: 14

Candidate Starts for Essence\_202:

(9, 108933), (Start: 14 @108960 has 172 MA's), (19, 108993), (23, 109026), (33, 109116), (36, 109125), (46, 109221), (49, 109242), (95, 109650), (103, 109680), (107, 109704), (108, 109707), (118, 109767), (125, 109809), (134, 109869), (135, 109881), (141, 109920), (145, 109938), (148, 109944), (150, 109968), (158, 110004), (161, 110013), (165, 110028),

Gene: Ewok\_204 Start: 110096, Stop: 111169, Start Num: 14

Candidate Starts for Ewok\_204:

(9, 110069), (Start: 14 @110096 has 172 MA's), (19, 110129), (23, 110162), (33, 110252), (36, 110261), (46, 110357), (49, 110378), (95, 110786), (103, 110816), (107, 110840), (108, 110843), (118, 110903), (125, 110945), (134, 111005), (135, 111017), (141, 111056), (145, 111074), (148, 111080), (150, 111104), (158, 111140), (161, 111149), (165, 111164),

Gene: Finch\_73 Start: 62417, Stop: 63523, Start Num: 10

Candidate Starts for Finch\_73:

(Start: 10 @62417 has 1 MA's), (28, 62549), (36, 62576), (40, 62621), (49, 62693), (51, 62729), (62, 62831), (65, 62852), (73, 62930), (77, 62960), (82, 62990), (93, 63086), (99, 63122), (109, 63155), (110, 63167), (113, 63176), (117, 63224), (121, 63248), (127, 63290), (128, 63296), (135, 63341), (136, 63344), (137, 63353), (141, 63380), (145, 63398), (148, 63404), (158, 63464), (164, 63482),

Gene: Flabslab\_200 Start: 108141, Stop: 109214, Start Num: 14

Candidate Starts for Flabslab\_200:

(9, 108114), (Start: 14 @108141 has 172 MA's), (19, 108174), (23, 108207), (33, 108297), (36, 108306), (46, 108402), (49, 108423), (95, 108831), (103, 108861), (107, 108885), (108, 108888), (118, 108948), (125, 108990), (134, 109050), (135, 109062), (141, 109101), (145, 109119), (148, 109125), (150, 109149), (158, 109185), (161, 109194), (165, 109209),

Gene: Fludd\_205 Start: 109532, Stop: 110605, Start Num: 14

Candidate Starts for Fludd\_205:

(9, 109505), (Start: 14 @109532 has 172 MA's), (19, 109565), (23, 109598), (33, 109688), (36, 109697), (46, 109793), (49, 109814), (95, 110222), (103, 110252), (107, 110276), (108, 110279), (118, 110339), (125, 110381), (134, 110441), (135, 110453), (141, 110492), (145, 110510), (148, 110516), (150, 110540), (158, 110576), (161, 110585), (165, 110600),

Gene: FlyingTortilla\_65 Start: 56268, Stop: 55417, Start Num: 44

Candidate Starts for FlyingTortilla\_65:

(28, 56358), (Start: 30 @56355 has 5 MA's), (Start: 44 @56268 has 2 MA's), (56, 56127), (57, 56121), (64, 56055), (72, 55983), (75, 55950), (76, 55938), (84, 55893), (86, 55881), (94, 55806), (105, 55746), (106, 55740), (111, 55716), (119, 55665), (122, 55656), (124, 55641), (129, 55605), (144, 55524), (146, 55515), (157, 55455), (162, 55443),

Gene: FoxtrotP1\_203 Start: 110776, Stop: 111849, Start Num: 14

Candidate Starts for FoxtrotP1\_203:

(9, 110749), (Start: 14 @110776 has 172 MA's), (19, 110809), (23, 110842), (33, 110932), (36, 110941), (46, 111037), (49, 111058), (95, 111466), (103, 111496), (107, 111520), (108, 111523), (118,



111583), (125, 111625), (134, 111685), (135, 111697), (141, 111736), (145, 111754), (148, 111760), (150, 111784), (158, 111820), (161, 111829), (165, 111844),

Gene: FrayBell\_208 Start: 109621, Stop: 110694, Start Num: 14

Candidate Starts for FrayBell\_208:

(9, 109594), (Start: 14 @109621 has 172 MA's), (19, 109654), (23, 109687), (33, 109777), (36, 109786), (46, 109882), (49, 109903), (95, 110311), (103, 110341), (107, 110365), (108, 110368), (118, 110428), (125, 110470), (134, 110530), (135, 110542), (141, 110581), (145, 110599), (148, 110605), (150, 110629), (158, 110665), (161, 110674), (165, 110689),

Gene: FudgeTart\_200 Start: 109243, Stop: 110316, Start Num: 14

Candidate Starts for FudgeTart\_200:

(9, 109216), (Start: 14 @109243 has 172 MA's), (19, 109276), (23, 109309), (33, 109399), (36, 109408), (46, 109504), (49, 109525), (95, 109933), (103, 109963), (107, 109987), (108, 109990), (118, 110050), (125, 110092), (134, 110152), (135, 110164), (141, 110203), (145, 110221), (148, 110227), (150, 110251), (158, 110287), (161, 110296), (165, 110311),

Gene: GMA6\_51 Start: 44602, Stop: 43667, Start Num: 31

Candidate Starts for GMA6\_51:

(28, 44614), (31, 44602), (37, 44557), (56, 44383), (64, 44311), (68, 44281), (74, 44209), (76, 44194), (80, 44173), (81, 44161), (87, 44125), (94, 44062), (96, 44050), (97, 44041), (99, 44032), (105, 44002), (106, 43996), (111, 43972), (115, 43951), (119, 43921), (120, 43918), (124, 43897), (146, 43765), (160, 43696), (162, 43693),

Gene: Gabriel\_208 Start: 108698, Stop: 109771, Start Num: 14

Candidate Starts for Gabriel\_208:

(9, 108671), (Start: 14 @108698 has 172 MA's), (19, 108731), (23, 108764), (33, 108854), (36, 108863), (46, 108959), (49, 108980), (95, 109388), (103, 109418), (107, 109442), (108, 109445), (118, 109505), (125, 109547), (134, 109607), (135, 109619), (141, 109658), (145, 109676), (148, 109682), (150, 109706), (158, 109742), (161, 109751), (165, 109766),

Gene: Gamgam\_206 Start: 109055, Stop: 110128, Start Num: 14

Candidate Starts for Gamgam\_206:

(9, 109028), (Start: 14 @109055 has 172 MA's), (19, 109088), (23, 109121), (33, 109211), (36, 109220), (46, 109316), (49, 109337), (95, 109745), (103, 109775), (107, 109799), (108, 109802), (118, 109862), (125, 109904), (134, 109964), (135, 109976), (141, 110015), (145, 110033), (148, 110039), (150, 110063), (158, 110099), (161, 110108), (165, 110123),

Gene: Ghost\_205 Start: 108976, Stop: 110049, Start Num: 14

Candidate Starts for Ghost\_205:

(9, 108949), (Start: 14 @108976 has 172 MA's), (19, 109009), (23, 109042), (33, 109132), (36, 109141), (46, 109237), (49, 109258), (95, 109666), (103, 109696), (107, 109720), (108, 109723), (118, 109783), (125, 109825), (134, 109885), (135, 109897), (141, 109936), (145, 109954), (148, 109960), (150, 109984), (158, 110020), (161, 110029), (165, 110044),

Gene: Gizmo\_211 Start: 112094, Stop: 113167, Start Num: 14

Candidate Starts for Gizmo\_211:

(9, 112067), (Start: 14 @112094 has 172 MA's), (19, 112127), (23, 112160), (33, 112250), (36, 112259), (46, 112355), (49, 112376), (95, 112784), (103, 112814), (107, 112838), (108, 112841), (118, 112901), (125, 112943), (134, 113003), (135, 113015), (141, 113054), (145, 113072), (148, 113078), (150, 113102), (158, 113138), (161, 113147), (165, 113162),

Gene: Grasshills\_213 Start: 112674, Stop: 113747, Start Num: 14

Candidate Starts for Grasshills\_213:

(9, 112647), (Start: 14 @112674 has 172 MA's), (19, 112707), (23, 112740), (33, 112830), (36, 112839), (46, 112935), (49, 112956), (95, 113364), (103, 113394), (107, 113418), (108, 113421), (118, 113481), (125, 113523), (134, 113583), (135, 113595), (141, 113634), (145, 113652), (148, 113658), (150, 113682), (158, 113718), (161, 113727), (165, 113742),

Gene: Gray\_66 Start: 53261, Stop: 52323, Start Num: 30

Candidate Starts for Gray\_66:

(Start: 30 @53261 has 5 MA's), (Start: 44 @53174 has 2 MA's), (56, 53033), (57, 53027), (64, 52961), (67, 52943), (75, 52856), (76, 52844), (83, 52802), (84, 52799), (86, 52787), (94, 52712), (99, 52682), (100, 52679), (105, 52652), (119, 52571), (122, 52562), (129, 52511), (143, 52433), (162, 52349),

Gene: Greely\_194 Start: 106927, Stop: 108072, Start Num: 12

Candidate Starts for Greely\_194:

(8, 106888), (Start: 12 @106927 has 2 MA's), (18, 106951), (27, 107065), (36, 107098), (46, 107215), (48, 107230), (49, 107236), (50, 107266), (55, 107320), (58, 107332), (60, 107344), (63, 107377), (71, 107437), (82, 107539), (89, 107593), (90, 107602), (106, 107683), (116, 107734), (130, 107821), (140, 107896), (167, 108016),

Gene: Grungle\_189 Start: 107013, Stop: 108086, Start Num: 14

Candidate Starts for Grungle\_189:

(9, 106986), (Start: 14 @107013 has 172 MA's), (19, 107046), (23, 107079), (33, 107169), (36, 107178), (46, 107274), (49, 107295), (95, 107703), (103, 107733), (107, 107757), (108, 107760), (118, 107820), (125, 107862), (134, 107922), (135, 107934), (141, 107973), (145, 107991), (148, 107997), (150, 108021), (158, 108057), (161, 108066), (165, 108081),

Gene: Guwapp\_200 Start: 107810, Stop: 108883, Start Num: 14

Candidate Starts for Guwapp\_200:

(9, 107783), (Start: 14 @107810 has 172 MA's), (19, 107843), (23, 107876), (33, 107966), (36, 107975), (46, 108071), (49, 108092), (95, 108500), (103, 108530), (107, 108554), (108, 108557), (118, 108617), (125, 108659), (134, 108719), (135, 108731), (141, 108770), (145, 108788), (148, 108794), (150, 108818), (158, 108854), (161, 108863), (165, 108878),

Gene: Halldule\_198 Start: 108195, Stop: 109268, Start Num: 14

Candidate Starts for Halldule\_198:

(9, 108168), (Start: 14 @108195 has 172 MA's), (19, 108228), (23, 108261), (33, 108351), (36, 108360), (46, 108456), (49, 108477), (95, 108885), (103, 108915), (107, 108939), (108, 108942), (118, 109002), (125, 109044), (134, 109104), (135, 109116), (141, 109155), (145, 109173), (148, 109179), (150, 109203), (158, 109239), (161, 109248), (165, 109263),

Gene: Hanem\_65 Start: 52643, Stop: 51792, Start Num: 44

Candidate Starts for Hanem\_65:

(Start: 30 @52730 has 5 MA's), (Start: 44 @52643 has 2 MA's), (56, 52502), (57, 52496), (64, 52430), (67, 52412), (75, 52325), (76, 52313), (83, 52271), (84, 52268), (86, 52256), (94, 52181), (99, 52151), (100, 52148), (105, 52121), (119, 52040), (122, 52031), (129, 51980), (143, 51902), (162, 51818),

Gene: HyRo\_193 Start: 109319, Stop: 110392, Start Num: 14

Candidate Starts for HyRo\_193:

(9, 109292), (Start: 14 @109319 has 172 MA's), (19, 109352), (23, 109385), (33, 109475), (36, 109484), (46, 109580), (49, 109601), (95, 110009), (103, 110039), (107, 110063), (108, 110066), (118, 110126), (125, 110168), (134, 110228), (135, 110240), (141, 110279), (145, 110297), (148, 110303), (150, 110327), (158, 110363), (161, 110372), (165, 110387),

Gene: I3\_215 Start: 112055, Stop: 113128, Start Num: 14

Candidate Starts for I3\_215:

(9, 112028), (Start: 14 @112055 has 172 MA's), (19, 112088), (23, 112121), (33, 112211), (36, 112220), (46, 112316), (49, 112337), (95, 112745), (103, 112775), (107, 112799), (108, 112802), (118, 112862), (125, 112904), (134, 112964), (135, 112976), (141, 113015), (145, 113033), (148, 113039), (150, 113063), (158, 113099), (161, 113108), (165, 113123),

Gene: IkeLoa\_197 Start: 108717, Stop: 109790, Start Num: 14

Candidate Starts for IkeLoa\_197:

(9, 108690), (Start: 14 @108717 has 172 MA's), (19, 108750), (23, 108783), (33, 108873), (36, 108882), (46, 108978), (49, 108999), (95, 109407), (103, 109437), (107, 109461), (108, 109464), (118, 109524), (125, 109566), (134, 109626), (135, 109638), (141, 109677), (145, 109695), (148, 109701), (150, 109725), (158, 109761), (161, 109770), (165, 109785),

Gene: InigoMontoya\_208 Start: 109729, Stop: 110802, Start Num: 14

Candidate Starts for InigoMontoya\_208:

(9, 109702), (Start: 14 @109729 has 172 MA's), (19, 109762), (23, 109795), (33, 109885), (36, 109894), (46, 109990), (49, 110011), (95, 110419), (103, 110449), (107, 110473), (108, 110476), (118, 110536), (125, 110578), (134, 110638), (135, 110650), (141, 110689), (145, 110707), (148, 110713), (150, 110737), (158, 110773), (161, 110782), (165, 110797),

Gene: InterFolia\_208 Start: 111427, Stop: 112500, Start Num: 14

Candidate Starts for InterFolia\_208:

(9, 111400), (Start: 14 @111427 has 172 MA's), (19, 111460), (23, 111493), (33, 111583), (36, 111592), (46, 111688), (49, 111709), (95, 112117), (103, 112147), (107, 112171), (108, 112174), (118, 112234), (125, 112276), (134, 112336), (135, 112348), (141, 112387), (145, 112405), (148, 112411), (150, 112435), (158, 112471), (161, 112480), (165, 112495),

Gene: Iota\_200 Start: 109414, Stop: 110487, Start Num: 14

Candidate Starts for Iota\_200:

(9, 109387), (Start: 14 @109414 has 172 MA's), (19, 109447), (23, 109480), (33, 109570), (36, 109579), (46, 109675), (49, 109696), (95, 110104), (103, 110134), (107, 110158), (108, 110161), (118, 110221), (125, 110263), (134, 110323), (135, 110335), (141, 110374), (145, 110392), (148, 110398), (150, 110422), (158, 110458), (161, 110467), (165, 110482),

Gene: Issimir\_201 Start: 109367, Stop: 110440, Start Num: 14

Candidate Starts for Issimir\_201:

(9, 109340), (Start: 14 @109367 has 172 MA's), (19, 109400), (23, 109433), (33, 109523), (36, 109532), (46, 109628), (49, 109649), (95, 110057), (103, 110087), (107, 110111), (108, 110114), (118, 110174), (125, 110216), (134, 110276), (135, 110288), (141, 110327), (145, 110345), (148, 110351), (150, 110375), (158, 110411), (161, 110420), (165, 110435),

Gene: Izajani\_203 Start: 110236, Stop: 111309, Start Num: 14

Candidate Starts for Izajani\_203:

(9, 110209), (Start: 14 @110236 has 172 MA's), (19, 110269), (23, 110302), (33, 110392), (36, 110401), (46, 110497), (49, 110518), (95, 110926), (103, 110956), (107, 110980), (108, 110983), (118, 111043), (125, 111085), (134, 111145), (135, 111157), (141, 111196), (145, 111214), (148, 111220), (150, 111244), (158, 111280), (161, 111289), (165, 111304),

Gene: JPickles\_201 Start: 107714, Stop: 108787, Start Num: 14

Candidate Starts for JPickles\_201:

(9, 107687), (Start: 14 @107714 has 172 MA's), (19, 107747), (23, 107780), (33, 107870), (36, 107879), (46, 107975), (49, 107996), (95, 108404), (103, 108434), (107, 108458), (108, 108461), (118,

108521), (125, 108563), (134, 108623), (135, 108635), (141, 108674), (145, 108692), (148, 108698), (150, 108722), (158, 108758), (161, 108767), (165, 108782),

Gene: Janiyra\_208 Start: 109954, Stop: 111027, Start Num: 14

Candidate Starts for Janiyra\_208:

(9, 109927), (Start: 14 @109954 has 172 MA's), (19, 109987), (23, 110020), (33, 110110), (36, 110119), (46, 110215), (49, 110236), (95, 110644), (103, 110674), (107, 110698), (108, 110701), (118, 110761), (125, 110803), (134, 110863), (135, 110875), (141, 110914), (145, 110932), (148, 110938), (150, 110962), (158, 110998), (161, 111007), (165, 111022),

Gene: JayJay\_203 Start: 110651, Stop: 111724, Start Num: 14

Candidate Starts for JayJay\_203:

(9, 110624), (Start: 14 @110651 has 172 MA's), (19, 110684), (23, 110717), (33, 110807), (36, 110816), (46, 110912), (49, 110933), (95, 111341), (103, 111371), (107, 111395), (108, 111398), (118, 111458), (125, 111500), (134, 111560), (135, 111572), (141, 111611), (145, 111629), (148, 111635), (150, 111659), (158, 111695), (161, 111704), (165, 111719),

Gene: Jaygup\_201 Start: 108775, Stop: 109848, Start Num: 14

Candidate Starts for Jaygup\_201:

(9, 108748), (Start: 14 @108775 has 172 MA's), (19, 108808), (23, 108841), (33, 108931), (36, 108940), (46, 109036), (49, 109057), (95, 109465), (103, 109495), (107, 109519), (108, 109522), (118, 109582), (125, 109624), (134, 109684), (135, 109696), (141, 109735), (145, 109753), (148, 109759), (150, 109783), (158, 109819), (161, 109828), (165, 109843),

Gene: JeanGrey\_91 Start: 72203, Stop: 73294, Start Num: 13

Candidate Starts for JeanGrey\_91:

(11, 72197), (13, 72203), (21, 72257), (32, 72359), (40, 72416), (43, 72434), (49, 72488), (55, 72572), (62, 72623), (86, 72806), (98, 72917), (110, 72965), (130, 73097), (148, 73199),

Gene: Jedediah\_205 Start: 109828, Stop: 110901, Start Num: 14

Candidate Starts for Jedediah\_205:

(9, 109801), (Start: 14 @109828 has 172 MA's), (19, 109861), (23, 109894), (33, 109984), (36, 109993), (46, 110089), (49, 110110), (95, 110518), (103, 110548), (107, 110572), (108, 110575), (118, 110635), (125, 110677), (134, 110737), (135, 110749), (141, 110788), (145, 110806), (148, 110812), (150, 110836), (158, 110872), (161, 110881), (165, 110896),

Gene: Jemmno\_204 Start: 108657, Stop: 109730, Start Num: 14

Candidate Starts for Jemmno\_204:

(9, 108630), (Start: 14 @108657 has 172 MA's), (19, 108690), (23, 108723), (33, 108813), (36, 108822), (46, 108918), (49, 108939), (95, 109347), (103, 109377), (107, 109401), (108, 109404), (118, 109464), (125, 109506), (134, 109566), (135, 109578), (141, 109617), (145, 109635), (148, 109641), (150, 109665), (158, 109701), (161, 109710), (165, 109725),

Gene: Jessibeth14\_205 Start: 110845, Stop: 111918, Start Num: 14

Candidate Starts for Jessibeth14\_205:

(9, 110818), (Start: 14 @110845 has 172 MA's), (19, 110878), (23, 110911), (33, 111001), (36, 111010), (46, 111106), (49, 111127), (95, 111535), (103, 111565), (107, 111589), (108, 111592), (118, 111652), (125, 111694), (134, 111754), (135, 111766), (141, 111805), (145, 111823), (148, 111829), (150, 111853), (158, 111889), (161, 111898), (165, 111913),

Gene: JulietS\_198 Start: 106946, Stop: 108019, Start Num: 14

Candidate Starts for JulietS\_198:

(9, 106919), (Start: 14 @106946 has 172 MA's), (19, 106979), (23, 107012), (33, 107102), (36, 107111), (46, 107207), (49, 107228), (95, 107636), (103, 107666), (107, 107690), (108, 107693), (118, 107753), (125, 107795), (134, 107855), (135, 107867), (141, 107906), (145, 107924), (148, 107930), (150, 107954), (158, 107990), (161, 107999), (165, 108014),

Gene: JustHall\_199 Start: 108861, Stop: 109934, Start Num: 14

Candidate Starts for JustHall\_199:

(9, 108834), (Start: 14 @108861 has 172 MA's), (19, 108894), (23, 108927), (33, 109017), (36, 109026), (46, 109122), (49, 109143), (95, 109551), (103, 109581), (107, 109605), (108, 109608), (118, 109668), (125, 109710), (134, 109770), (135, 109782), (141, 109821), (145, 109839), (148, 109845), (150, 109869), (158, 109905), (161, 109914), (165, 109929),

Gene: Kabocha\_67 Start: 54073, Stop: 53135, Start Num: 30

Candidate Starts for Kabocha\_67:

(Start: 30 @54073 has 5 MA's), (Start: 44 @53986 has 2 MA's), (56, 53845), (57, 53839), (64, 53773), (67, 53755), (75, 53668), (76, 53656), (83, 53614), (84, 53611), (86, 53599), (94, 53524), (99, 53494), (100, 53491), (105, 53464), (119, 53383), (122, 53374), (129, 53323), (143, 53245), (162, 53161),

Gene: Kamryn\_204 Start: 110491, Stop: 111564, Start Num: 14

Candidate Starts for Kamryn\_204:

(9, 110464), (Start: 14 @110491 has 172 MA's), (19, 110524), (23, 110557), (33, 110647), (36, 110656), (46, 110752), (49, 110773), (95, 111181), (103, 111211), (107, 111235), (108, 111238), (118, 111298), (125, 111340), (134, 111400), (135, 111412), (141, 111451), (145, 111469), (148, 111475), (150, 111499), (158, 111535), (161, 111544), (165, 111559),

Gene: Kboogie\_209 Start: 109519, Stop: 110592, Start Num: 14

Candidate Starts for Kboogie\_209:

(9, 109492), (Start: 14 @109519 has 172 MA's), (19, 109552), (23, 109585), (33, 109675), (36, 109684), (46, 109780), (49, 109801), (95, 110209), (103, 110239), (107, 110263), (108, 110266), (118, 110326), (125, 110368), (134, 110428), (135, 110440), (141, 110479), (145, 110497), (148, 110503), (150, 110527), (158, 110563), (161, 110572), (165, 110587),

Gene: Khaleesi\_204 Start: 110312, Stop: 111385, Start Num: 14

Candidate Starts for Khaleesi\_204:

(9, 110285), (Start: 14 @110312 has 172 MA's), (19, 110345), (23, 110378), (33, 110468), (36, 110477), (46, 110573), (49, 110594), (95, 111002), (103, 111032), (107, 111056), (108, 111059), (118, 111119), (125, 111161), (134, 111221), (135, 111233), (141, 111272), (145, 111290), (148, 111296), (150, 111320), (158, 111356), (161, 111365), (165, 111380),

Gene: Koguma\_204 Start: 109172, Stop: 110245, Start Num: 14

Candidate Starts for Koguma\_204:

(9, 109145), (Start: 14 @109172 has 172 MA's), (19, 109205), (23, 109238), (33, 109328), (36, 109337), (46, 109433), (49, 109454), (95, 109862), (103, 109892), (107, 109916), (108, 109919), (118, 109979), (125, 110021), (134, 110081), (135, 110093), (141, 110132), (145, 110150), (148, 110156), (150, 110180), (158, 110216), (161, 110225), (165, 110240),

Gene: LRRHood\_198 Start: 109517, Stop: 110590, Start Num: 14

Candidate Starts for LRRHood\_198:

(9, 109490), (Start: 14 @109517 has 172 MA's), (19, 109550), (23, 109583), (33, 109673), (36, 109682), (46, 109778), (49, 109799), (95, 110207), (103, 110237), (107, 110261), (108, 110264), (118, 110324), (125, 110366), (134, 110426), (135, 110438), (141, 110477), (145, 110495), (148, 110501), (150, 110525), (158, 110561), (161, 110570), (165, 110585),

Gene: Latch\_205 Start: 109065, Stop: 110138, Start Num: 14

Candidate Starts for Latch\_205:

(9, 109038), (Start: 14 @109065 has 172 MA's), (19, 109098), (23, 109131), (33, 109221), (36, 109230), (46, 109326), (49, 109347), (95, 109755), (103, 109785), (107, 109809), (108, 109812), (118, 109872), (125, 109914), (134, 109974), (135, 109986), (141, 110025), (145, 110043), (148, 110049), (150, 110073), (158, 110109), (161, 110118), (165, 110133),

Gene: Lee7\_205 Start: 111692, Stop: 112765, Start Num: 14

Candidate Starts for Lee7\_205:

(9, 111665), (Start: 14 @111692 has 172 MA's), (19, 111725), (23, 111758), (33, 111848), (36, 111857), (46, 111953), (49, 111974), (95, 112382), (103, 112412), (107, 112436), (108, 112439), (118, 112499), (125, 112541), (134, 112601), (135, 112613), (141, 112652), (145, 112670), (148, 112676), (150, 112700), (158, 112736), (161, 112745), (165, 112760),

Gene: LifeSavor\_204 Start: 109590, Stop: 110663, Start Num: 14

Candidate Starts for LifeSavor\_204:

(9, 109563), (Start: 14 @109590 has 172 MA's), (19, 109623), (23, 109656), (33, 109746), (36, 109755), (46, 109851), (49, 109872), (95, 110280), (103, 110310), (107, 110334), (108, 110337), (118, 110397), (125, 110439), (134, 110499), (135, 110511), (141, 110550), (145, 110568), (148, 110574), (150, 110598), (158, 110634), (161, 110643), (165, 110658),

Gene: LinStu\_204 Start: 109804, Stop: 110877, Start Num: 14

Candidate Starts for LinStu\_204:

(9, 109777), (Start: 14 @109804 has 172 MA's), (19, 109837), (23, 109870), (33, 109960), (36, 109969), (46, 110065), (49, 110086), (95, 110494), (103, 110524), (107, 110548), (108, 110551), (118, 110611), (125, 110653), (134, 110713), (135, 110725), (141, 110764), (145, 110782), (148, 110788), (150, 110812), (158, 110848), (161, 110857), (165, 110872),

Gene: Littleton\_208 Start: 110302, Stop: 111375, Start Num: 14

Candidate Starts for Littleton\_208:

(9, 110275), (Start: 14 @110302 has 172 MA's), (19, 110335), (23, 110368), (33, 110458), (36, 110467), (46, 110563), (49, 110584), (95, 110992), (103, 111022), (107, 111046), (108, 111049), (118, 111109), (125, 111151), (134, 111211), (135, 111223), (141, 111262), (145, 111280), (148, 111286), (150, 111310), (158, 111346), (161, 111355), (165, 111370),

Gene: Loanshark\_202 Start: 109627, Stop: 110700, Start Num: 14

Candidate Starts for Loanshark\_202:

(9, 109600), (Start: 14 @109627 has 172 MA's), (19, 109660), (23, 109693), (33, 109783), (36, 109792), (46, 109888), (49, 109909), (95, 110317), (103, 110347), (107, 110371), (108, 110374), (118, 110434), (125, 110476), (134, 110536), (135, 110548), (141, 110587), (145, 110605), (148, 110611), (150, 110635), (158, 110671), (161, 110680), (165, 110695),

Gene: LolaVinca\_203 Start: 110857, Stop: 111930, Start Num: 14

Candidate Starts for LolaVinca\_203:

(9, 110830), (Start: 14 @110857 has 172 MA's), (19, 110890), (23, 110923), (33, 111013), (36, 111022), (46, 111118), (49, 111139), (95, 111547), (103, 111577), (107, 111601), (108, 111604), (118, 111664), (125, 111706), (134, 111766), (135, 111778), (141, 111817), (145, 111835), (148, 111841), (150, 111865), (158, 111901), (161, 111910), (165, 111925),

Gene: LordLeafolot\_207 Start: 110469, Stop: 111542, Start Num: 14

Candidate Starts for LordLeafolot\_207:

(9, 110442), (Start: 14 @110469 has 172 MA's), (19, 110502), (23, 110535), (33, 110625), (36, 110634), (46, 110730), (49, 110751), (95, 111159), (103, 111189), (107, 111213), (108, 111216), (118,

111276), (125, 111318), (134, 111378), (135, 111390), (141, 111429), (145, 111447), (148, 111453), (150, 111477), (158, 111513), (161, 111522), (165, 111537),

Gene: Lukilu\_196 Start: 110527, Stop: 111600, Start Num: 14

Candidate Starts for Lukilu\_196:

(9, 110500), (Start: 14 @110527 has 172 MA's), (19, 110560), (23, 110593), (33, 110683), (36, 110692), (46, 110788), (49, 110809), (95, 111217), (103, 111247), (107, 111271), (108, 111274), (118, 111334), (125, 111376), (134, 111436), (135, 111448), (141, 111487), (145, 111505), (148, 111511), (150, 111535), (158, 111571), (161, 111580), (165, 111595),

Gene: Maby2021\_205 Start: 110756, Stop: 111829, Start Num: 14

Candidate Starts for Maby2021\_205:

(9, 110729), (Start: 14 @110756 has 172 MA's), (19, 110789), (23, 110822), (33, 110912), (36, 110921), (46, 111017), (49, 111038), (95, 111446), (103, 111476), (107, 111500), (108, 111503), (118, 111563), (125, 111605), (134, 111665), (135, 111677), (141, 111716), (145, 111734), (148, 111740), (150, 111764), (158, 111800), (161, 111809), (165, 111824),

Gene: Mangeria\_206 Start: 110858, Stop: 111931, Start Num: 14

Candidate Starts for Mangeria\_206:

(9, 110831), (Start: 14 @110858 has 172 MA's), (19, 110891), (23, 110924), (33, 111014), (36, 111023), (46, 111119), (49, 111140), (95, 111548), (103, 111578), (107, 111602), (108, 111605), (118, 111665), (125, 111707), (134, 111767), (135, 111779), (141, 111818), (145, 111836), (148, 111842), (150, 111866), (158, 111902), (161, 111911), (165, 111926),

Gene: Matsumoto\_204 Start: 109507, Stop: 110580, Start Num: 14

Candidate Starts for Matsumoto\_204:

(9, 109480), (Start: 14 @109507 has 172 MA's), (19, 109540), (23, 109573), (33, 109663), (36, 109672), (46, 109768), (49, 109789), (95, 110197), (103, 110227), (107, 110251), (108, 110254), (118, 110314), (125, 110356), (134, 110416), (135, 110428), (141, 110467), (145, 110485), (148, 110491), (150, 110515), (158, 110551), (161, 110560), (165, 110575),

Gene: McGee\_204 Start: 108701, Stop: 109774, Start Num: 14

Candidate Starts for McGee\_204:

(9, 108674), (Start: 14 @108701 has 172 MA's), (19, 108734), (23, 108767), (33, 108857), (36, 108866), (46, 108962), (49, 108983), (95, 109391), (103, 109421), (107, 109445), (108, 109448), (118, 109508), (125, 109550), (134, 109610), (135, 109622), (141, 109661), (145, 109679), (148, 109685), (150, 109709), (158, 109745), (161, 109754), (165, 109769),

Gene: McWolfish\_202 Start: 109523, Stop: 110596, Start Num: 14

Candidate Starts for McWolfish\_202:

(9, 109496), (Start: 14 @109523 has 172 MA's), (19, 109556), (23, 109589), (33, 109679), (36, 109688), (46, 109784), (49, 109805), (95, 110213), (103, 110243), (107, 110267), (108, 110270), (118, 110330), (125, 110372), (134, 110432), (135, 110444), (141, 110483), (145, 110501), (148, 110507), (150, 110531), (158, 110567), (161, 110576), (165, 110591),

Gene: Megamind\_202 Start: 109814, Stop: 110887, Start Num: 14

Candidate Starts for Megamind\_202:

(9, 109787), (Start: 14 @109814 has 172 MA's), (19, 109847), (23, 109880), (33, 109970), (36, 109979), (46, 110075), (49, 110096), (95, 110504), (103, 110534), (107, 110558), (108, 110561), (118, 110621), (125, 110663), (134, 110723), (135, 110735), (141, 110774), (145, 110792), (148, 110798), (150, 110822), (158, 110858), (161, 110867), (165, 110882),

Gene: Melpomini\_200 Start: 108599, Stop: 109672, Start Num: 14

Candidate Starts for Melpomini\_200:

(9, 108572), (Start: 14 @108599 has 172 MA's), (19, 108632), (23, 108665), (33, 108755), (36, 108764), (46, 108860), (49, 108881), (95, 109289), (103, 109319), (107, 109343), (108, 109346), (118, 109406), (125, 109448), (134, 109508), (135, 109520), (141, 109559), (145, 109577), (148, 109583), (150, 109607), (158, 109643), (161, 109652), (165, 109667),

Gene: MikeLiesIn\_207 Start: 110950, Stop: 112023, Start Num: 14

Candidate Starts for MikeLiesIn\_207:

(9, 110923), (Start: 14 @110950 has 172 MA's), (19, 110983), (23, 111016), (33, 111106), (36, 111115), (46, 111211), (49, 111232), (95, 111640), (103, 111670), (107, 111694), (108, 111697), (118, 111757), (125, 111799), (134, 111859), (135, 111871), (141, 111910), (145, 111928), (148, 111934), (150, 111958), (158, 111994), (161, 112003), (165, 112018),

Gene: Mikro\_201 Start: 111499, Stop: 112572, Start Num: 14

Candidate Starts for Mikro\_201:

(9, 111472), (Start: 14 @111499 has 172 MA's), (19, 111532), (23, 111565), (33, 111655), (36, 111664), (46, 111760), (49, 111781), (95, 112189), (103, 112219), (107, 112243), (108, 112246), (118, 112306), (125, 112348), (134, 112408), (135, 112420), (141, 112459), (145, 112477), (148, 112483), (150, 112507), (158, 112543), (161, 112552), (165, 112567),

Gene: MoMoMixon\_203 Start: 109989, Stop: 111062, Start Num: 14

Candidate Starts for MoMoMixon\_203:

(9, 109962), (Start: 14 @109989 has 172 MA's), (19, 110022), (23, 110055), (33, 110145), (36, 110154), (46, 110250), (49, 110271), (95, 110679), (103, 110709), (107, 110733), (108, 110736), (118, 110796), (125, 110838), (134, 110898), (135, 110910), (141, 110949), (145, 110967), (148, 110973), (150, 110997), (158, 111033), (161, 111042), (165, 111057),

Gene: Momo\_206 Start: 109065, Stop: 110138, Start Num: 14

Candidate Starts for Momo\_206:

(9, 109038), (Start: 14 @109065 has 172 MA's), (19, 109098), (23, 109131), (33, 109221), (36, 109230), (46, 109326), (49, 109347), (95, 109755), (103, 109785), (107, 109809), (108, 109812), (118, 109872), (125, 109914), (134, 109974), (135, 109986), (141, 110025), (145, 110043), (148, 110049), (150, 110073), (158, 110109), (161, 110118), (165, 110133),

Gene: Morizzled23\_202 Start: 108432, Stop: 109505, Start Num: 14

Candidate Starts for Morizzled23\_202:

(9, 108405), (Start: 14 @108432 has 172 MA's), (19, 108465), (23, 108498), (33, 108588), (36, 108597), (46, 108693), (49, 108714), (95, 109122), (103, 109152), (107, 109176), (108, 109179), (118, 109239), (125, 109281), (134, 109341), (135, 109353), (141, 109392), (145, 109410), (148, 109416), (150, 109440), (158, 109476), (161, 109485), (165, 109500),

Gene: Myrna\_188 Start: 106597, Stop: 107742, Start Num: 12

Candidate Starts for Myrna\_188:

(Start: 12 @106597 has 2 MA's), (18, 106621), (27, 106735), (33, 106759), (36, 106768), (46, 106885), (48, 106900), (49, 106906), (50, 106936), (55, 106990), (60, 107014), (63, 107047), (71, 107107), (82, 107209), (89, 107263), (90, 107272), (106, 107353), (130, 107491), (140, 107566), (169, 107710),

Gene: Naija\_206 Start: 109768, Stop: 110841, Start Num: 14

Candidate Starts for Naija\_206:

(9, 109741), (Start: 14 @109768 has 172 MA's), (19, 109801), (23, 109834), (33, 109924), (36, 109933), (46, 110029), (49, 110050), (95, 110458), (103, 110488), (107, 110512), (108, 110515), (118, 110575), (125, 110617), (134, 110677), (135, 110689), (141, 110728), (145, 110746), (148, 110752),



(150, 110776), (158, 110812), (161, 110821), (165, 110836),

Gene: Napoleon13\_202 Start: 108796, Stop: 109869, Start Num: 14

Candidate Starts for Napoleon13\_202:

(9, 108769), (Start: 14 @108796 has 172 MA's), (19, 108829), (23, 108862), (33, 108952), (36, 108961), (46, 109057), (49, 109078), (95, 109486), (103, 109516), (107, 109540), (108, 109543), (118, 109603), (125, 109645), (134, 109705), (135, 109717), (141, 109756), (145, 109774), (148, 109780), (150, 109804), (158, 109840), (161, 109849), (165, 109864),

Gene: Nappy\_206 Start: 111462, Stop: 112535, Start Num: 14

Candidate Starts for Nappy\_206:

(9, 111435), (Start: 14 @111462 has 172 MA's), (19, 111495), (23, 111528), (33, 111618), (36, 111627), (46, 111723), (49, 111744), (95, 112152), (103, 112182), (107, 112206), (108, 112209), (118, 112269), (125, 112311), (134, 112371), (135, 112383), (141, 112422), (145, 112440), (148, 112446), (150, 112470), (158, 112506), (161, 112515), (165, 112530),

Gene: Naval22\_210 Start: 111545, Stop: 112618, Start Num: 14

Candidate Starts for Naval22\_210:

(9, 111518), (Start: 14 @111545 has 172 MA's), (19, 111578), (23, 111611), (33, 111701), (36, 111710), (46, 111806), (49, 111827), (95, 112235), (103, 112265), (107, 112289), (108, 112292), (118, 112352), (125, 112394), (134, 112454), (135, 112466), (141, 112505), (145, 112523), (148, 112529), (150, 112553), (158, 112589), (161, 112598), (165, 112613),

Gene: NedWong\_204 Start: 110201, Stop: 111274, Start Num: 14

Candidate Starts for NedWong\_204:

(9, 110174), (Start: 14 @110201 has 172 MA's), (19, 110234), (23, 110267), (33, 110357), (36, 110366), (46, 110462), (49, 110483), (95, 110891), (103, 110921), (107, 110945), (108, 110948), (118, 111008), (125, 111050), (134, 111110), (135, 111122), (141, 111161), (145, 111179), (148, 111185), (150, 111209), (158, 111245), (161, 111254), (165, 111269),

Gene: Ngannou\_202 Start: 108047, Stop: 109120, Start Num: 14

Candidate Starts for Ngannou\_202:

(9, 108020), (Start: 14 @108047 has 172 MA's), (19, 108080), (23, 108113), (33, 108203), (36, 108212), (46, 108308), (49, 108329), (95, 108737), (103, 108767), (107, 108791), (108, 108794), (118, 108854), (125, 108896), (134, 108956), (135, 108968), (141, 109007), (145, 109025), (148, 109031), (150, 109055), (158, 109091), (161, 109100), (165, 109115),

Gene: Nidhogg\_206 Start: 110594, Stop: 111667, Start Num: 14

Candidate Starts for Nidhogg\_206:

(9, 110567), (Start: 14 @110594 has 172 MA's), (19, 110627), (23, 110660), (33, 110750), (36, 110759), (46, 110855), (49, 110876), (95, 111284), (103, 111314), (107, 111338), (108, 111341), (118, 111401), (125, 111443), (134, 111503), (135, 111515), (141, 111554), (145, 111572), (148, 111578), (150, 111602), (158, 111638), (161, 111647), (165, 111662),

Gene: NoodleTree\_211 Start: 110501, Stop: 111574, Start Num: 14

Candidate Starts for NoodleTree\_211:

(9, 110474), (Start: 14 @110501 has 172 MA's), (19, 110534), (23, 110567), (33, 110657), (36, 110666), (46, 110762), (49, 110783), (95, 111191), (103, 111221), (107, 111245), (108, 111248), (118, 111308), (125, 111350), (134, 111410), (135, 111422), (141, 111461), (145, 111479), (148, 111485), (150, 111509), (158, 111545), (161, 111554), (165, 111569),

Gene: Norm\_205 Start: 110503, Stop: 111576, Start Num: 14

Candidate Starts for Norm\_205:

(9, 110476), (Start: 14 @110503 has 172 MA's), (19, 110536), (23, 110569), (33, 110659), (36, 110668), (46, 110764), (49, 110785), (95, 111193), (103, 111223), (107, 111247), (108, 111250), (118, 111310), (125, 111352), (134, 111412), (135, 111424), (141, 111463), (145, 111481), (148, 111487), (150, 111511), (158, 111547), (161, 111556), (165, 111571),

Gene: NuevoMundo\_208 Start: 112055, Stop: 113128, Start Num: 14

Candidate Starts for NuevoMundo\_208:

(9, 112028), (Start: 14 @112055 has 172 MA's), (19, 112088), (23, 112121), (33, 112211), (36, 112220), (46, 112316), (49, 112337), (95, 112745), (103, 112775), (107, 112799), (108, 112802), (118, 112862), (125, 112904), (134, 112964), (135, 112976), (141, 113015), (145, 113033), (148, 113039), (150, 113063), (158, 113099), (161, 113108), (165, 113123),

Gene: Oogie\_65 Start: 54451, Stop: 53513, Start Num: 30

Candidate Starts for Oogie\_65:

(Start: 30 @54451 has 5 MA's), (Start: 44 @54364 has 2 MA's), (56, 54223), (57, 54217), (64, 54151), (67, 54133), (75, 54046), (76, 54034), (83, 53992), (84, 53989), (86, 53977), (94, 53902), (99, 53872), (100, 53869), (105, 53842), (119, 53761), (122, 53752), (129, 53701), (143, 53623), (162, 53539),

Gene: Pakusa\_63 Start: 52472, Stop: 51534, Start Num: 30

Candidate Starts for Pakusa\_63:

(Start: 30 @52472 has 5 MA's), (Start: 44 @52385 has 2 MA's), (56, 52244), (57, 52238), (64, 52172), (67, 52154), (75, 52067), (76, 52055), (83, 52013), (84, 52010), (86, 51998), (94, 51923), (99, 51893), (100, 51890), (105, 51863), (119, 51782), (122, 51773), (129, 51722), (143, 51644), (162, 51560),

Gene: ParkTD\_204 Start: 110065, Stop: 111138, Start Num: 14

Candidate Starts for ParkTD\_204:

(9, 110038), (Start: 14 @110065 has 172 MA's), (19, 110098), (23, 110131), (33, 110221), (36, 110230), (46, 110326), (49, 110347), (95, 110755), (103, 110785), (107, 110809), (108, 110812), (118, 110872), (125, 110914), (134, 110974), (135, 110986), (141, 111025), (145, 111043), (148, 111049), (150, 111073), (158, 111109), (161, 111118), (165, 111133),

Gene: Patter\_206 Start: 109079, Stop: 110152, Start Num: 14

Candidate Starts for Patter\_206:

(9, 109052), (Start: 14 @109079 has 172 MA's), (19, 109112), (23, 109145), (33, 109235), (36, 109244), (46, 109340), (49, 109361), (95, 109769), (103, 109799), (107, 109823), (108, 109826), (118, 109886), (125, 109928), (134, 109988), (135, 110000), (141, 110039), (145, 110057), (148, 110063), (150, 110087), (158, 110123), (161, 110132), (165, 110147),

Gene: Phabba\_199 Start: 106502, Stop: 107647, Start Num: 12

Candidate Starts for Phabba\_199:

(8, 106463), (Start: 12 @106502 has 2 MA's), (18, 106526), (27, 106640), (36, 106673), (46, 106790), (48, 106805), (49, 106811), (50, 106841), (55, 106895), (58, 106907), (60, 106919), (63, 106952), (71, 107012), (82, 107114), (89, 107168), (90, 107177), (106, 107258), (130, 107396), (140, 107471), (167, 107591),

Gene: Phlegm\_209 Start: 109768, Stop: 110841, Start Num: 14

Candidate Starts for Phlegm\_209:

(9, 109741), (Start: 14 @109768 has 172 MA's), (19, 109801), (23, 109834), (33, 109924), (36, 109933), (46, 110029), (49, 110050), (95, 110458), (103, 110488), (107, 110512), (108, 110515), (118, 110575), (125, 110617), (134, 110677), (135, 110689), (141, 110728), (145, 110746), (148, 110752), (150, 110776), (158, 110812), (161, 110821), (165, 110836),

Gene: Phox\_206 Start: 110723, Stop: 111796, Start Num: 14

Candidate Starts for Phox\_206:

(9, 110696), (Start: 14 @110723 has 172 MA's), (19, 110756), (23, 110789), (33, 110879), (36, 110888), (46, 110984), (49, 111005), (95, 111413), (103, 111443), (107, 111467), (108, 111470), (118, 111530), (125, 111572), (134, 111632), (135, 111644), (141, 111683), (145, 111701), (148, 111707), (150, 111731), (158, 111767), (161, 111776), (165, 111791),

Gene: Phrappuccino\_115 Start: 83314, Stop: 84369, Start Num: 15

Candidate Starts for Phrappuccino\_115:

(7, 83179), (Start: 15 @83314 has 2 MA's), (22, 83374), (29, 83455), (70, 83776), (77, 83863), (93, 83980), (109, 84043), (110, 84055), (112, 84061), (114, 84073), (118, 84097), (126, 84142), (128, 84166), (138, 84235), (140, 84247), (141, 84250), (142, 84253), (151, 84301), (153, 84310),

Gene: Phusco\_203 Start: 108600, Stop: 109673, Start Num: 14

Candidate Starts for Phusco\_203:

(9, 108573), (Start: 14 @108600 has 172 MA's), (19, 108633), (23, 108666), (33, 108756), (36, 108765), (46, 108861), (49, 108882), (95, 109290), (103, 109320), (107, 109344), (108, 109347), (118, 109407), (125, 109449), (134, 109509), (135, 109521), (141, 109560), (145, 109578), (148, 109584), (150, 109608), (158, 109644), (161, 109653), (165, 109668),

Gene: Pier\_206 Start: 111597, Stop: 112670, Start Num: 14

Candidate Starts for Pier\_206:

(9, 111570), (Start: 14 @111597 has 172 MA's), (19, 111630), (23, 111663), (33, 111753), (36, 111762), (46, 111858), (49, 111879), (95, 112287), (103, 112317), (107, 112341), (108, 112344), (118, 112404), (125, 112446), (134, 112506), (135, 112518), (141, 112557), (145, 112575), (148, 112581), (150, 112605), (158, 112641), (161, 112650), (165, 112665),

Gene: Pinkcreek\_189 Start: 108976, Stop: 110049, Start Num: 14

Candidate Starts for Pinkcreek\_189:

(9, 108949), (Start: 14 @108976 has 172 MA's), (19, 109009), (23, 109042), (33, 109132), (36, 109141), (46, 109237), (49, 109258), (95, 109666), (103, 109696), (107, 109720), (108, 109723), (118, 109783), (125, 109825), (134, 109885), (135, 109897), (141, 109936), (145, 109954), (148, 109960), (150, 109984), (158, 110020), (161, 110029), (165, 110044),

Gene: Pio\_213 Start: 112792, Stop: 113865, Start Num: 14

Candidate Starts for Pio\_213:

(9, 112765), (Start: 14 @112792 has 172 MA's), (19, 112825), (23, 112858), (33, 112948), (36, 112957), (46, 113053), (49, 113074), (95, 113482), (103, 113512), (107, 113536), (108, 113539), (118, 113599), (125, 113641), (134, 113701), (135, 113713), (141, 113752), (145, 113770), (148, 113776), (150, 113800), (158, 113836), (161, 113845), (165, 113860),

Gene: Pivoine\_206 Start: 109768, Stop: 110841, Start Num: 14

Candidate Starts for Pivoine\_206:

(9, 109741), (Start: 14 @109768 has 172 MA's), (19, 109801), (23, 109834), (33, 109924), (36, 109933), (46, 110029), (49, 110050), (95, 110458), (103, 110488), (107, 110512), (108, 110515), (118, 110575), (125, 110617), (134, 110677), (135, 110689), (141, 110728), (145, 110746), (148, 110752), (150, 110776), (158, 110812), (161, 110821), (165, 110836),

Gene: Pleione\_209 Start: 110543, Stop: 111616, Start Num: 14

Candidate Starts for Pleione\_209:

(9, 110516), (Start: 14 @110543 has 172 MA's), (19, 110576), (23, 110609), (33, 110699), (36, 110708), (46, 110804), (49, 110825), (95, 111233), (103, 111263), (107, 111287), (108, 111290), (118, 111350), (125, 111392), (134, 111452), (135, 111464), (141, 111503), (145, 111521), (148, 111527), (150, 111551), (158, 111587), (161, 111596), (165, 111611),

Gene: Pupper\_148 Start: 103120, Stop: 104235, Start Num: 14

Candidate Starts for Pupper\_148:

(Start: 14 @103120 has 172 MA's), (19, 103162), (24, 103204), (26, 103240), (36, 103297), (42, 103354), (48, 103408), (49, 103414), (61, 103528), (64, 103585), (66, 103600), (70, 103621), (85, 103756), (110, 103903), (112, 103909), (117, 103945), (130, 104023), (140, 104095), (156, 104173), (163, 104197),

Gene: PurduePete\_205 Start: 110771, Stop: 111844, Start Num: 14

Candidate Starts for PurduePete\_205:

(9, 110744), (Start: 14 @110771 has 172 MA's), (19, 110804), (23, 110837), (33, 110927), (36, 110936), (46, 111032), (49, 111053), (95, 111461), (103, 111491), (107, 111515), (108, 111518), (118, 111578), (125, 111620), (134, 111680), (135, 111692), (141, 111731), (145, 111749), (148, 111755), (150, 111779), (158, 111815), (161, 111824), (165, 111839),

Gene: QBert\_197 Start: 109124, Stop: 110197, Start Num: 14

Candidate Starts for QBert\_197:

(9, 109097), (Start: 14 @109124 has 172 MA's), (19, 109157), (23, 109190), (33, 109280), (36, 109289), (46, 109385), (49, 109406), (95, 109814), (103, 109844), (107, 109868), (108, 109871), (118, 109931), (125, 109973), (134, 110033), (135, 110045), (141, 110084), (145, 110102), (148, 110108), (150, 110132), (158, 110168), (161, 110177), (165, 110192),

Gene: Quasimodo\_207 Start: 110394, Stop: 111467, Start Num: 14

Candidate Starts for Quasimodo\_207:

(9, 110367), (Start: 14 @110394 has 172 MA's), (19, 110427), (23, 110460), (33, 110550), (36, 110559), (46, 110655), (49, 110676), (95, 111084), (103, 111114), (107, 111138), (108, 111141), (118, 111201), (125, 111243), (134, 111303), (135, 111315), (141, 111354), (145, 111372), (148, 111378), (150, 111402), (158, 111438), (161, 111447), (165, 111462),

Gene: Rabinovish\_198 Start: 110669, Stop: 111742, Start Num: 14

Candidate Starts for Rabinovish\_198:

(9, 110642), (Start: 14 @110669 has 172 MA's), (19, 110702), (23, 110735), (33, 110825), (36, 110834), (46, 110930), (49, 110951), (95, 111359), (103, 111389), (107, 111413), (108, 111416), (118, 111476), (125, 111518), (134, 111578), (135, 111590), (141, 111629), (145, 111647), (148, 111653), (150, 111677), (158, 111713), (161, 111722), (165, 111737),

Gene: Rahel\_206 Start: 109503, Stop: 110576, Start Num: 14

Candidate Starts for Rahel\_206:

(9, 109476), (Start: 14 @109503 has 172 MA's), (19, 109536), (23, 109569), (33, 109659), (36, 109668), (46, 109764), (49, 109785), (95, 110193), (103, 110223), (107, 110247), (108, 110250), (118, 110310), (125, 110352), (134, 110412), (135, 110424), (141, 110463), (145, 110481), (148, 110487), (150, 110511), (158, 110547), (161, 110556), (165, 110571),

Gene: RedWattleHog\_75 Start: 68343, Stop: 69437, Start Num: 17

Candidate Starts for RedWattleHog\_75:

(Start: 17 @68343 has 2 MA's), (20, 68388), (24, 68427), (36, 68502), (49, 68619), (65, 68772), (79, 68895), (108, 69090), (110, 69105), (127, 69210), (128, 69216), (139, 69288), (141, 69300), (148, 69324), (151, 69348), (152, 69351), (154, 69360), (164, 69405),

Gene: Rizal\_197 Start: 108021, Stop: 109094, Start Num: 14

Candidate Starts for Rizal\_197:

(9, 107994), (Start: 14 @108021 has 172 MA's), (19, 108054), (23, 108087), (33, 108177), (36, 108186), (46, 108282), (49, 108303), (95, 108711), (103, 108741), (107, 108765), (108, 108768), (118,

108828), (125, 108870), (134, 108930), (135, 108942), (141, 108981), (145, 108999), (148, 109005), (150, 109029), (158, 109065), (161, 109074), (165, 109089),

Gene: RoMag\_200 Start: 109814, Stop: 110887, Start Num: 14

Candidate Starts for RoMag\_200:

(9, 109787), (Start: 14 @109814 has 172 MA's), (19, 109847), (23, 109880), (33, 109970), (36, 109979), (46, 110075), (49, 110096), (95, 110504), (103, 110534), (107, 110558), (108, 110561), (118, 110621), (125, 110663), (134, 110723), (135, 110735), (141, 110774), (145, 110792), (148, 110798), (150, 110822), (158, 110858), (161, 110867), (165, 110882),

Gene: Ronan\_201 Start: 108206, Stop: 109279, Start Num: 14

Candidate Starts for Ronan\_201:

(9, 108179), (Start: 14 @108206 has 172 MA's), (19, 108239), (23, 108272), (33, 108362), (36, 108371), (46, 108467), (49, 108488), (95, 108896), (103, 108926), (107, 108950), (108, 108953), (118, 109013), (125, 109055), (134, 109115), (135, 109127), (141, 109166), (145, 109184), (148, 109190), (150, 109214), (158, 109250), (161, 109259), (165, 109274),

Gene: Roots515\_207 Start: 111322, Stop: 112395, Start Num: 14

Candidate Starts for Roots515\_207:

(9, 111295), (Start: 14 @111322 has 172 MA's), (19, 111355), (23, 111388), (33, 111478), (36, 111487), (46, 111583), (49, 111604), (95, 112012), (103, 112042), (107, 112066), (108, 112069), (118, 112129), (125, 112171), (134, 112231), (135, 112243), (141, 112282), (145, 112300), (148, 112306), (150, 112330), (158, 112366), (161, 112375), (165, 112390),

Gene: SCentae\_147 Start: 103271, Stop: 104386, Start Num: 14

Candidate Starts for SCentae\_147:

(5, 103007), (6, 103127), (Start: 14 @103271 has 172 MA's), (19, 103313), (26, 103391), (36, 103448), (42, 103505), (48, 103559), (49, 103565), (59, 103667), (61, 103679), (64, 103736), (66, 103751), (70, 103772), (85, 103907), (110, 104054), (112, 104060), (117, 104096), (130, 104174), (140, 104246), (156, 104324), (163, 104348),

Gene: Salacia\_205 Start: 109906, Stop: 110979, Start Num: 14

Candidate Starts for Salacia\_205:

(9, 109879), (Start: 14 @109906 has 172 MA's), (19, 109939), (23, 109972), (33, 110062), (36, 110071), (46, 110167), (49, 110188), (95, 110596), (103, 110626), (107, 110650), (108, 110653), (118, 110713), (125, 110755), (134, 110815), (135, 110827), (141, 110866), (145, 110884), (148, 110890), (150, 110914), (158, 110950), (161, 110959), (165, 110974),

Gene: Sauce\_201 Start: 108720, Stop: 109793, Start Num: 14

Candidate Starts for Sauce\_201:

(9, 108693), (Start: 14 @108720 has 172 MA's), (19, 108753), (23, 108786), (33, 108876), (36, 108885), (46, 108981), (49, 109002), (95, 109410), (103, 109440), (107, 109464), (108, 109467), (118, 109527), (125, 109569), (134, 109629), (135, 109641), (141, 109680), (145, 109698), (148, 109704), (150, 109728), (158, 109764), (161, 109773), (165, 109788),

Gene: ScarletRaider\_64 Start: 55555, Stop: 54704, Start Num: 44

Candidate Starts for ScarletRaider\_64:

(28, 55645), (Start: 30 @55642 has 5 MA's), (Start: 44 @55555 has 2 MA's), (56, 55414), (57, 55408), (64, 55342), (72, 55270), (75, 55237), (76, 55225), (84, 55180), (86, 55168), (94, 55093), (105, 55033), (106, 55027), (111, 55003), (119, 54952), (122, 54943), (124, 54928), (129, 54892), (144, 54811), (146, 54802), (157, 54742), (162, 54730),

Gene: Schomber\_64 Start: 52480, Stop: 51542, Start Num: 30

Candidate Starts for Schomber\_64:

(Start: 30 @52480 has 5 MA's), (Start: 44 @52393 has 2 MA's), (56, 52252), (57, 52246), (64, 52180), (67, 52162), (75, 52075), (76, 52063), (83, 52021), (84, 52018), (86, 52006), (94, 51931), (99, 51901), (100, 51898), (105, 51871), (119, 51790), (122, 51781), (129, 51730), (143, 51652), (162, 51568),

Gene: ScoobyDoobyDoo\_186 Start: 103679, Stop: 104788, Start Num: 14

Candidate Starts for ScoobyDoobyDoo\_186:

(Start: 14 @103679 has 172 MA's), (18, 103700), (28, 103820), (46, 103964), (48, 103979), (50, 104015), (52, 104036), (54, 104060), (66, 104147), (82, 104285), (86, 104306), (97, 104402), (123, 104546), (130, 104585),

Gene: ScottMcG\_198 Start: 108527, Stop: 109600, Start Num: 14

Candidate Starts for ScottMcG\_198:

(9, 108500), (Start: 14 @108527 has 172 MA's), (19, 108560), (23, 108593), (33, 108683), (36, 108692), (46, 108788), (49, 108809), (95, 109217), (103, 109247), (107, 109271), (108, 109274), (118, 109334), (125, 109376), (134, 109436), (135, 109448), (141, 109487), (145, 109505), (148, 109511), (150, 109535), (158, 109571), (161, 109580), (165, 109595),

Gene: Sebata\_206 Start: 111229, Stop: 112302, Start Num: 14

Candidate Starts for Sebata\_206:

(9, 111202), (Start: 14 @111229 has 172 MA's), (19, 111262), (23, 111295), (33, 111385), (36, 111394), (46, 111490), (49, 111511), (95, 111919), (103, 111949), (107, 111973), (108, 111976), (118, 112036), (125, 112078), (134, 112138), (135, 112150), (141, 112189), (145, 112207), (148, 112213), (150, 112237), (158, 112273), (161, 112282), (165, 112297),

Gene: Settecandela\_115 Start: 83314, Stop: 84369, Start Num: 15

Candidate Starts for Settecandela\_115:

(7, 83179), (Start: 15 @83314 has 2 MA's), (22, 83374), (29, 83455), (70, 83776), (77, 83863), (93, 83980), (109, 84043), (110, 84055), (112, 84061), (114, 84073), (118, 84097), (126, 84142), (128, 84166), (138, 84235), (140, 84247), (141, 84250), (142, 84253), (151, 84301), (153, 84310),

Gene: Shaqnato\_196 Start: 108937, Stop: 110010, Start Num: 14

Candidate Starts for Shaqnato\_196:

(9, 108910), (Start: 14 @108937 has 172 MA's), (19, 108970), (23, 109003), (33, 109093), (36, 109102), (46, 109198), (49, 109219), (95, 109627), (103, 109657), (107, 109681), (108, 109684), (118, 109744), (125, 109786), (134, 109846), (135, 109858), (141, 109897), (145, 109915), (148, 109921), (150, 109945), (158, 109981), (161, 109990), (165, 110005),

Gene: Shelob\_206 Start: 111677, Stop: 112750, Start Num: 14

Candidate Starts for Shelob\_206:

(9, 111650), (Start: 14 @111677 has 172 MA's), (19, 111710), (23, 111743), (33, 111833), (36, 111842), (46, 111938), (49, 111959), (95, 112367), (103, 112397), (107, 112421), (108, 112424), (118, 112484), (125, 112526), (134, 112586), (135, 112598), (141, 112637), (145, 112655), (148, 112661), (150, 112685), (158, 112721), (161, 112730), (165, 112745),

Gene: ShiaLabeouf\_202 Start: 108711, Stop: 109784, Start Num: 14

Candidate Starts for ShiaLabeouf\_202:

(9, 108684), (Start: 14 @108711 has 172 MA's), (19, 108744), (23, 108777), (33, 108867), (36, 108876), (46, 108972), (49, 108993), (95, 109401), (103, 109431), (107, 109455), (108, 109458), (118, 109518), (125, 109560), (134, 109620), (135, 109632), (141, 109671), (145, 109689), (148, 109695), (150, 109719), (158, 109755), (161, 109764), (165, 109779),

Gene: Shifa\_182 Start: 109288, Stop: 110361, Start Num: 14

Candidate Starts for Shifa\_182:

(9, 109261), (Start: 14 @109288 has 172 MA's), (19, 109321), (23, 109354), (33, 109444), (36, 109453), (46, 109549), (49, 109570), (95, 109978), (103, 110008), (107, 110032), (108, 110035), (118, 110095), (125, 110137), (134, 110197), (135, 110209), (141, 110248), (145, 110266), (148, 110272), (150, 110296), (158, 110332), (161, 110341), (165, 110356),

Gene: Shnickers\_203 Start: 108775, Stop: 109848, Start Num: 14

Candidate Starts for Shnickers\_203:

(9, 108748), (Start: 14 @108775 has 172 MA's), (19, 108808), (23, 108841), (33, 108931), (36, 108940), (46, 109036), (49, 109057), (95, 109465), (103, 109495), (107, 109519), (108, 109522), (118, 109582), (125, 109624), (134, 109684), (135, 109696), (141, 109735), (145, 109753), (148, 109759), (150, 109783), (158, 109819), (161, 109828), (165, 109843),

Gene: Shrimp\_207 Start: 110832, Stop: 111905, Start Num: 14

Candidate Starts for Shrimp\_207:

(9, 110805), (Start: 14 @110832 has 172 MA's), (19, 110865), (23, 110898), (33, 110988), (36, 110997), (46, 111093), (49, 111114), (95, 111522), (103, 111552), (107, 111576), (108, 111579), (118, 111639), (125, 111681), (134, 111741), (135, 111753), (141, 111792), (145, 111810), (148, 111816), (150, 111840), (158, 111876), (161, 111885), (165, 111900),

Gene: SilverDipper\_209 Start: 110324, Stop: 111397, Start Num: 14

Candidate Starts for SilverDipper\_209:

(9, 110297), (Start: 14 @110324 has 172 MA's), (19, 110357), (23, 110390), (33, 110480), (36, 110489), (46, 110585), (49, 110606), (95, 111014), (103, 111044), (107, 111068), (108, 111071), (118, 111131), (125, 111173), (134, 111233), (135, 111245), (141, 111284), (145, 111302), (148, 111308), (150, 111332), (158, 111368), (161, 111377), (165, 111392),

Gene: Skog\_208 Start: 132502, Stop: 133617, Start Num: 14

Candidate Starts for Skog\_208:

(1, 131149), (2, 131212), (3, 131368), (4, 131917), (6, 132355), (Start: 14 @132502 has 172 MA's), (19, 132544), (36, 132679), (48, 132790), (49, 132796), (61, 132910), (64, 132967), (66, 132982), (70, 133003), (106, 133264), (110, 133285), (112, 133291), (117, 133327), (118, 133330), (125, 133372), (130, 133405), (133, 133429), (137, 133456), (141, 133480), (154, 133543), (156, 133555),

Gene: SmallFry\_205 Start: 108869, Stop: 109942, Start Num: 14

Candidate Starts for SmallFry\_205:

(9, 108842), (Start: 14 @108869 has 172 MA's), (19, 108902), (23, 108935), (33, 109025), (36, 109034), (46, 109130), (49, 109151), (95, 109559), (103, 109589), (107, 109613), (108, 109616), (118, 109676), (125, 109718), (134, 109778), (135, 109790), (141, 109829), (145, 109847), (148, 109853), (150, 109877), (158, 109913), (161, 109922), (165, 109937),

Gene: Spec\_200 Start: 109060, Stop: 110133, Start Num: 14

Candidate Starts for Spec\_200:

(9, 109033), (Start: 14 @109060 has 172 MA's), (19, 109093), (23, 109126), (33, 109216), (36, 109225), (46, 109321), (49, 109342), (95, 109750), (103, 109780), (107, 109804), (108, 109807), (118, 109867), (125, 109909), (134, 109969), (135, 109981), (141, 110020), (145, 110038), (148, 110044), (150, 110068), (158, 110104), (161, 110113), (165, 110128),

Gene: Specks\_209 Start: 111176, Stop: 112249, Start Num: 14

Candidate Starts for Specks\_209:

(9, 111149), (Start: 14 @111176 has 172 MA's), (19, 111209), (23, 111242), (33, 111332), (36, 111341), (46, 111437), (49, 111458), (95, 111866), (103, 111896), (107, 111920), (108, 111923), (118, 111983), (125, 112025), (134, 112085), (135, 112097), (141, 112136), (145, 112154), (148, 112160),

(150, 112184), (158, 112220), (161, 112229), (165, 112244),

Gene: Sprinklers\_203 Start: 109427, Stop: 110500, Start Num: 14

Candidate Starts for Sprinklers\_203:

(9, 109400), (Start: 14 @109427 has 172 MA's), (19, 109460), (23, 109493), (33, 109583), (36, 109592), (46, 109688), (49, 109709), (95, 110117), (103, 110147), (107, 110171), (108, 110174), (118, 110234), (125, 110276), (134, 110336), (135, 110348), (141, 110387), (145, 110405), (148, 110411), (150, 110435), (158, 110471), (161, 110480), (165, 110495),

Gene: Spud\_199 Start: 109139, Stop: 110212, Start Num: 14

Candidate Starts for Spud\_199:

(9, 109112), (Start: 14 @109139 has 172 MA's), (19, 109172), (23, 109205), (33, 109295), (36, 109304), (46, 109400), (49, 109421), (95, 109829), (103, 109859), (107, 109883), (108, 109886), (118, 109946), (125, 109988), (134, 110048), (135, 110060), (141, 110099), (145, 110117), (148, 110123), (150, 110147), (158, 110183), (161, 110192), (165, 110207),

Gene: SrishMeg2525\_202 Start: 110303, Stop: 111376, Start Num: 14

Candidate Starts for SrishMeg2525\_202:

(9, 110276), (Start: 14 @110303 has 172 MA's), (19, 110336), (23, 110369), (33, 110459), (36, 110468), (46, 110564), (49, 110585), (95, 110993), (103, 111023), (107, 111047), (108, 111050), (118, 111110), (125, 111152), (134, 111212), (135, 111224), (141, 111263), (145, 111281), (148, 111287), (150, 111311), (158, 111347), (161, 111356), (165, 111371),

Gene: StephanieG\_201 Start: 110334, Stop: 111407, Start Num: 14

Candidate Starts for StephanieG\_201:

(9, 110307), (Start: 14 @110334 has 172 MA's), (19, 110367), (23, 110400), (33, 110490), (36, 110499), (46, 110595), (49, 110616), (95, 111024), (103, 111054), (107, 111078), (108, 111081), (118, 111141), (125, 111183), (134, 111243), (135, 111255), (141, 111294), (145, 111312), (148, 111318), (150, 111342), (158, 111378), (161, 111387), (165, 111402),

Gene: Stormageddon\_72 Start: 68324, Stop: 69418, Start Num: 17

Candidate Starts for Stormageddon\_72:

(Start: 17 @68324 has 2 MA's), (20, 68369), (24, 68408), (36, 68483), (49, 68600), (65, 68753), (79, 68876), (108, 69071), (110, 69086), (127, 69191), (128, 69197), (139, 69269), (141, 69281), (148, 69305), (151, 69329), (152, 69332), (154, 69341), (164, 69386),

Gene: Stubby\_189 Start: 109179, Stop: 110252, Start Num: 14

Candidate Starts for Stubby\_189:

(9, 109152), (Start: 14 @109179 has 172 MA's), (19, 109212), (23, 109245), (33, 109335), (36, 109344), (46, 109440), (49, 109461), (95, 109869), (103, 109899), (107, 109923), (108, 109926), (118, 109986), (125, 110028), (134, 110088), (135, 110100), (141, 110139), (145, 110157), (148, 110163), (150, 110187), (158, 110223), (161, 110232), (165, 110247),

Gene: StubbySaigey\_210 Start: 109858, Stop: 110931, Start Num: 14

Candidate Starts for StubbySaigey\_210:

(9, 109831), (Start: 14 @109858 has 172 MA's), (19, 109891), (23, 109924), (33, 110014), (36, 110023), (46, 110119), (49, 110140), (95, 110548), (103, 110578), (107, 110602), (108, 110605), (118, 110665), (125, 110707), (134, 110767), (135, 110779), (141, 110818), (145, 110836), (148, 110842), (150, 110866), (158, 110902), (161, 110911), (165, 110926),

Gene: Teardrop\_202 Start: 108371, Stop: 109444, Start Num: 14

Candidate Starts for Teardrop\_202:



(9, 108344), (Start: 14 @108371 has 172 MA's), (19, 108404), (23, 108437), (33, 108527), (36, 108536), (46, 108632), (49, 108653), (95, 109061), (103, 109091), (107, 109115), (108, 109118), (118, 109178), (125, 109220), (134, 109280), (135, 109292), (141, 109331), (145, 109349), (148, 109355), (150, 109379), (158, 109415), (161, 109424), (165, 109439),

Gene: TinyTim\_203 Start: 109152, Stop: 110225, Start Num: 14

Candidate Starts for TinyTim\_203:

(9, 109125), (Start: 14 @109152 has 172 MA's), (19, 109185), (23, 109218), (33, 109308), (36, 109317), (46, 109413), (49, 109434), (95, 109842), (103, 109872), (107, 109896), (108, 109899), (118, 109959), (125, 110001), (134, 110061), (135, 110073), (141, 110112), (145, 110130), (148, 110136), (150, 110160), (158, 110196), (161, 110205), (165, 110220),

Gene: Tonenili\_226 Start: 115973, Stop: 117046, Start Num: 14

Candidate Starts for Tonenili\_226:

(6, 115823), (Start: 14 @115973 has 172 MA's), (19, 116006), (23, 116039), (25, 116066), (46, 116234), (49, 116255), (95, 116663), (107, 116717), (108, 116720), (118, 116780), (125, 116822), (134, 116882), (141, 116933), (145, 116951), (148, 116957), (150, 116981), (151, 116984), (158, 117017), (161, 117026), (165, 117041),

Gene: Tortoise16\_203 Start: 109614, Stop: 110687, Start Num: 14

Candidate Starts for Tortoise16\_203:

(9, 109587), (Start: 14 @109614 has 172 MA's), (19, 109647), (23, 109680), (33, 109770), (36, 109779), (46, 109875), (49, 109896), (95, 110304), (103, 110334), (107, 110358), (108, 110361), (118, 110421), (125, 110463), (134, 110523), (135, 110535), (141, 110574), (145, 110592), (148, 110598), (150, 110622), (158, 110658), (161, 110667), (165, 110682),

Gene: Trinitium\_201 Start: 108899, Stop: 109972, Start Num: 14

Candidate Starts for Trinitium\_201:

(9, 108872), (Start: 14 @108899 has 172 MA's), (19, 108932), (23, 108965), (33, 109055), (36, 109064), (46, 109160), (49, 109181), (95, 109589), (103, 109619), (107, 109643), (108, 109646), (118, 109706), (125, 109748), (134, 109808), (135, 109820), (141, 109859), (145, 109877), (148, 109883), (150, 109907), (158, 109943), (161, 109952), (165, 109967),

Gene: Turret\_198 Start: 108481, Stop: 109554, Start Num: 14

Candidate Starts for Turret\_198:

(9, 108454), (Start: 14 @108481 has 172 MA's), (19, 108514), (23, 108547), (33, 108637), (36, 108646), (46, 108742), (49, 108763), (95, 109171), (103, 109201), (107, 109225), (108, 109228), (118, 109288), (125, 109330), (134, 109390), (135, 109402), (141, 109441), (145, 109459), (148, 109465), (150, 109489), (158, 109525), (161, 109534), (165, 109549),

Gene: Tyke\_203 Start: 110981, Stop: 112054, Start Num: 14

Candidate Starts for Tyke\_203:

(9, 110954), (Start: 14 @110981 has 172 MA's), (19, 111014), (23, 111047), (33, 111137), (36, 111146), (46, 111242), (49, 111263), (95, 111671), (103, 111701), (107, 111725), (108, 111728), (118, 111788), (125, 111830), (134, 111890), (135, 111902), (141, 111941), (145, 111959), (148, 111965), (150, 111989), (158, 112025), (161, 112034), (165, 112049),

Gene: UBSmoodge\_67 Start: 56037, Stop: 55186, Start Num: 44

Candidate Starts for UBSmoodge\_67:

(28, 56127), (Start: 30 @56124 has 5 MA's), (Start: 44 @56037 has 2 MA's), (56, 55896), (57, 55890), (64, 55824), (68, 55794), (72, 55752), (75, 55719), (76, 55707), (81, 55674), (84, 55662), (86, 55650), (94, 55575), (105, 55515), (106, 55509), (111, 55485), (119, 55434), (122, 55425), (129, 55374), (144, 55293), (146, 55284), (162, 55212),

Gene: ValleyTerrace\_206 Start: 109065, Stop: 110138, Start Num: 14

Candidate Starts for ValleyTerrace\_206:

(9, 109038), (Start: 14 @109065 has 172 MA's), (19, 109098), (23, 109131), (33, 109221), (36, 109230), (46, 109326), (49, 109347), (95, 109755), (103, 109785), (107, 109809), (108, 109812), (118, 109872), (125, 109914), (134, 109974), (135, 109986), (141, 110025), (145, 110043), (148, 110049), (150, 110073), (158, 110109), (161, 110118), (165, 110133),

Gene: Wally\_203 Start: 109049, Stop: 110122, Start Num: 14

Candidate Starts for Wally\_203:

(9, 109022), (Start: 14 @109049 has 172 MA's), (19, 109082), (23, 109115), (33, 109205), (36, 109214), (46, 109310), (49, 109331), (95, 109739), (103, 109769), (107, 109793), (108, 109796), (118, 109856), (125, 109898), (134, 109958), (135, 109970), (141, 110009), (145, 110027), (148, 110033), (150, 110057), (158, 110093), (161, 110102), (165, 110117),

Gene: Willis\_206 Start: 109963, Stop: 111036, Start Num: 14

Candidate Starts for Willis\_206:

(9, 109936), (Start: 14 @109963 has 172 MA's), (19, 109996), (23, 110029), (33, 110119), (36, 110128), (46, 110224), (49, 110245), (95, 110653), (103, 110683), (107, 110707), (108, 110710), (118, 110770), (125, 110812), (134, 110872), (135, 110884), (141, 110923), (145, 110941), (148, 110947), (150, 110971), (158, 111007), (161, 111016), (165, 111031),

Gene: Yassified\_202 Start: 109404, Stop: 110477, Start Num: 14

Candidate Starts for Yassified\_202:

(9, 109377), (Start: 14 @109404 has 172 MA's), (19, 109437), (23, 109470), (33, 109560), (36, 109569), (46, 109665), (49, 109686), (95, 110094), (103, 110124), (107, 110148), (108, 110151), (118, 110211), (125, 110253), (134, 110313), (135, 110325), (141, 110364), (145, 110382), (148, 110388), (150, 110412), (158, 110448), (161, 110457), (165, 110472),

Gene: YemiJoy2021\_206 Start: 110719, Stop: 111792, Start Num: 14

Candidate Starts for YemiJoy2021\_206:

(9, 110692), (Start: 14 @110719 has 172 MA's), (19, 110752), (23, 110785), (33, 110875), (36, 110884), (46, 110980), (49, 111001), (95, 111409), (103, 111439), (107, 111463), (108, 111466), (118, 111526), (125, 111568), (134, 111628), (135, 111640), (141, 111679), (145, 111697), (148, 111703), (150, 111727), (158, 111763), (161, 111772), (165, 111787),

Gene: YoungMoneyMata\_203 Start: 109261, Stop: 110334, Start Num: 14

Candidate Starts for YoungMoneyMata\_203:

(9, 109234), (Start: 14 @109261 has 172 MA's), (19, 109294), (23, 109327), (33, 109417), (36, 109426), (46, 109522), (49, 109543), (95, 109951), (103, 109981), (107, 110005), (108, 110008), (118, 110068), (125, 110110), (134, 110170), (135, 110182), (141, 110221), (145, 110239), (148, 110245), (150, 110269), (158, 110305), (161, 110314), (165, 110329),

Gene: Yucca\_205 Start: 110711, Stop: 111784, Start Num: 14

Candidate Starts for Yucca\_205:

(9, 110684), (Start: 14 @110711 has 172 MA's), (19, 110744), (23, 110777), (33, 110867), (36, 110876), (46, 110972), (49, 110993), (95, 111401), (103, 111431), (107, 111455), (108, 111458), (118, 111518), (125, 111560), (134, 111620), (135, 111632), (141, 111671), (145, 111689), (148, 111695), (150, 111719), (158, 111755), (161, 111764), (165, 111779),

Gene: Zalkecks\_204 Start: 109792, Stop: 110865, Start Num: 14

Candidate Starts for Zalkecks\_204:

(9, 109765), (Start: 14 @109792 has 172 MA's), (19, 109825), (23, 109858), (33, 109948), (36, 109957), (46, 110053), (49, 110074), (95, 110482), (103, 110512), (107, 110536), (108, 110539), (118, 110599), (125, 110641), (134, 110701), (135, 110713), (141, 110752), (145, 110770), (148, 110776), (150, 110800), (158, 110836), (161, 110845), (165, 110860),

Gene: Zeenon\_207 Start: 110363, Stop: 111436, Start Num: 14

Candidate Starts for Zeenon\_207:

(9, 110336), (Start: 14 @110363 has 172 MA's), (19, 110396), (23, 110429), (33, 110519), (36, 110528), (46, 110624), (49, 110645), (95, 111053), (103, 111083), (107, 111107), (108, 111110), (118, 111170), (125, 111212), (134, 111272), (135, 111284), (141, 111323), (145, 111341), (148, 111347), (150, 111371), (158, 111407), (161, 111416), (165, 111431),

Gene: ZygoTaiga\_202 Start: 110983, Stop: 112056, Start Num: 14

Candidate Starts for ZygoTaiga\_202:

(9, 110956), (Start: 14 @110983 has 172 MA's), (19, 111016), (23, 111049), (33, 111139), (36, 111148), (46, 111244), (49, 111265), (95, 111673), (103, 111703), (107, 111727), (108, 111730), (118, 111790), (125, 111832), (134, 111892), (135, 111904), (141, 111943), (145, 111961), (148, 111967), (150, 111991), (158, 112027), (161, 112036), (165, 112051),