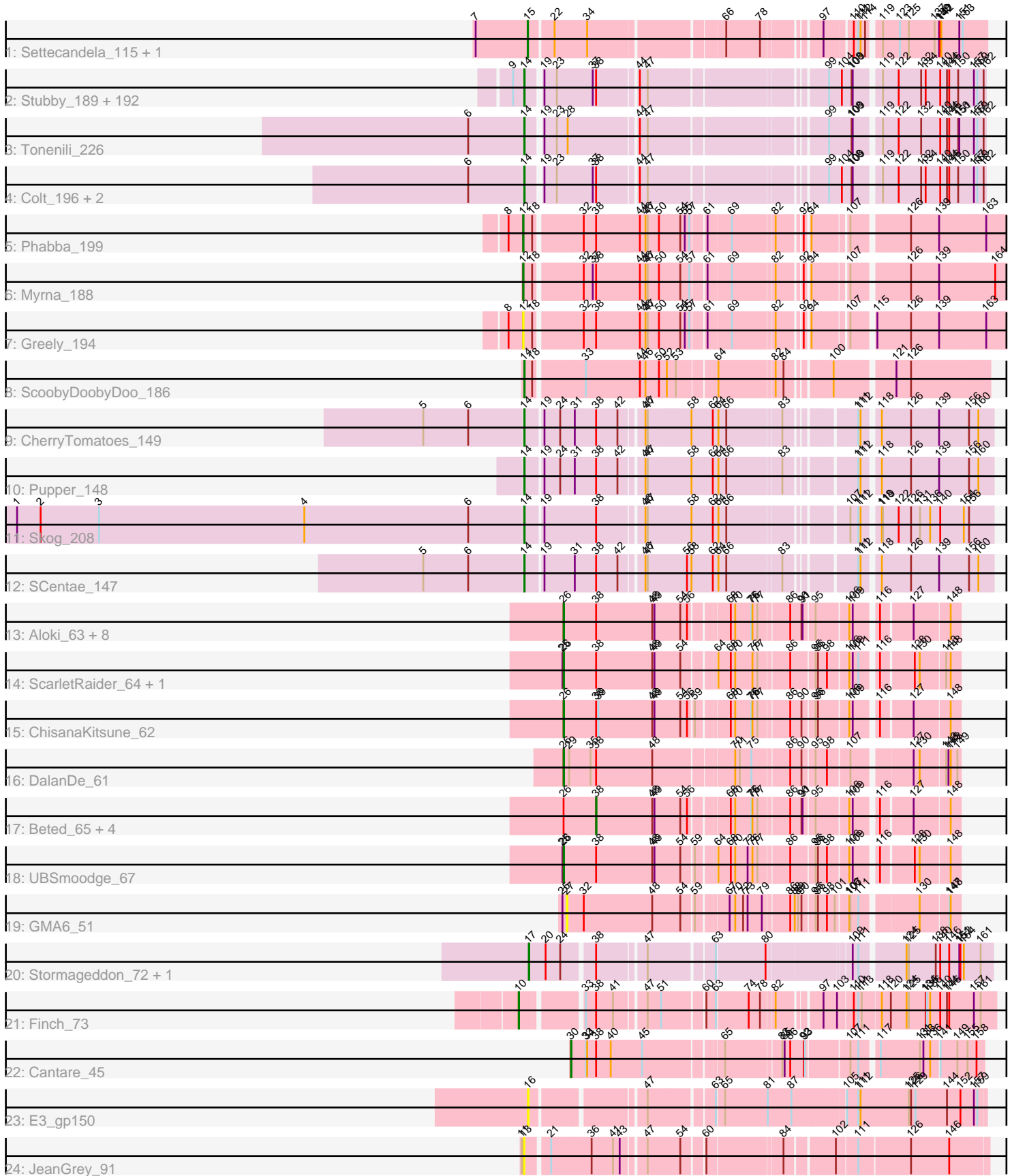


# Pham 222866



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 222866 Report

This analysis was run 03/28/25 on database version 593.

Pham number 222866 has 233 members, 38 are drafts.

Phages represented in each track:

- Track 1 : Settecandela\_115, Phrappuccino\_115
- Track 2 : Stubby\_189, Amataga\_206, Burrough\_207, Napoleon13\_202, Morizzled23\_202, Bigswole\_210, CindyLou\_206, Willis\_206, Spec\_200, Breeniome\_204, Shelob\_206, Gizmo\_211, NuevoMundo\_208, Tainan\_206, Cactojaque\_200, Bonray\_207, BeanWater\_197, 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, Shifa\_182, LolaVinca\_203, MoMoMixon\_203, Babyland\_208, Astraea\_199, Concombre\_210, Teardrop\_202, Daffodil\_210, EmToTheThree\_205, Bread\_200, Chomp\_205, InigoMontoya\_208, Grasshills\_213, Naval22\_210, Dietrick\_194, Ading\_206, BadAgartude\_199, Dandelion\_213, Darko\_204, YemiJoy2021\_206, Lethe\_207, Phlegm\_209, Norm\_205, Pio\_213, Janiyra\_208, Capablanca\_210, Megamind\_202, Audrick\_207, ZygoTaiga\_202, JayJay\_207, Koguma\_204, Erdmann\_206, Phusco\_203, Domi\_199, DeejaClivia\_193, InterFolia\_208, ChickenPhender\_201, Zeenon\_207, Issimir\_198, Melpomini\_200, Salacia\_205, Gabriel\_208, Belieber\_198, Quasimodo\_207, Turret\_198, Sauce\_201, Blackdragon\_200, Asterius\_207, Bipolarisk\_203, Phox\_206, ET08\_193, ErnieJ\_198, Chargie21\_202, FrayBell\_208, Mikro\_201, Ngannou\_202, SVoro\_202, Khaleesi\_204, Delylah\_207, Catera\_198, ChaylaJr\_202, Delilah\_203, Jezreel\_202, Lukilu\_196, Haldule\_198, ArcherS7\_205, Maby2021\_205, Ava3\_204, EmmaElysia\_208, BananaFence\_202, EasyJones\_208, DrPhinkDaddy\_202, Sprinklers\_203, StubbySaigey\_210, FudgeTart\_200, Iota\_200, Demodog\_211, Ghost\_205, Momo\_206, Shaqnato\_196, EggyFarm\_214, Alice\_192, Pleione\_209, Mangeria\_206, DirtMonster\_198, Shrimp\_207, StephanieG\_201, BackyardAgain\_200, BigCity\_214, TinyTim\_203, Spud\_199, Grungle\_189, Blackbrain\_202, Wally\_203, Drazdys\_203, Gamgam\_206, Yucca\_205, Jemmno\_204, Pier\_206, Jaygup\_201, Bxz1\_195, Ablatia\_203, QBert\_197, McGee\_204, Atlantean\_205, Fongie\_206, Shnickers\_203, Zalkecks\_204, Bangla1971\_205, HyRo\_193, Naija\_206, DTDevon\_207, FoxtrotP1\_203, Trinitium\_201, Izajani\_203, Ewok\_204, Flabslab\_200, Tortoise16\_203, LordLeafolot\_207, JustHall\_199, NedWong\_204, JigglyPuff\_212, 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, NoodleTree\_211, Essence\_202, Specks\_209, SrishMeg2525\_202, GlutenPhree\_205, Fludd\_205, IkeLoa\_197, ShiaLabeouf\_202, Roots515\_207, Guwapp\_200, McWolfish\_202, Primadonna\_200, Nidhogg\_206, Adlitam\_204, Tyke\_203, ValleyTerrace\_206, Kboogie\_209, Ronan\_201, Matsumoto\_204, ScottMcG\_198, ParkTD\_204, Nappy\_206,

- Caravan\_196, Rabinovish\_198, Pinkcreek\_189
- Track 3 : Tonenili\_226
  - Track 4 : Colt\_196, Cane17\_196, Blubba\_194
  - 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, EmoNemo\_63, Kabocha\_67, Toneprano\_63, MintFritos\_63, Oogie\_65, Pakusa\_63, Schomber\_64
  - Track 14 : ScarletRaider\_64, FlyingTortilla\_65
  - Track 15 : ChisanaKitsune\_62
  - Track 16 : DalanDe\_61
  - Track 17 : Beted\_65, Lenoshki\_65, Chidiebere\_66, Hanem\_65, Twin\_63
  - Track 18 : UBSmoodge\_67
  - 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 177 of the 195 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ablatia\_203, Ading\_206, Adlitam\_204, Alice\_192, Amataga\_206, ArcherS7\_205, Asterius\_207, Astraea\_199, Atlantean\_205, Audrick\_207, Ava3\_204, Babyland\_208, BackyardAgain\_200, BadAgartude\_199, BananaFence\_202, Bangla1971\_205, Basquiat\_202, BeanWater\_197, Belieber\_198, BigCity\_214, Bigswole\_210, Bipolarisk\_203, Blackbrain\_202, Blackdragon\_200, Blubba\_194, Bonray\_207, Bread\_200, Breeniome\_204, Burrough\_207, Bxz1\_195, Cactojaque\_200, Cali\_198, Cane17\_196, Capablanca\_210, Caravan\_196, Catera\_198, Chargie21\_202, CharlieB\_199, ChaylaJr\_202, CherryTomatoes\_149, ChickenPhender\_201, Chomp\_205, CindyLou\_206, Colt\_196, Concombre\_210, DTDevon\_207, Daffodil\_210, Dandelion\_213, Darko\_204, DeejaClivia\_193, Delilah\_203, Delylah\_207, Demodog\_211, Derek\_202, Dietrick\_194, DirtMonster\_198, Domi\_199, DrPhinkDaddy\_202, Drazdys\_203, ET08\_193, EasyJones\_208, EggyFarm\_214, EmToTheThree\_205, EmmaElysia\_208, Erdmann\_206, ErnieJ\_198, Essence\_202, Ewok\_204, Flabslab\_200, Fludd\_205, Fongie\_206, FoxtrotP1\_203, FrayBell\_208, FudgeTart\_200, Gabriel\_208, Gamgam\_206, Ghost\_205, Gizmo\_211, GlutenPhree\_205, Grasshills\_213, Grungle\_189, Guwapp\_200, Halldule\_198, HyRo\_193, I3\_215, IkeLoa\_197, InigoMontoya\_208, InterFolia\_208, Iota\_200, Issimir\_198, Izajani\_203, JPickles\_201, Janiyra\_208, JayJay\_207, Jaygup\_201, Jedediah\_205, Jemmno\_204, Jessibeth14\_205, Jezreel\_202, JigglyPuff\_212,

JulietS\_198, JustHall\_199, Kamryn\_204, Kboogie\_209, Khaleesi\_204, Koguma\_204, LRRHood\_198, Latch\_205, Lee7\_205, Lethe\_207, 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, Primadonna\_200, Pupper\_148, PurduePete\_205, QBert\_197, Quasimodo\_207, Rabinovich\_198, Rahel\_206, Rizal\_197, RoMag\_200, Ronan\_201, Roots515\_207, SCentae\_147, SVoro\_202, Salacia\_205, Sauce\_201, ScoobyDoobyDoo\_186, ScottMcG\_198, Sebata\_206, Shaq nato\_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, Tainan\_206, 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:

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

### Summary by start number:

Start 10:

- Found in 1 of 233 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 1 of 195
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finch\_73 (singleton),

Start 12:

- Found in 3 of 233 ( 1.3% ) of genes in pham
- Manual Annotations of this start: 2 of 195
- 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 233 ( 0.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JeanGrey\_91 (singleton),

Start 14:

- Found in 202 of 233 ( 86.7% ) of genes in pham
- Manual Annotations of this start: 177 of 195
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ablatia\_203 (C1), Ading\_206 (C1), Adlitam\_204 (C1), Alice\_192 (C1), Amataga\_206 (C1), ArcherS7\_205 (C1), Asterius\_207 (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), Belieber\_198 (C1), BigCity\_214 (C1), Bigswole\_210 (C1), Bipolarisk\_203 (C1), Blackbrain\_202 (C1), Blackdragon\_200 (C1), Blubba\_194 (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\_205 (C1), CindyLou\_206 (C1), Colt\_196 (C1), Concombre\_210 (C1), DTDevon\_207 (C1), Daffodil\_210 (C1), Dandelion\_213 (C1), Darko\_204 (C1), DeejaClivia\_193 (C1), Delilah\_203 (C1), Delylah\_207 (C1), Demodog\_211 (C1), Derek\_202 (C1), Dietrick\_194 (C1), DirtMonster\_198 (C1), Domi\_199 (C1), DrPhinkDaddy\_202 (C1), Drazdys\_203 (C1), ET08\_193 (C1), EasyJones\_208 (C1), EggFarm\_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), Fongie\_206 (C1), FoxtrotP1\_203 (C1), FrayBell\_208 (C1), FudgeTart\_200 (C1), Gabriel\_208 (C1), Gamgam\_206 (C1), Ghost\_205 (C1), Gizmo\_211 (C1), GlutenPhree\_205 (C1), Grasshills\_213 (C1), Grungle\_189 (C1), Guwapp\_200 (C1), Halldule\_198 (C1), HyRo\_193 (C1), I3\_215 (C1), IkeLoa\_197 (C1), InigoMontoya\_208 (C1), InterFolia\_208 (C1), Iota\_200 (C1), Issimir\_198 (C1), Izajani\_203 (C1), JPickles\_201 (C1), JaniyrA\_208 (C1), JayJay\_207 (C1), Jaygup\_201 (C1), Jedediah\_205 (C1), Jemmno\_204 (C1), Jessibeth14\_205 (C1), Jezreel\_202 (C1), JigglyPuff\_212 (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), Lethe\_207 (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), Primadonna\_200 (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), SVoro\_202 (C1), 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), Tainan\_206 (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 233 ( 0.9% ) of genes in pham
- Manual Annotations of this start: 2 of 195
- 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 233 ( 0.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: E3\_gp150 (singleton),

Start 17:

- Found in 2 of 233 ( 0.9% ) of genes in pham
- Manual Annotations of this start: 2 of 195
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog\_75 (DX), Stormageddon\_72 (DX),

Start 26:

- Found in 19 of 233 ( 8.2% ) of genes in pham
- Manual Annotations of this start: 8 of 195
- Called 73.7% of time when present
- Phage (with cluster) where this start called: Aloki\_63 (DQ), ChisanaKitsune\_62 (DQ), DalanDe\_61 (DQ), EmoNemo\_63 (DQ), FlyingTortilla\_65 (DQ), Gray\_66 (DQ), Kabocha\_67 (DQ), MintFritos\_63 (DQ), Oogie\_65 (DQ), Pakusa\_63 (DQ), ScarletRaider\_64 (DQ), Schomber\_64 (DQ), Toneprano\_63 (DQ), UBSmoodge\_67 (DQ),

Start 27:

- Found in 1 of 233 ( 0.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA6\_51 (DQ),

Start 30:

- Found in 1 of 233 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 1 of 195
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cantare\_45 (singleton),

Start 38:

- Found in 226 of 233 ( 97.0% ) of genes in pham
- Manual Annotations of this start: 2 of 195
- Called 2.2% of time when present
- Phage (with cluster) where this start called: Beted\_65 (DQ), Chidiebere\_66 (DQ), Hanem\_65 (DQ), Lenoshki\_65 (DQ), Twin\_63 (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 172 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 26 was manually annotated 8 times for cluster DQ.
- Start number 38 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: Ablatia\_203 Start: 110022, Stop: 111095, Start Num: 14

Candidate Starts for Ablatia\_203:

(9, 109995), (Start: 14 @110022 has 177 MA's), (19, 110055), (23, 110088), (37, 110178), (Start: 38 @110187 has 2 MA's), (44, 110283), (47, 110304), (99, 110712), (104, 110742), (108, 110766), (109, 110769), (119, 110829), (122, 110871), (132, 110931), (134, 110943), (140, 110982), (144, 111000), (146, 111006), (150, 111030), (157, 111066), (159, 111075), (162, 111090),

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

Candidate Starts for Ading\_206:

(9, 110622), (Start: 14 @110649 has 177 MA's), (19, 110682), (23, 110715), (37, 110805), (Start: 38 @110814 has 2 MA's), (44, 110910), (47, 110931), (99, 111339), (104, 111369), (108, 111393), (109, 111396), (119, 111456), (122, 111498), (132, 111558), (134, 111570), (140, 111609), (144, 111627), (146, 111633), (150, 111657), (157, 111693), (159, 111702), (162, 111717),

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

Candidate Starts for Adlitam\_204:

(9, 109226), (Start: 14 @109253 has 177 MA's), (19, 109286), (23, 109319), (37, 109409), (Start: 38 @109418 has 2 MA's), (44, 109514), (47, 109535), (99, 109943), (104, 109973), (108, 109997), (109, 110000), (119, 110060), (122, 110102), (132, 110162), (134, 110174), (140, 110213), (144, 110231), (146, 110237), (150, 110261), (157, 110297), (159, 110306), (162, 110321),

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

Candidate Starts for Alice\_192:

(9, 109194), (Start: 14 @109221 has 177 MA's), (19, 109254), (23, 109287), (37, 109377), (Start: 38 @109386 has 2 MA's), (44, 109482), (47, 109503), (99, 109911), (104, 109941), (108, 109965), (109, 109968), (119, 110028), (122, 110070), (132, 110130), (134, 110142), (140, 110181), (144, 110199),

(146, 110205), (150, 110229), (157, 110265), (159, 110274), (162, 110289),

Gene: Alok\_i\_63 Start: 52730, Stop: 51792, Start Num: 26

Candidate Starts for Alok\_i\_63:

(Start: 26 @52730 has 8 MA's), (Start: 38 @52643 has 2 MA's), (48, 52502), (49, 52496), (54, 52430), (56, 52412), (68, 52325), (70, 52313), (75, 52271), (76, 52268), (77, 52256), (86, 52181), (90, 52151), (91, 52148), (95, 52121), (106, 52040), (109, 52031), (116, 51980), (127, 51902), (148, 51818),

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

Candidate Starts for Amataga\_206:

(9, 109038), (Start: 14 @109065 has 177 MA's), (19, 109098), (23, 109131), (37, 109221), (Start: 38 @109230 has 2 MA's), (44, 109326), (47, 109347), (99, 109755), (104, 109785), (108, 109809), (109, 109812), (119, 109872), (122, 109914), (132, 109974), (134, 109986), (140, 110025), (144, 110043), (146, 110049), (150, 110073), (157, 110109), (159, 110118), (162, 110133),

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

Candidate Starts for ArcherS7\_205:

(9, 110080), (Start: 14 @110107 has 177 MA's), (19, 110140), (23, 110173), (37, 110263), (Start: 38 @110272 has 2 MA's), (44, 110368), (47, 110389), (99, 110797), (104, 110827), (108, 110851), (109, 110854), (119, 110914), (122, 110956), (132, 111016), (134, 111028), (140, 111067), (144, 111085), (146, 111091), (150, 111115), (157, 111151), (159, 111160), (162, 111175),

Gene: Asterius\_207 Start: 109474, Stop: 110547, Start Num: 14

Candidate Starts for Asterius\_207:

(9, 109447), (Start: 14 @109474 has 177 MA's), (19, 109507), (23, 109540), (37, 109630), (Start: 38 @109639 has 2 MA's), (44, 109735), (47, 109756), (99, 110164), (104, 110194), (108, 110218), (109, 110221), (119, 110281), (122, 110323), (132, 110383), (134, 110395), (140, 110434), (144, 110452), (146, 110458), (150, 110482), (157, 110518), (159, 110527), (162, 110542),

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

Candidate Starts for Astraea\_199:

(9, 108642), (Start: 14 @108669 has 177 MA's), (19, 108702), (23, 108735), (37, 108825), (Start: 38 @108834 has 2 MA's), (44, 108930), (47, 108951), (99, 109359), (104, 109389), (108, 109413), (109, 109416), (119, 109476), (122, 109518), (132, 109578), (134, 109590), (140, 109629), (144, 109647), (146, 109653), (150, 109677), (157, 109713), (159, 109722), (162, 109737),

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

Candidate Starts for Atlantean\_205:

(9, 109038), (Start: 14 @109065 has 177 MA's), (19, 109098), (23, 109131), (37, 109221), (Start: 38 @109230 has 2 MA's), (44, 109326), (47, 109347), (99, 109755), (104, 109785), (108, 109809), (109, 109812), (119, 109872), (122, 109914), (132, 109974), (134, 109986), (140, 110025), (144, 110043), (146, 110049), (150, 110073), (157, 110109), (159, 110118), (162, 110133),

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

Candidate Starts for Audrick\_207:

(9, 108928), (Start: 14 @108955 has 177 MA's), (19, 108988), (23, 109021), (37, 109111), (Start: 38 @109120 has 2 MA's), (44, 109216), (47, 109237), (99, 109645), (104, 109675), (108, 109699), (109, 109702), (119, 109762), (122, 109804), (132, 109864), (134, 109876), (140, 109915), (144, 109933), (146, 109939), (150, 109963), (157, 109999), (159, 110008), (162, 110023),

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

Candidate Starts for Ava3\_204:



(9, 109472), (Start: 14 @109499 has 177 MA's), (19, 109532), (23, 109565), (37, 109655), (Start: 38 @109664 has 2 MA's), (44, 109760), (47, 109781), (99, 110189), (104, 110219), (108, 110243), (109, 110246), (119, 110306), (122, 110348), (132, 110408), (134, 110420), (140, 110459), (144, 110477), (146, 110483), (150, 110507), (157, 110543), (159, 110552), (162, 110567),

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

Candidate Starts for Babyland\_208:

(9, 109815), (Start: 14 @109842 has 177 MA's), (19, 109875), (23, 109908), (37, 109998), (Start: 38 @110007 has 2 MA's), (44, 110103), (47, 110124), (99, 110532), (104, 110562), (108, 110586), (109, 110589), (119, 110649), (122, 110691), (132, 110751), (134, 110763), (140, 110802), (144, 110820), (146, 110826), (150, 110850), (157, 110886), (159, 110895), (162, 110910),

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

Candidate Starts for BackyardAgain\_200:

(9, 107724), (Start: 14 @107751 has 177 MA's), (19, 107784), (23, 107817), (37, 107907), (Start: 38 @107916 has 2 MA's), (44, 108012), (47, 108033), (99, 108441), (104, 108471), (108, 108495), (109, 108498), (119, 108558), (122, 108600), (132, 108660), (134, 108672), (140, 108711), (144, 108729), (146, 108735), (150, 108759), (157, 108795), (159, 108804), (162, 108819),

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

Candidate Starts for BadAgartude\_199:

(9, 109137), (Start: 14 @109164 has 177 MA's), (19, 109197), (23, 109230), (37, 109320), (Start: 38 @109329 has 2 MA's), (44, 109425), (47, 109446), (99, 109854), (104, 109884), (108, 109908), (109, 109911), (119, 109971), (122, 110013), (132, 110073), (134, 110085), (140, 110124), (144, 110142), (146, 110148), (150, 110172), (157, 110208), (159, 110217), (162, 110232),

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

Candidate Starts for BananaFence\_202:

(9, 109271), (Start: 14 @109298 has 177 MA's), (19, 109331), (23, 109364), (37, 109454), (Start: 38 @109463 has 2 MA's), (44, 109559), (47, 109580), (99, 109988), (104, 110018), (108, 110042), (109, 110045), (119, 110105), (122, 110147), (132, 110207), (134, 110219), (140, 110258), (144, 110276), (146, 110282), (150, 110306), (157, 110342), (159, 110351), (162, 110366),

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

Candidate Starts for Bangla1971\_205:

(9, 109044), (Start: 14 @109071 has 177 MA's), (19, 109104), (23, 109137), (37, 109227), (Start: 38 @109236 has 2 MA's), (44, 109332), (47, 109353), (99, 109761), (104, 109791), (108, 109815), (109, 109818), (119, 109878), (122, 109920), (132, 109980), (134, 109992), (140, 110031), (144, 110049), (146, 110055), (150, 110079), (157, 110115), (159, 110124), (162, 110139),

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

Candidate Starts for Basquiat\_202:

(9, 108550), (Start: 14 @108577 has 177 MA's), (19, 108610), (23, 108643), (37, 108733), (Start: 38 @108742 has 2 MA's), (44, 108838), (47, 108859), (99, 109267), (104, 109297), (108, 109321), (109, 109324), (119, 109384), (122, 109426), (132, 109486), (134, 109498), (140, 109537), (144, 109555), (146, 109561), (150, 109585), (157, 109621), (159, 109630), (162, 109645),

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

Candidate Starts for BeanWater\_197:

(9, 109076), (Start: 14 @109103 has 177 MA's), (19, 109136), (23, 109169), (37, 109259), (Start: 38 @109268 has 2 MA's), (44, 109364), (47, 109385), (99, 109793), (104, 109823), (108, 109847), (109, 109850), (119, 109910), (122, 109952), (132, 110012), (134, 110024), (140, 110063), (144, 110081), (146, 110087), (150, 110111), (157, 110147), (159, 110156), (162, 110171),

Gene: Belieber\_198 Start: 107891, Stop: 108964, Start Num: 14

Candidate Starts for Belieber\_198:

(9, 107864), (Start: 14 @107891 has 177 MA's), (19, 107924), (23, 107957), (37, 108047), (Start: 38 @108056 has 2 MA's), (44, 108152), (47, 108173), (99, 108581), (104, 108611), (108, 108635), (109, 108638), (119, 108698), (122, 108740), (132, 108800), (134, 108812), (140, 108851), (144, 108869), (146, 108875), (150, 108899), (157, 108935), (159, 108944), (162, 108959),

Gene: Beted\_65 Start: 54338, Stop: 53487, Start Num: 38

Candidate Starts for Beted\_65:

(Start: 26 @54425 has 8 MA's), (Start: 38 @54338 has 2 MA's), (48, 54197), (49, 54191), (54, 54125), (56, 54107), (68, 54020), (70, 54008), (75, 53966), (76, 53963), (77, 53951), (86, 53876), (90, 53846), (91, 53843), (95, 53816), (106, 53735), (109, 53726), (116, 53675), (127, 53597), (148, 53513),

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

Candidate Starts for BigCity\_214:

(9, 112647), (Start: 14 @112674 has 177 MA's), (19, 112707), (23, 112740), (37, 112830), (Start: 38 @112839 has 2 MA's), (44, 112935), (47, 112956), (99, 113364), (104, 113394), (108, 113418), (109, 113421), (119, 113481), (122, 113523), (132, 113583), (134, 113595), (140, 113634), (144, 113652), (146, 113658), (150, 113682), (157, 113718), (159, 113727), (162, 113742),

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

Candidate Starts for Bigswole\_210:

(9, 112498), (Start: 14 @112525 has 177 MA's), (19, 112558), (23, 112591), (37, 112681), (Start: 38 @112690 has 2 MA's), (44, 112786), (47, 112807), (99, 113215), (104, 113245), (108, 113269), (109, 113272), (119, 113332), (122, 113374), (132, 113434), (134, 113446), (140, 113485), (144, 113503), (146, 113509), (150, 113533), (157, 113569), (159, 113578), (162, 113593),

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

Candidate Starts for Bipolarisk\_203:

(9, 109741), (Start: 14 @109768 has 177 MA's), (19, 109801), (23, 109834), (37, 109924), (Start: 38 @109933 has 2 MA's), (44, 110029), (47, 110050), (99, 110458), (104, 110488), (108, 110512), (109, 110515), (119, 110575), (122, 110617), (132, 110677), (134, 110689), (140, 110728), (144, 110746), (146, 110752), (150, 110776), (157, 110812), (159, 110821), (162, 110836),

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

Candidate Starts for Blackbrain\_202:

(9, 109635), (Start: 14 @109662 has 177 MA's), (19, 109695), (23, 109728), (37, 109818), (Start: 38 @109827 has 2 MA's), (44, 109923), (47, 109944), (99, 110352), (104, 110382), (108, 110406), (109, 110409), (119, 110469), (122, 110511), (132, 110571), (134, 110583), (140, 110622), (144, 110640), (146, 110646), (150, 110670), (157, 110706), (159, 110715), (162, 110730),

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

Candidate Starts for Blackdragon\_200:

(9, 109374), (Start: 14 @109401 has 177 MA's), (19, 109434), (23, 109467), (37, 109557), (Start: 38 @109566 has 2 MA's), (44, 109662), (47, 109683), (99, 110091), (104, 110121), (108, 110145), (109, 110148), (119, 110208), (122, 110250), (132, 110310), (134, 110322), (140, 110361), (144, 110379), (146, 110385), (150, 110409), (157, 110445), (159, 110454), (162, 110469),

Gene: Blubba\_194 Start: 112787, Stop: 113860, Start Num: 14

Candidate Starts for Blubba\_194:

(6, 112637), (Start: 14 @112787 has 177 MA's), (19, 112820), (23, 112853), (37, 112943), (Start: 38 @112952 has 2 MA's), (44, 113048), (47, 113069), (99, 113477), (104, 113507), (108, 113531), (109,

113534), (119, 113594), (122, 113636), (132, 113696), (134, 113708), (140, 113747), (144, 113765), (146, 113771), (150, 113795), (157, 113831), (159, 113840), (162, 113855),

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

Candidate Starts for Bonray\_207:

(9, 111143), (Start: 14 @111170 has 177 MA's), (19, 111203), (23, 111236), (37, 111326), (Start: 38 @111335 has 2 MA's), (44, 111431), (47, 111452), (99, 111860), (104, 111890), (108, 111914), (109, 111917), (119, 111977), (122, 112019), (132, 112079), (134, 112091), (140, 112130), (144, 112148), (146, 112154), (150, 112178), (157, 112214), (159, 112223), (162, 112238),

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

Candidate Starts for Bread\_200:

(9, 109141), (Start: 14 @109168 has 177 MA's), (19, 109201), (23, 109234), (37, 109324), (Start: 38 @109333 has 2 MA's), (44, 109429), (47, 109450), (99, 109858), (104, 109888), (108, 109912), (109, 109915), (119, 109975), (122, 110017), (132, 110077), (134, 110089), (140, 110128), (144, 110146), (146, 110152), (150, 110176), (157, 110212), (159, 110221), (162, 110236),

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

Candidate Starts for Breeniome\_204:

(9, 108595), (Start: 14 @108622 has 177 MA's), (19, 108655), (23, 108688), (37, 108778), (Start: 38 @108787 has 2 MA's), (44, 108883), (47, 108904), (99, 109312), (104, 109342), (108, 109366), (109, 109369), (119, 109429), (122, 109471), (132, 109531), (134, 109543), (140, 109582), (144, 109600), (146, 109606), (150, 109630), (157, 109666), (159, 109675), (162, 109690),

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

Candidate Starts for Burrough\_207:

(9, 110911), (Start: 14 @110938 has 177 MA's), (19, 110971), (23, 111004), (37, 111094), (Start: 38 @111103 has 2 MA's), (44, 111199), (47, 111220), (99, 111628), (104, 111658), (108, 111682), (109, 111685), (119, 111745), (122, 111787), (132, 111847), (134, 111859), (140, 111898), (144, 111916), (146, 111922), (150, 111946), (157, 111982), (159, 111991), (162, 112006),

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

Candidate Starts for Bxz1\_195:

(9, 112110), (Start: 14 @112137 has 177 MA's), (19, 112170), (23, 112203), (37, 112293), (Start: 38 @112302 has 2 MA's), (44, 112398), (47, 112419), (99, 112827), (104, 112857), (108, 112881), (109, 112884), (119, 112944), (122, 112986), (132, 113046), (134, 113058), (140, 113097), (144, 113115), (146, 113121), (150, 113145), (157, 113181), (159, 113190), (162, 113205),

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

Candidate Starts for Cactojaque\_200:

(9, 108570), (Start: 14 @108597 has 177 MA's), (19, 108630), (23, 108663), (37, 108753), (Start: 38 @108762 has 2 MA's), (44, 108858), (47, 108879), (99, 109287), (104, 109317), (108, 109341), (109, 109344), (119, 109404), (122, 109446), (132, 109506), (134, 109518), (140, 109557), (144, 109575), (146, 109581), (150, 109605), (157, 109641), (159, 109650), (162, 109665),

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

Candidate Starts for Cali\_198:

(9, 110517), (Start: 14 @110544 has 177 MA's), (19, 110577), (23, 110610), (37, 110700), (Start: 38 @110709 has 2 MA's), (44, 110805), (47, 110826), (99, 111234), (104, 111264), (108, 111288), (109, 111291), (119, 111351), (122, 111393), (132, 111453), (134, 111465), (140, 111504), (144, 111522), (146, 111528), (150, 111552), (157, 111588), (159, 111597), (162, 111612),

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

Candidate Starts for Cane17\_196:

(6, 113046), (Start: 14 @113196 has 177 MA's), (19, 113229), (23, 113262), (37, 113352), (Start: 38 @113361 has 2 MA's), (44, 113457), (47, 113478), (99, 113886), (104, 113916), (108, 113940), (109, 113943), (119, 114003), (122, 114045), (132, 114105), (134, 114117), (140, 114156), (144, 114174), (146, 114180), (150, 114204), (157, 114240), (159, 114249), (162, 114264),

Gene: Cantare\_45 Start: 41518, Stop: 40511, Start Num: 30

Candidate Starts for Cantare\_45:

(Start: 30 @41518 has 1 MA's), (33, 41479), (34, 41476), (Start: 38 @41452 has 2 MA's), (40, 41413), (45, 41332), (65, 41143), (83, 41005), (85, 40999), (86, 40984), (92, 40948), (93, 40945), (107, 40840), (111, 40819), (117, 40780), (131, 40675), (133, 40666), (136, 40648), (141, 40627), (149, 40582), (155, 40555), (158, 40531),

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

Candidate Starts for Capablanca\_210:

(9, 111738), (Start: 14 @111765 has 177 MA's), (19, 111798), (23, 111831), (37, 111921), (Start: 38 @111930 has 2 MA's), (44, 112026), (47, 112047), (99, 112455), (104, 112485), (108, 112509), (109, 112512), (119, 112572), (122, 112614), (132, 112674), (134, 112686), (140, 112725), (144, 112743), (146, 112749), (150, 112773), (157, 112809), (159, 112818), (162, 112833),

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

Candidate Starts for Caravan\_196:

(9, 109858), (Start: 14 @109885 has 177 MA's), (19, 109918), (23, 109951), (37, 110041), (Start: 38 @110050 has 2 MA's), (44, 110146), (47, 110167), (99, 110575), (104, 110605), (108, 110629), (109, 110632), (119, 110692), (122, 110734), (132, 110794), (134, 110806), (140, 110845), (144, 110863), (146, 110869), (150, 110893), (157, 110929), (159, 110938), (162, 110953),

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

Candidate Starts for Catera\_198:

(9, 108251), (Start: 14 @108278 has 177 MA's), (19, 108311), (23, 108344), (37, 108434), (Start: 38 @108443 has 2 MA's), (44, 108539), (47, 108560), (99, 108968), (104, 108998), (108, 109022), (109, 109025), (119, 109085), (122, 109127), (132, 109187), (134, 109199), (140, 109238), (144, 109256), (146, 109262), (150, 109286), (157, 109322), (159, 109331), (162, 109346),

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

Candidate Starts for Chargie21\_202:

(9, 108550), (Start: 14 @108577 has 177 MA's), (19, 108610), (23, 108643), (37, 108733), (Start: 38 @108742 has 2 MA's), (44, 108838), (47, 108859), (99, 109267), (104, 109297), (108, 109321), (109, 109324), (119, 109384), (122, 109426), (132, 109486), (134, 109498), (140, 109537), (144, 109555), (146, 109561), (150, 109585), (157, 109621), (159, 109630), (162, 109645),

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

Candidate Starts for CharlieB\_199:

(9, 109278), (Start: 14 @109305 has 177 MA's), (19, 109338), (23, 109371), (37, 109461), (Start: 38 @109470 has 2 MA's), (44, 109566), (47, 109587), (99, 109995), (104, 110025), (108, 110049), (109, 110052), (119, 110112), (122, 110154), (132, 110214), (134, 110226), (140, 110265), (144, 110283), (146, 110289), (150, 110313), (157, 110349), (159, 110358), (162, 110373),

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

Candidate Starts for ChaylaJr\_202:

(9, 108978), (Start: 14 @109005 has 177 MA's), (19, 109038), (23, 109071), (37, 109161), (Start: 38 @109170 has 2 MA's), (44, 109266), (47, 109287), (99, 109695), (104, 109725), (108, 109749), (109, 109752), (119, 109812), (122, 109854), (132, 109914), (134, 109926), (140, 109965), (144, 109983),

(146, 109989), (150, 110013), (157, 110049), (159, 110058), (162, 110073),

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

Candidate Starts for CherryTomatoes\_149:

(5, 102616), (6, 102736), (Start: 14 @102880 has 177 MA's), (19, 102922), (24, 102964), (31, 103000), (Start: 38 @103057 has 2 MA's), (42, 103114), (46, 103168), (47, 103174), (58, 103288), (62, 103345), (64, 103360), (66, 103381), (83, 103516), (111, 103663), (112, 103669), (118, 103705), (126, 103783), (139, 103855), (156, 103933), (160, 103957),

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

Candidate Starts for ChickenPhender\_201:

(9, 108697), (Start: 14 @108724 has 177 MA's), (19, 108757), (23, 108790), (37, 108880), (Start: 38 @108889 has 2 MA's), (44, 108985), (47, 109006), (99, 109414), (104, 109444), (108, 109468), (109, 109471), (119, 109531), (122, 109573), (132, 109633), (134, 109645), (140, 109684), (144, 109702), (146, 109708), (150, 109732), (157, 109768), (159, 109777), (162, 109792),

Gene: Chidiebere\_66 Start: 53174, Stop: 52323, Start Num: 38

Candidate Starts for Chidiebere\_66:

(Start: 26 @53261 has 8 MA's), (Start: 38 @53174 has 2 MA's), (48, 53033), (49, 53027), (54, 52961), (56, 52943), (68, 52856), (70, 52844), (75, 52802), (76, 52799), (77, 52787), (86, 52712), (90, 52682), (91, 52679), (95, 52652), (106, 52571), (109, 52562), (116, 52511), (127, 52433), (148, 52349),

Gene: ChisanaKitsune\_62 Start: 52034, Stop: 51096, Start Num: 26

Candidate Starts for ChisanaKitsune\_62:

(Start: 26 @52034 has 8 MA's), (Start: 38 @51947 has 2 MA's), (39, 51941), (48, 51806), (49, 51800), (54, 51734), (56, 51716), (59, 51704), (68, 51629), (70, 51617), (75, 51575), (76, 51572), (77, 51560), (86, 51485), (90, 51455), (95, 51425), (96, 51419), (106, 51344), (109, 51335), (116, 51284), (127, 51206), (148, 51122),

Gene: Chomp\_205 Start: 110354, Stop: 111427, Start Num: 14

Candidate Starts for Chomp\_205:

(9, 110327), (Start: 14 @110354 has 177 MA's), (19, 110387), (23, 110420), (37, 110510), (Start: 38 @110519 has 2 MA's), (44, 110615), (47, 110636), (99, 111044), (104, 111074), (108, 111098), (109, 111101), (119, 111161), (122, 111203), (132, 111263), (134, 111275), (140, 111314), (144, 111332), (146, 111338), (150, 111362), (157, 111398), (159, 111407), (162, 111422),

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

Candidate Starts for CindyLou\_206:

(9, 110587), (Start: 14 @110614 has 177 MA's), (19, 110647), (23, 110680), (37, 110770), (Start: 38 @110779 has 2 MA's), (44, 110875), (47, 110896), (99, 111304), (104, 111334), (108, 111358), (109, 111361), (119, 111421), (122, 111463), (132, 111523), (134, 111535), (140, 111574), (144, 111592), (146, 111598), (150, 111622), (157, 111658), (159, 111667), (162, 111682),

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

Candidate Starts for Colt\_196:

(6, 112277), (Start: 14 @112427 has 177 MA's), (19, 112460), (23, 112493), (37, 112583), (Start: 38 @112592 has 2 MA's), (44, 112688), (47, 112709), (99, 113117), (104, 113147), (108, 113171), (109, 113174), (119, 113234), (122, 113276), (132, 113336), (134, 113348), (140, 113387), (144, 113405), (146, 113411), (150, 113435), (157, 113471), (159, 113480), (162, 113495),

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

Candidate Starts for Concombre\_210:

(9, 112190), (Start: 14 @112217 has 177 MA's), (19, 112250), (23, 112283), (37, 112373), (Start: 38 @112382 has 2 MA's), (44, 112478), (47, 112499), (99, 112907), (104, 112937), (108, 112961), (109, 112964), (119, 113024), (122, 113066), (132, 113126), (134, 113138), (140, 113177), (144, 113195), (146, 113201), (150, 113225), (157, 113261), (159, 113270), (162, 113285),

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

Candidate Starts for DTDevon\_207:

(9, 111076), (Start: 14 @111103 has 177 MA's), (19, 111136), (23, 111169), (37, 111259), (Start: 38 @111268 has 2 MA's), (44, 111364), (47, 111385), (99, 111793), (104, 111823), (108, 111847), (109, 111850), (119, 111910), (122, 111952), (132, 112012), (134, 112024), (140, 112063), (144, 112081), (146, 112087), (150, 112111), (157, 112147), (159, 112156), (162, 112171),

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

Candidate Starts for Daffodil\_210:

(9, 110041), (Start: 14 @110068 has 177 MA's), (19, 110101), (23, 110134), (37, 110224), (Start: 38 @110233 has 2 MA's), (44, 110329), (47, 110350), (99, 110758), (104, 110788), (108, 110812), (109, 110815), (119, 110875), (122, 110917), (132, 110977), (134, 110989), (140, 111028), (144, 111046), (146, 111052), (150, 111076), (157, 111112), (159, 111121), (162, 111136),

Gene: DalanDe\_61 Start: 55926, Stop: 54979, Start Num: 26

Candidate Starts for DalanDe\_61:

(Start: 26 @55926 has 8 MA's), (29, 55911), (35, 55854), (Start: 38 @55839 has 2 MA's), (48, 55698), (70, 55506), (71, 55494), (75, 55464), (86, 55374), (90, 55344), (95, 55314), (98, 55284), (107, 55230), (127, 55089), (130, 55077), (143, 55017), (145, 55011), (148, 55005), (149, 54987),

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

Candidate Starts for Dandelion\_213:

(9, 113674), (Start: 14 @113701 has 177 MA's), (19, 113734), (23, 113767), (37, 113857), (Start: 38 @113866 has 2 MA's), (44, 113962), (47, 113983), (99, 114391), (104, 114421), (108, 114445), (109, 114448), (119, 114508), (122, 114550), (132, 114610), (134, 114622), (140, 114661), (144, 114679), (146, 114685), (150, 114709), (157, 114745), (159, 114754), (162, 114769),

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

Candidate Starts for Darko\_204:

(9, 109275), (Start: 14 @109302 has 177 MA's), (19, 109335), (23, 109368), (37, 109458), (Start: 38 @109467 has 2 MA's), (44, 109563), (47, 109584), (99, 109992), (104, 110022), (108, 110046), (109, 110049), (119, 110109), (122, 110151), (132, 110211), (134, 110223), (140, 110262), (144, 110280), (146, 110286), (150, 110310), (157, 110346), (159, 110355), (162, 110370),

Gene: DeejaClivia\_193 Start: 108437, Stop: 109510, Start Num: 14

Candidate Starts for DeejaClivia\_193:

(9, 108410), (Start: 14 @108437 has 177 MA's), (19, 108470), (23, 108503), (37, 108593), (Start: 38 @108602 has 2 MA's), (44, 108698), (47, 108719), (99, 109127), (104, 109157), (108, 109181), (109, 109184), (119, 109244), (122, 109286), (132, 109346), (134, 109358), (140, 109397), (144, 109415), (146, 109421), (150, 109445), (157, 109481), (159, 109490), (162, 109505),

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

Candidate Starts for Delilah\_203:

(9, 110159), (Start: 14 @110186 has 177 MA's), (19, 110219), (23, 110252), (37, 110342), (Start: 38 @110351 has 2 MA's), (44, 110447), (47, 110468), (99, 110876), (104, 110906), (108, 110930), (109, 110933), (119, 110993), (122, 111035), (132, 111095), (134, 111107), (140, 111146), (144, 111164), (146, 111170), (150, 111194), (157, 111230), (159, 111239), (162, 111254),

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

Candidate Starts for Delylah\_207:

(9, 110448), (Start: 14 @110475 has 177 MA's), (19, 110508), (23, 110541), (37, 110631), (Start: 38 @110640 has 2 MA's), (44, 110736), (47, 110757), (99, 111165), (104, 111195), (108, 111219), (109, 111222), (119, 111282), (122, 111324), (132, 111384), (134, 111396), (140, 111435), (144, 111453), (146, 111459), (150, 111483), (157, 111519), (159, 111528), (162, 111543),

Gene: Demodog\_211 Start: 112227, Stop: 113300, Start Num: 14

Candidate Starts for Demodog\_211:

(9, 112200), (Start: 14 @112227 has 177 MA's), (19, 112260), (23, 112293), (37, 112383), (Start: 38 @112392 has 2 MA's), (44, 112488), (47, 112509), (99, 112917), (104, 112947), (108, 112971), (109, 112974), (119, 113034), (122, 113076), (132, 113136), (134, 113148), (140, 113187), (144, 113205), (146, 113211), (150, 113235), (157, 113271), (159, 113280), (162, 113295),

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

Candidate Starts for Derek\_202:

(9, 109604), (Start: 14 @109631 has 177 MA's), (19, 109664), (23, 109697), (37, 109787), (Start: 38 @109796 has 2 MA's), (44, 109892), (47, 109913), (99, 110321), (104, 110351), (108, 110375), (109, 110378), (119, 110438), (122, 110480), (132, 110540), (134, 110552), (140, 110591), (144, 110609), (146, 110615), (150, 110639), (157, 110675), (159, 110684), (162, 110699),

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

Candidate Starts for Dietrick\_194:

(9, 108280), (Start: 14 @108307 has 177 MA's), (19, 108340), (23, 108373), (37, 108463), (Start: 38 @108472 has 2 MA's), (44, 108568), (47, 108589), (99, 108997), (104, 109027), (108, 109051), (109, 109054), (119, 109114), (122, 109156), (132, 109216), (134, 109228), (140, 109267), (144, 109285), (146, 109291), (150, 109315), (157, 109351), (159, 109360), (162, 109375),

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

Candidate Starts for DirtMonster\_198:

(9, 109520), (Start: 14 @109547 has 177 MA's), (19, 109580), (23, 109613), (37, 109703), (Start: 38 @109712 has 2 MA's), (44, 109808), (47, 109829), (99, 110237), (104, 110267), (108, 110291), (109, 110294), (119, 110354), (122, 110396), (132, 110456), (134, 110468), (140, 110507), (144, 110525), (146, 110531), (150, 110555), (157, 110591), (159, 110600), (162, 110615),

Gene: Domi\_199 Start: 109658, Stop: 110731, Start Num: 14

Candidate Starts for Domi\_199:

(9, 109631), (Start: 14 @109658 has 177 MA's), (19, 109691), (23, 109724), (37, 109814), (Start: 38 @109823 has 2 MA's), (44, 109919), (47, 109940), (99, 110348), (104, 110378), (108, 110402), (109, 110405), (119, 110465), (122, 110507), (132, 110567), (134, 110579), (140, 110618), (144, 110636), (146, 110642), (150, 110666), (157, 110702), (159, 110711), (162, 110726),

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

Candidate Starts for DrPhinkDaddy\_202:

(9, 110819), (Start: 14 @110846 has 177 MA's), (19, 110879), (23, 110912), (37, 111002), (Start: 38 @111011 has 2 MA's), (44, 111107), (47, 111128), (99, 111536), (104, 111566), (108, 111590), (109, 111593), (119, 111653), (122, 111695), (132, 111755), (134, 111767), (140, 111806), (144, 111824), (146, 111830), (150, 111854), (157, 111890), (159, 111899), (162, 111914),

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

Candidate Starts for Drazdys\_203:

(9, 109721), (Start: 14 @109748 has 177 MA's), (19, 109781), (23, 109814), (37, 109904), (Start: 38 @109913 has 2 MA's), (44, 110009), (47, 110030), (99, 110438), (104, 110468), (108, 110492), (109,

110495), (119, 110555), (122, 110597), (132, 110657), (134, 110669), (140, 110708), (144, 110726), (146, 110732), (150, 110756), (157, 110792), (159, 110801), (162, 110816),

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

Candidate Starts for E3\_gp150:

(16, 99938), (47, 100202), (63, 100355), (65, 100373), (81, 100487), (87, 100550), (105, 100682), (111, 100712), (112, 100718), (125, 100847), (126, 100853), (129, 100865), (144, 100949), (152, 100985), (157, 101015), (159, 101024),

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

Candidate Starts for ET08\_193:

(9, 109312), (Start: 14 @109339 has 177 MA's), (19, 109372), (23, 109405), (37, 109495), (Start: 38 @109504 has 2 MA's), (44, 109600), (47, 109621), (99, 110029), (104, 110059), (108, 110083), (109, 110086), (119, 110146), (122, 110188), (132, 110248), (134, 110260), (140, 110299), (144, 110317), (146, 110323), (150, 110347), (157, 110383), (159, 110392), (162, 110407),

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

Candidate Starts for EasyJones\_208:

(9, 109793), (Start: 14 @109820 has 177 MA's), (19, 109853), (23, 109886), (37, 109976), (Start: 38 @109985 has 2 MA's), (44, 110081), (47, 110102), (99, 110510), (104, 110540), (108, 110564), (109, 110567), (119, 110627), (122, 110669), (132, 110729), (134, 110741), (140, 110780), (144, 110798), (146, 110804), (150, 110828), (157, 110864), (159, 110873), (162, 110888),

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

Candidate Starts for EggyFarm\_214:

(9, 112648), (Start: 14 @112675 has 177 MA's), (19, 112708), (23, 112741), (37, 112831), (Start: 38 @112840 has 2 MA's), (44, 112936), (47, 112957), (99, 113365), (104, 113395), (108, 113419), (109, 113422), (119, 113482), (122, 113524), (132, 113584), (134, 113596), (140, 113635), (144, 113653), (146, 113659), (150, 113683), (157, 113719), (159, 113728), (162, 113743),

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

Candidate Starts for EmToTheThree\_205:

(9, 110192), (Start: 14 @110219 has 177 MA's), (19, 110252), (23, 110285), (37, 110375), (Start: 38 @110384 has 2 MA's), (44, 110480), (47, 110501), (99, 110909), (104, 110939), (108, 110963), (109, 110966), (119, 111026), (122, 111068), (132, 111128), (134, 111140), (140, 111179), (144, 111197), (146, 111203), (150, 111227), (157, 111263), (159, 111272), (162, 111287),

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

Candidate Starts for EmmaElysia\_208:

(9, 110211), (Start: 14 @110238 has 177 MA's), (19, 110271), (23, 110304), (37, 110394), (Start: 38 @110403 has 2 MA's), (44, 110499), (47, 110520), (99, 110928), (104, 110958), (108, 110982), (109, 110985), (119, 111045), (122, 111087), (132, 111147), (134, 111159), (140, 111198), (144, 111216), (146, 111222), (150, 111246), (157, 111282), (159, 111291), (162, 111306),

Gene: EmoNemo\_63 Start: 52730, Stop: 51792, Start Num: 26

Candidate Starts for EmoNemo\_63:

(Start: 26 @52730 has 8 MA's), (Start: 38 @52643 has 2 MA's), (48, 52502), (49, 52496), (54, 52430), (56, 52412), (68, 52325), (70, 52313), (75, 52271), (76, 52268), (77, 52256), (86, 52181), (90, 52151), (91, 52148), (95, 52121), (106, 52040), (109, 52031), (116, 51980), (127, 51902), (148, 51818),

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

Candidate Starts for Erdmann\_206:



(9, 110150), (Start: 14 @110177 has 177 MA's), (19, 110210), (23, 110243), (37, 110333), (Start: 38 @110342 has 2 MA's), (44, 110438), (47, 110459), (99, 110867), (104, 110897), (108, 110921), (109, 110924), (119, 110984), (122, 111026), (132, 111086), (134, 111098), (140, 111137), (144, 111155), (146, 111161), (150, 111185), (157, 111221), (159, 111230), (162, 111245),

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

Candidate Starts for ErnieJ\_198:

(9, 107972), (Start: 14 @107999 has 177 MA's), (19, 108032), (23, 108065), (37, 108155), (Start: 38 @108164 has 2 MA's), (44, 108260), (47, 108281), (99, 108689), (104, 108719), (108, 108743), (109, 108746), (119, 108806), (122, 108848), (132, 108908), (134, 108920), (140, 108959), (144, 108977), (146, 108983), (150, 109007), (157, 109043), (159, 109052), (162, 109067),

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

Candidate Starts for Essence\_202:

(9, 108933), (Start: 14 @108960 has 177 MA's), (19, 108993), (23, 109026), (37, 109116), (Start: 38 @109125 has 2 MA's), (44, 109221), (47, 109242), (99, 109650), (104, 109680), (108, 109704), (109, 109707), (119, 109767), (122, 109809), (132, 109869), (134, 109881), (140, 109920), (144, 109938), (146, 109944), (150, 109968), (157, 110004), (159, 110013), (162, 110028),

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

Candidate Starts for Ewok\_204:

(9, 110069), (Start: 14 @110096 has 177 MA's), (19, 110129), (23, 110162), (37, 110252), (Start: 38 @110261 has 2 MA's), (44, 110357), (47, 110378), (99, 110786), (104, 110816), (108, 110840), (109, 110843), (119, 110903), (122, 110945), (132, 111005), (134, 111017), (140, 111056), (144, 111074), (146, 111080), (150, 111104), (157, 111140), (159, 111149), (162, 111164),

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

Candidate Starts for Finch\_73:

(Start: 10 @62417 has 1 MA's), (33, 62549), (Start: 38 @62576 has 2 MA's), (41, 62621), (47, 62693), (51, 62729), (60, 62831), (63, 62852), (74, 62930), (78, 62960), (82, 62990), (97, 63086), (103, 63122), (110, 63155), (111, 63167), (113, 63176), (118, 63224), (120, 63248), (124, 63290), (125, 63296), (134, 63341), (135, 63344), (136, 63353), (140, 63380), (144, 63398), (146, 63404), (157, 63464), (161, 63482),

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

Candidate Starts for Flabslab\_200:

(9, 108114), (Start: 14 @108141 has 177 MA's), (19, 108174), (23, 108207), (37, 108297), (Start: 38 @108306 has 2 MA's), (44, 108402), (47, 108423), (99, 108831), (104, 108861), (108, 108885), (109, 108888), (119, 108948), (122, 108990), (132, 109050), (134, 109062), (140, 109101), (144, 109119), (146, 109125), (150, 109149), (157, 109185), (159, 109194), (162, 109209),

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

Candidate Starts for Fludd\_205:

(9, 109505), (Start: 14 @109532 has 177 MA's), (19, 109565), (23, 109598), (37, 109688), (Start: 38 @109697 has 2 MA's), (44, 109793), (47, 109814), (99, 110222), (104, 110252), (108, 110276), (109, 110279), (119, 110339), (122, 110381), (132, 110441), (134, 110453), (140, 110492), (144, 110510), (146, 110516), (150, 110540), (157, 110576), (159, 110585), (162, 110600),

Gene: FlyingTortilla\_65 Start: 56355, Stop: 55417, Start Num: 26

Candidate Starts for FlyingTortilla\_65:

(25, 56358), (Start: 26 @56355 has 8 MA's), (Start: 38 @56268 has 2 MA's), (48, 56127), (49, 56121), (54, 56055), (64, 55983), (68, 55950), (70, 55938), (76, 55893), (77, 55881), (86, 55806), (95, 55746), (96, 55740), (98, 55716), (106, 55665), (109, 55656), (111, 55641), (116, 55605), (128, 55524), (130,

55515), (143, 55455), (148, 55443),

Gene: Fongie\_206 Start: 110119, Stop: 111192, Start Num: 14

Candidate Starts for Fongie\_206:

(9, 110092), (Start: 14 @110119 has 177 MA's), (19, 110152), (23, 110185), (37, 110275), (Start: 38 @110284 has 2 MA's), (44, 110380), (47, 110401), (99, 110809), (104, 110839), (108, 110863), (109, 110866), (119, 110926), (122, 110968), (132, 111028), (134, 111040), (140, 111079), (144, 111097), (146, 111103), (150, 111127), (157, 111163), (159, 111172), (162, 111187),

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

Candidate Starts for FoxtrotP1\_203:

(9, 110749), (Start: 14 @110776 has 177 MA's), (19, 110809), (23, 110842), (37, 110932), (Start: 38 @110941 has 2 MA's), (44, 111037), (47, 111058), (99, 111466), (104, 111496), (108, 111520), (109, 111523), (119, 111583), (122, 111625), (132, 111685), (134, 111697), (140, 111736), (144, 111754), (146, 111760), (150, 111784), (157, 111820), (159, 111829), (162, 111844),

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

Candidate Starts for FrayBell\_208:

(9, 109594), (Start: 14 @109621 has 177 MA's), (19, 109654), (23, 109687), (37, 109777), (Start: 38 @109786 has 2 MA's), (44, 109882), (47, 109903), (99, 110311), (104, 110341), (108, 110365), (109, 110368), (119, 110428), (122, 110470), (132, 110530), (134, 110542), (140, 110581), (144, 110599), (146, 110605), (150, 110629), (157, 110665), (159, 110674), (162, 110689),

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

Candidate Starts for FudgeTart\_200:

(9, 109216), (Start: 14 @109243 has 177 MA's), (19, 109276), (23, 109309), (37, 109399), (Start: 38 @109408 has 2 MA's), (44, 109504), (47, 109525), (99, 109933), (104, 109963), (108, 109987), (109, 109990), (119, 110050), (122, 110092), (132, 110152), (134, 110164), (140, 110203), (144, 110221), (146, 110227), (150, 110251), (157, 110287), (159, 110296), (162, 110311),

Gene: GMA6\_51 Start: 44602, Stop: 43667, Start Num: 27

Candidate Starts for GMA6\_51:

(25, 44614), (27, 44602), (32, 44557), (48, 44383), (54, 44311), (59, 44281), (67, 44209), (70, 44194), (72, 44173), (73, 44161), (79, 44125), (86, 44062), (88, 44050), (89, 44041), (90, 44032), (95, 44002), (96, 43996), (98, 43972), (101, 43951), (106, 43921), (107, 43918), (111, 43897), (130, 43765), (147, 43696), (148, 43693),

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

Candidate Starts for Gabriel\_208:

(9, 108671), (Start: 14 @108698 has 177 MA's), (19, 108731), (23, 108764), (37, 108854), (Start: 38 @108863 has 2 MA's), (44, 108959), (47, 108980), (99, 109388), (104, 109418), (108, 109442), (109, 109445), (119, 109505), (122, 109547), (132, 109607), (134, 109619), (140, 109658), (144, 109676), (146, 109682), (150, 109706), (157, 109742), (159, 109751), (162, 109766),

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

Candidate Starts for Gamgam\_206:

(9, 109028), (Start: 14 @109055 has 177 MA's), (19, 109088), (23, 109121), (37, 109211), (Start: 38 @109220 has 2 MA's), (44, 109316), (47, 109337), (99, 109745), (104, 109775), (108, 109799), (109, 109802), (119, 109862), (122, 109904), (132, 109964), (134, 109976), (140, 110015), (144, 110033), (146, 110039), (150, 110063), (157, 110099), (159, 110108), (162, 110123),

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

Candidate Starts for Ghost\_205:

(9, 108949), (Start: 14 @108976 has 177 MA's), (19, 109009), (23, 109042), (37, 109132), (Start: 38 @109141 has 2 MA's), (44, 109237), (47, 109258), (99, 109666), (104, 109696), (108, 109720), (109, 109723), (119, 109783), (122, 109825), (132, 109885), (134, 109897), (140, 109936), (144, 109954), (146, 109960), (150, 109984), (157, 110020), (159, 110029), (162, 110044),

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

Candidate Starts for Gizmo\_211:

(9, 112067), (Start: 14 @112094 has 177 MA's), (19, 112127), (23, 112160), (37, 112250), (Start: 38 @112259 has 2 MA's), (44, 112355), (47, 112376), (99, 112784), (104, 112814), (108, 112838), (109, 112841), (119, 112901), (122, 112943), (132, 113003), (134, 113015), (140, 113054), (144, 113072), (146, 113078), (150, 113102), (157, 113138), (159, 113147), (162, 113162),

Gene: GlutenPhree\_205 Start: 109066, Stop: 110139, Start Num: 14

Candidate Starts for GlutenPhree\_205:

(9, 109039), (Start: 14 @109066 has 177 MA's), (19, 109099), (23, 109132), (37, 109222), (Start: 38 @109231 has 2 MA's), (44, 109327), (47, 109348), (99, 109756), (104, 109786), (108, 109810), (109, 109813), (119, 109873), (122, 109915), (132, 109975), (134, 109987), (140, 110026), (144, 110044), (146, 110050), (150, 110074), (157, 110110), (159, 110119), (162, 110134),

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

Candidate Starts for Grasshills\_213:

(9, 112647), (Start: 14 @112674 has 177 MA's), (19, 112707), (23, 112740), (37, 112830), (Start: 38 @112839 has 2 MA's), (44, 112935), (47, 112956), (99, 113364), (104, 113394), (108, 113418), (109, 113421), (119, 113481), (122, 113523), (132, 113583), (134, 113595), (140, 113634), (144, 113652), (146, 113658), (150, 113682), (157, 113718), (159, 113727), (162, 113742),

Gene: Gray\_66 Start: 53261, Stop: 52323, Start Num: 26

Candidate Starts for Gray\_66:

(Start: 26 @53261 has 8 MA's), (Start: 38 @53174 has 2 MA's), (48, 53033), (49, 53027), (54, 52961), (56, 52943), (68, 52856), (70, 52844), (75, 52802), (76, 52799), (77, 52787), (86, 52712), (90, 52682), (91, 52679), (95, 52652), (106, 52571), (109, 52562), (116, 52511), (127, 52433), (148, 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), (32, 107065), (Start: 38 @107098 has 2 MA's), (44, 107215), (46, 107230), (47, 107236), (50, 107266), (54, 107320), (55, 107332), (57, 107344), (61, 107377), (69, 107437), (82, 107539), (92, 107593), (94, 107602), (107, 107683), (115, 107734), (126, 107821), (139, 107896), (163, 108016),

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

Candidate Starts for Grungle\_189:

(9, 106986), (Start: 14 @107013 has 177 MA's), (19, 107046), (23, 107079), (37, 107169), (Start: 38 @107178 has 2 MA's), (44, 107274), (47, 107295), (99, 107703), (104, 107733), (108, 107757), (109, 107760), (119, 107820), (122, 107862), (132, 107922), (134, 107934), (140, 107973), (144, 107991), (146, 107997), (150, 108021), (157, 108057), (159, 108066), (162, 108081),

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

Candidate Starts for Guwapp\_200:

(9, 107783), (Start: 14 @107810 has 177 MA's), (19, 107843), (23, 107876), (37, 107966), (Start: 38 @107975 has 2 MA's), (44, 108071), (47, 108092), (99, 108500), (104, 108530), (108, 108554), (109, 108557), (119, 108617), (122, 108659), (132, 108719), (134, 108731), (140, 108770), (144, 108788), (146, 108794), (150, 108818), (157, 108854), (159, 108863), (162, 108878),

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

Candidate Starts for Halldule\_198:

(9, 108168), (Start: 14 @108195 has 177 MA's), (19, 108228), (23, 108261), (37, 108351), (Start: 38 @108360 has 2 MA's), (44, 108456), (47, 108477), (99, 108885), (104, 108915), (108, 108939), (109, 108942), (119, 109002), (122, 109044), (132, 109104), (134, 109116), (140, 109155), (144, 109173), (146, 109179), (150, 109203), (157, 109239), (159, 109248), (162, 109263),

Gene: Hanem\_65 Start: 52643, Stop: 51792, Start Num: 38

Candidate Starts for Hanem\_65:

(Start: 26 @52730 has 8 MA's), (Start: 38 @52643 has 2 MA's), (48, 52502), (49, 52496), (54, 52430), (56, 52412), (68, 52325), (70, 52313), (75, 52271), (76, 52268), (77, 52256), (86, 52181), (90, 52151), (91, 52148), (95, 52121), (106, 52040), (109, 52031), (116, 51980), (127, 51902), (148, 51818),

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

Candidate Starts for HyRo\_193:

(9, 109292), (Start: 14 @109319 has 177 MA's), (19, 109352), (23, 109385), (37, 109475), (Start: 38 @109484 has 2 MA's), (44, 109580), (47, 109601), (99, 110009), (104, 110039), (108, 110063), (109, 110066), (119, 110126), (122, 110168), (132, 110228), (134, 110240), (140, 110279), (144, 110297), (146, 110303), (150, 110327), (157, 110363), (159, 110372), (162, 110387),

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

Candidate Starts for I3\_215:

(9, 112028), (Start: 14 @112055 has 177 MA's), (19, 112088), (23, 112121), (37, 112211), (Start: 38 @112220 has 2 MA's), (44, 112316), (47, 112337), (99, 112745), (104, 112775), (108, 112799), (109, 112802), (119, 112862), (122, 112904), (132, 112964), (134, 112976), (140, 113015), (144, 113033), (146, 113039), (150, 113063), (157, 113099), (159, 113108), (162, 113123),

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

Candidate Starts for IkeLoa\_197:

(9, 108690), (Start: 14 @108717 has 177 MA's), (19, 108750), (23, 108783), (37, 108873), (Start: 38 @108882 has 2 MA's), (44, 108978), (47, 108999), (99, 109407), (104, 109437), (108, 109461), (109, 109464), (119, 109524), (122, 109566), (132, 109626), (134, 109638), (140, 109677), (144, 109695), (146, 109701), (150, 109725), (157, 109761), (159, 109770), (162, 109785),

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

Candidate Starts for InigoMontoya\_208:

(9, 109702), (Start: 14 @109729 has 177 MA's), (19, 109762), (23, 109795), (37, 109885), (Start: 38 @109894 has 2 MA's), (44, 109990), (47, 110011), (99, 110419), (104, 110449), (108, 110473), (109, 110476), (119, 110536), (122, 110578), (132, 110638), (134, 110650), (140, 110689), (144, 110707), (146, 110713), (150, 110737), (157, 110773), (159, 110782), (162, 110797),

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

Candidate Starts for InterFolia\_208:

(9, 111400), (Start: 14 @111427 has 177 MA's), (19, 111460), (23, 111493), (37, 111583), (Start: 38 @111592 has 2 MA's), (44, 111688), (47, 111709), (99, 112117), (104, 112147), (108, 112171), (109, 112174), (119, 112234), (122, 112276), (132, 112336), (134, 112348), (140, 112387), (144, 112405), (146, 112411), (150, 112435), (157, 112471), (159, 112480), (162, 112495),

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

Candidate Starts for Iota\_200:

(9, 109387), (Start: 14 @109414 has 177 MA's), (19, 109447), (23, 109480), (37, 109570), (Start: 38 @109579 has 2 MA's), (44, 109675), (47, 109696), (99, 110104), (104, 110134), (108, 110158), (109, 110161), (119, 110221), (122, 110263), (132, 110323), (134, 110335), (140, 110374), (144, 110392),

(146, 110398), (150, 110422), (157, 110458), (159, 110467), (162, 110482),

Gene: Issimir\_198 Start: 109367, Stop: 110440, Start Num: 14

Candidate Starts for Issimir\_198:

(9, 109340), (Start: 14 @109367 has 177 MA's), (19, 109400), (23, 109433), (37, 109523), (Start: 38 @109532 has 2 MA's), (44, 109628), (47, 109649), (99, 110057), (104, 110087), (108, 110111), (109, 110114), (119, 110174), (122, 110216), (132, 110276), (134, 110288), (140, 110327), (144, 110345), (146, 110351), (150, 110375), (157, 110411), (159, 110420), (162, 110435),

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

Candidate Starts for Izajani\_203:

(9, 110209), (Start: 14 @110236 has 177 MA's), (19, 110269), (23, 110302), (37, 110392), (Start: 38 @110401 has 2 MA's), (44, 110497), (47, 110518), (99, 110926), (104, 110956), (108, 110980), (109, 110983), (119, 111043), (122, 111085), (132, 111145), (134, 111157), (140, 111196), (144, 111214), (146, 111220), (150, 111244), (157, 111280), (159, 111289), (162, 111304),

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

Candidate Starts for JPickles\_201:

(9, 107687), (Start: 14 @107714 has 177 MA's), (19, 107747), (23, 107780), (37, 107870), (Start: 38 @107879 has 2 MA's), (44, 107975), (47, 107996), (99, 108404), (104, 108434), (108, 108458), (109, 108461), (119, 108521), (122, 108563), (132, 108623), (134, 108635), (140, 108674), (144, 108692), (146, 108698), (150, 108722), (157, 108758), (159, 108767), (162, 108782),

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

Candidate Starts for Janiyra\_208:

(9, 109927), (Start: 14 @109954 has 177 MA's), (19, 109987), (23, 110020), (37, 110110), (Start: 38 @110119 has 2 MA's), (44, 110215), (47, 110236), (99, 110644), (104, 110674), (108, 110698), (109, 110701), (119, 110761), (122, 110803), (132, 110863), (134, 110875), (140, 110914), (144, 110932), (146, 110938), (150, 110962), (157, 110998), (159, 111007), (162, 111022),

Gene: JayJay\_207 Start: 110651, Stop: 111724, Start Num: 14

Candidate Starts for JayJay\_207:

(9, 110624), (Start: 14 @110651 has 177 MA's), (19, 110684), (23, 110717), (37, 110807), (Start: 38 @110816 has 2 MA's), (44, 110912), (47, 110933), (99, 111341), (104, 111371), (108, 111395), (109, 111398), (119, 111458), (122, 111500), (132, 111560), (134, 111572), (140, 111611), (144, 111629), (146, 111635), (150, 111659), (157, 111695), (159, 111704), (162, 111719),

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

Candidate Starts for Jaygup\_201:

(9, 108748), (Start: 14 @108775 has 177 MA's), (19, 108808), (23, 108841), (37, 108931), (Start: 38 @108940 has 2 MA's), (44, 109036), (47, 109057), (99, 109465), (104, 109495), (108, 109519), (109, 109522), (119, 109582), (122, 109624), (132, 109684), (134, 109696), (140, 109735), (144, 109753), (146, 109759), (150, 109783), (157, 109819), (159, 109828), (162, 109843),

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

Candidate Starts for JeanGrey\_91:

(11, 72197), (13, 72203), (21, 72257), (36, 72359), (41, 72416), (43, 72434), (47, 72488), (54, 72572), (60, 72623), (84, 72806), (102, 72917), (111, 72965), (126, 73097), (146, 73199),

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

Candidate Starts for Jedediah\_205:

(9, 109801), (Start: 14 @109828 has 177 MA's), (19, 109861), (23, 109894), (37, 109984), (Start: 38 @109993 has 2 MA's), (44, 110089), (47, 110110), (99, 110518), (104, 110548), (108, 110572), (109,

110575), (119, 110635), (122, 110677), (132, 110737), (134, 110749), (140, 110788), (144, 110806), (146, 110812), (150, 110836), (157, 110872), (159, 110881), (162, 110896),

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

Candidate Starts for Jemmno\_204:

(9, 108630), (Start: 14 @108657 has 177 MA's), (19, 108690), (23, 108723), (37, 108813), (Start: 38 @108822 has 2 MA's), (44, 108918), (47, 108939), (99, 109347), (104, 109377), (108, 109401), (109, 109404), (119, 109464), (122, 109506), (132, 109566), (134, 109578), (140, 109617), (144, 109635), (146, 109641), (150, 109665), (157, 109701), (159, 109710), (162, 109725),

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

Candidate Starts for Jessibeth14\_205:

(9, 110818), (Start: 14 @110845 has 177 MA's), (19, 110878), (23, 110911), (37, 111001), (Start: 38 @111010 has 2 MA's), (44, 111106), (47, 111127), (99, 111535), (104, 111565), (108, 111589), (109, 111592), (119, 111652), (122, 111694), (132, 111754), (134, 111766), (140, 111805), (144, 111823), (146, 111829), (150, 111853), (157, 111889), (159, 111898), (162, 111913),

Gene: Jezreel\_202 Start: 109914, Stop: 110987, Start Num: 14

Candidate Starts for Jezreel\_202:

(9, 109887), (Start: 14 @109914 has 177 MA's), (19, 109947), (23, 109980), (37, 110070), (Start: 38 @110079 has 2 MA's), (44, 110175), (47, 110196), (99, 110604), (104, 110634), (108, 110658), (109, 110661), (119, 110721), (122, 110763), (132, 110823), (134, 110835), (140, 110874), (144, 110892), (146, 110898), (150, 110922), (157, 110958), (159, 110967), (162, 110982),

Gene: JigglyPuff\_212 Start: 112225, Stop: 113298, Start Num: 14

Candidate Starts for JigglyPuff\_212:

(9, 112198), (Start: 14 @112225 has 177 MA's), (19, 112258), (23, 112291), (37, 112381), (Start: 38 @112390 has 2 MA's), (44, 112486), (47, 112507), (99, 112915), (104, 112945), (108, 112969), (109, 112972), (119, 113032), (122, 113074), (132, 113134), (134, 113146), (140, 113185), (144, 113203), (146, 113209), (150, 113233), (157, 113269), (159, 113278), (162, 113293),

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

Candidate Starts for JulietS\_198:

(9, 106919), (Start: 14 @106946 has 177 MA's), (19, 106979), (23, 107012), (37, 107102), (Start: 38 @107111 has 2 MA's), (44, 107207), (47, 107228), (99, 107636), (104, 107666), (108, 107690), (109, 107693), (119, 107753), (122, 107795), (132, 107855), (134, 107867), (140, 107906), (144, 107924), (146, 107930), (150, 107954), (157, 107990), (159, 107999), (162, 108014),

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

Candidate Starts for JustHall\_199:

(9, 108834), (Start: 14 @108861 has 177 MA's), (19, 108894), (23, 108927), (37, 109017), (Start: 38 @109026 has 2 MA's), (44, 109122), (47, 109143), (99, 109551), (104, 109581), (108, 109605), (109, 109608), (119, 109668), (122, 109710), (132, 109770), (134, 109782), (140, 109821), (144, 109839), (146, 109845), (150, 109869), (157, 109905), (159, 109914), (162, 109929),

Gene: Kabocha\_67 Start: 54073, Stop: 53135, Start Num: 26

Candidate Starts for Kabocha\_67:

(Start: 26 @54073 has 8 MA's), (Start: 38 @53986 has 2 MA's), (48, 53845), (49, 53839), (54, 53773), (56, 53755), (68, 53668), (70, 53656), (75, 53614), (76, 53611), (77, 53599), (86, 53524), (90, 53494), (91, 53491), (95, 53464), (106, 53383), (109, 53374), (116, 53323), (127, 53245), (148, 53161),

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

Candidate Starts for Kamryn\_204:

(9, 110464), (Start: 14 @110491 has 177 MA's), (19, 110524), (23, 110557), (37, 110647), (Start: 38 @110656 has 2 MA's), (44, 110752), (47, 110773), (99, 111181), (104, 111211), (108, 111235), (109, 111238), (119, 111298), (122, 111340), (132, 111400), (134, 111412), (140, 111451), (144, 111469), (146, 111475), (150, 111499), (157, 111535), (159, 111544), (162, 111559),

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

Candidate Starts for Kboogie\_209:

(9, 109492), (Start: 14 @109519 has 177 MA's), (19, 109552), (23, 109585), (37, 109675), (Start: 38 @109684 has 2 MA's), (44, 109780), (47, 109801), (99, 110209), (104, 110239), (108, 110263), (109, 110266), (119, 110326), (122, 110368), (132, 110428), (134, 110440), (140, 110479), (144, 110497), (146, 110503), (150, 110527), (157, 110563), (159, 110572), (162, 110587),

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

Candidate Starts for Khaleesi\_204:

(9, 110285), (Start: 14 @110312 has 177 MA's), (19, 110345), (23, 110378), (37, 110468), (Start: 38 @110477 has 2 MA's), (44, 110573), (47, 110594), (99, 111002), (104, 111032), (108, 111056), (109, 111059), (119, 111119), (122, 111161), (132, 111221), (134, 111233), (140, 111272), (144, 111290), (146, 111296), (150, 111320), (157, 111356), (159, 111365), (162, 111380),

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

Candidate Starts for Koguma\_204:

(9, 109145), (Start: 14 @109172 has 177 MA's), (19, 109205), (23, 109238), (37, 109328), (Start: 38 @109337 has 2 MA's), (44, 109433), (47, 109454), (99, 109862), (104, 109892), (108, 109916), (109, 109919), (119, 109979), (122, 110021), (132, 110081), (134, 110093), (140, 110132), (144, 110150), (146, 110156), (150, 110180), (157, 110216), (159, 110225), (162, 110240),

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

Candidate Starts for LRRHood\_198:

(9, 109490), (Start: 14 @109517 has 177 MA's), (19, 109550), (23, 109583), (37, 109673), (Start: 38 @109682 has 2 MA's), (44, 109778), (47, 109799), (99, 110207), (104, 110237), (108, 110261), (109, 110264), (119, 110324), (122, 110366), (132, 110426), (134, 110438), (140, 110477), (144, 110495), (146, 110501), (150, 110525), (157, 110561), (159, 110570), (162, 110585),

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

Candidate Starts for Latch\_205:

(9, 109038), (Start: 14 @109065 has 177 MA's), (19, 109098), (23, 109131), (37, 109221), (Start: 38 @109230 has 2 MA's), (44, 109326), (47, 109347), (99, 109755), (104, 109785), (108, 109809), (109, 109812), (119, 109872), (122, 109914), (132, 109974), (134, 109986), (140, 110025), (144, 110043), (146, 110049), (150, 110073), (157, 110109), (159, 110118), (162, 110133),

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

Candidate Starts for Lee7\_205:

(9, 111665), (Start: 14 @111692 has 177 MA's), (19, 111725), (23, 111758), (37, 111848), (Start: 38 @111857 has 2 MA's), (44, 111953), (47, 111974), (99, 112382), (104, 112412), (108, 112436), (109, 112439), (119, 112499), (122, 112541), (132, 112601), (134, 112613), (140, 112652), (144, 112670), (146, 112676), (150, 112700), (157, 112736), (159, 112745), (162, 112760),

Gene: Lenoshki\_65 Start: 54338, Stop: 53487, Start Num: 38

Candidate Starts for Lenoshki\_65:

(Start: 26 @54425 has 8 MA's), (Start: 38 @54338 has 2 MA's), (48, 54197), (49, 54191), (54, 54125), (56, 54107), (68, 54020), (70, 54008), (75, 53966), (76, 53963), (77, 53951), (86, 53876), (90, 53846), (91, 53843), (95, 53816), (106, 53735), (109, 53726), (116, 53675), (127, 53597), (148, 53513),

Gene: Lethe\_207 Start: 110955, Stop: 112028, Start Num: 14

Candidate Starts for Lethe\_207:

(9, 110928), (Start: 14 @110955 has 177 MA's), (19, 110988), (23, 111021), (37, 111111), (Start: 38 @111120 has 2 MA's), (44, 111216), (47, 111237), (99, 111645), (104, 111675), (108, 111699), (109, 111702), (119, 111762), (122, 111804), (132, 111864), (134, 111876), (140, 111915), (144, 111933), (146, 111939), (150, 111963), (157, 111999), (159, 112008), (162, 112023),

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

Candidate Starts for LifeSavor\_204:

(9, 109563), (Start: 14 @109590 has 177 MA's), (19, 109623), (23, 109656), (37, 109746), (Start: 38 @109755 has 2 MA's), (44, 109851), (47, 109872), (99, 110280), (104, 110310), (108, 110334), (109, 110337), (119, 110397), (122, 110439), (132, 110499), (134, 110511), (140, 110550), (144, 110568), (146, 110574), (150, 110598), (157, 110634), (159, 110643), (162, 110658),

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

Candidate Starts for LinStu\_204:

(9, 109777), (Start: 14 @109804 has 177 MA's), (19, 109837), (23, 109870), (37, 109960), (Start: 38 @109969 has 2 MA's), (44, 110065), (47, 110086), (99, 110494), (104, 110524), (108, 110548), (109, 110551), (119, 110611), (122, 110653), (132, 110713), (134, 110725), (140, 110764), (144, 110782), (146, 110788), (150, 110812), (157, 110848), (159, 110857), (162, 110872),

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

Candidate Starts for Littleton\_208:

(9, 110275), (Start: 14 @110302 has 177 MA's), (19, 110335), (23, 110368), (37, 110458), (Start: 38 @110467 has 2 MA's), (44, 110563), (47, 110584), (99, 110992), (104, 111022), (108, 111046), (109, 111049), (119, 111109), (122, 111151), (132, 111211), (134, 111223), (140, 111262), (144, 111280), (146, 111286), (150, 111310), (157, 111346), (159, 111355), (162, 111370),

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

Candidate Starts for Loanshark\_202:

(9, 109600), (Start: 14 @109627 has 177 MA's), (19, 109660), (23, 109693), (37, 109783), (Start: 38 @109792 has 2 MA's), (44, 109888), (47, 109909), (99, 110317), (104, 110347), (108, 110371), (109, 110374), (119, 110434), (122, 110476), (132, 110536), (134, 110548), (140, 110587), (144, 110605), (146, 110611), (150, 110635), (157, 110671), (159, 110680), (162, 110695),

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

Candidate Starts for LolaVinca\_203:

(9, 110830), (Start: 14 @110857 has 177 MA's), (19, 110890), (23, 110923), (37, 111013), (Start: 38 @111022 has 2 MA's), (44, 111118), (47, 111139), (99, 111547), (104, 111577), (108, 111601), (109, 111604), (119, 111664), (122, 111706), (132, 111766), (134, 111778), (140, 111817), (144, 111835), (146, 111841), (150, 111865), (157, 111901), (159, 111910), (162, 111925),

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

Candidate Starts for LordLeafolot\_207:

(9, 110442), (Start: 14 @110469 has 177 MA's), (19, 110502), (23, 110535), (37, 110625), (Start: 38 @110634 has 2 MA's), (44, 110730), (47, 110751), (99, 111159), (104, 111189), (108, 111213), (109, 111216), (119, 111276), (122, 111318), (132, 111378), (134, 111390), (140, 111429), (144, 111447), (146, 111453), (150, 111477), (157, 111513), (159, 111522), (162, 111537),

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

Candidate Starts for Lukilu\_196:

(9, 110500), (Start: 14 @110527 has 177 MA's), (19, 110560), (23, 110593), (37, 110683), (Start: 38 @110692 has 2 MA's), (44, 110788), (47, 110809), (99, 111217), (104, 111247), (108, 111271), (109,



111274), (119, 111334), (122, 111376), (132, 111436), (134, 111448), (140, 111487), (144, 111505), (146, 111511), (150, 111535), (157, 111571), (159, 111580), (162, 111595),

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

Candidate Starts for Maby2021\_205:

(9, 110729), (Start: 14 @110756 has 177 MA's), (19, 110789), (23, 110822), (37, 110912), (Start: 38 @110921 has 2 MA's), (44, 111017), (47, 111038), (99, 111446), (104, 111476), (108, 111500), (109, 111503), (119, 111563), (122, 111605), (132, 111665), (134, 111677), (140, 111716), (144, 111734), (146, 111740), (150, 111764), (157, 111800), (159, 111809), (162, 111824),

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

Candidate Starts for Mangeria\_206:

(9, 110831), (Start: 14 @110858 has 177 MA's), (19, 110891), (23, 110924), (37, 111014), (Start: 38 @111023 has 2 MA's), (44, 111119), (47, 111140), (99, 111548), (104, 111578), (108, 111602), (109, 111605), (119, 111665), (122, 111707), (132, 111767), (134, 111779), (140, 111818), (144, 111836), (146, 111842), (150, 111866), (157, 111902), (159, 111911), (162, 111926),

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

Candidate Starts for Matsumoto\_204:

(9, 109480), (Start: 14 @109507 has 177 MA's), (19, 109540), (23, 109573), (37, 109663), (Start: 38 @109672 has 2 MA's), (44, 109768), (47, 109789), (99, 110197), (104, 110227), (108, 110251), (109, 110254), (119, 110314), (122, 110356), (132, 110416), (134, 110428), (140, 110467), (144, 110485), (146, 110491), (150, 110515), (157, 110551), (159, 110560), (162, 110575),

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

Candidate Starts for McGee\_204:

(9, 108674), (Start: 14 @108701 has 177 MA's), (19, 108734), (23, 108767), (37, 108857), (Start: 38 @108866 has 2 MA's), (44, 108962), (47, 108983), (99, 109391), (104, 109421), (108, 109445), (109, 109448), (119, 109508), (122, 109550), (132, 109610), (134, 109622), (140, 109661), (144, 109679), (146, 109685), (150, 109709), (157, 109745), (159, 109754), (162, 109769),

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

Candidate Starts for McWolfish\_202:

(9, 109496), (Start: 14 @109523 has 177 MA's), (19, 109556), (23, 109589), (37, 109679), (Start: 38 @109688 has 2 MA's), (44, 109784), (47, 109805), (99, 110213), (104, 110243), (108, 110267), (109, 110270), (119, 110330), (122, 110372), (132, 110432), (134, 110444), (140, 110483), (144, 110501), (146, 110507), (150, 110531), (157, 110567), (159, 110576), (162, 110591),

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

Candidate Starts for Megamind\_202:

(9, 109787), (Start: 14 @109814 has 177 MA's), (19, 109847), (23, 109880), (37, 109970), (Start: 38 @109979 has 2 MA's), (44, 110075), (47, 110096), (99, 110504), (104, 110534), (108, 110558), (109, 110561), (119, 110621), (122, 110663), (132, 110723), (134, 110735), (140, 110774), (144, 110792), (146, 110798), (150, 110822), (157, 110858), (159, 110867), (162, 110882),

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

Candidate Starts for Melpomini\_200:

(9, 108572), (Start: 14 @108599 has 177 MA's), (19, 108632), (23, 108665), (37, 108755), (Start: 38 @108764 has 2 MA's), (44, 108860), (47, 108881), (99, 109289), (104, 109319), (108, 109343), (109, 109346), (119, 109406), (122, 109448), (132, 109508), (134, 109520), (140, 109559), (144, 109577), (146, 109583), (150, 109607), (157, 109643), (159, 109652), (162, 109667),

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

Candidate Starts for MikeLiesIn\_207:

(9, 110923), (Start: 14 @110950 has 177 MA's), (19, 110983), (23, 111016), (37, 111106), (Start: 38 @111115 has 2 MA's), (44, 111211), (47, 111232), (99, 111640), (104, 111670), (108, 111694), (109, 111697), (119, 111757), (122, 111799), (132, 111859), (134, 111871), (140, 111910), (144, 111928), (146, 111934), (150, 111958), (157, 111994), (159, 112003), (162, 112018),

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

Candidate Starts for Mikro\_201:

(9, 111472), (Start: 14 @111499 has 177 MA's), (19, 111532), (23, 111565), (37, 111655), (Start: 38 @111664 has 2 MA's), (44, 111760), (47, 111781), (99, 112189), (104, 112219), (108, 112243), (109, 112246), (119, 112306), (122, 112348), (132, 112408), (134, 112420), (140, 112459), (144, 112477), (146, 112483), (150, 112507), (157, 112543), (159, 112552), (162, 112567),

Gene: MintFritos\_63 Start: 52731, Stop: 51793, Start Num: 26

Candidate Starts for MintFritos\_63:

(Start: 26 @52731 has 8 MA's), (Start: 38 @52644 has 2 MA's), (48, 52503), (49, 52497), (54, 52431), (56, 52413), (68, 52326), (70, 52314), (75, 52272), (76, 52269), (77, 52257), (86, 52182), (90, 52152), (91, 52149), (95, 52122), (106, 52041), (109, 52032), (116, 51981), (127, 51903), (148, 51819),

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

Candidate Starts for MoMoMixon\_203:

(9, 109962), (Start: 14 @109989 has 177 MA's), (19, 110022), (23, 110055), (37, 110145), (Start: 38 @110154 has 2 MA's), (44, 110250), (47, 110271), (99, 110679), (104, 110709), (108, 110733), (109, 110736), (119, 110796), (122, 110838), (132, 110898), (134, 110910), (140, 110949), (144, 110967), (146, 110973), (150, 110997), (157, 111033), (159, 111042), (162, 111057),

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

Candidate Starts for Momo\_206:

(9, 109038), (Start: 14 @109065 has 177 MA's), (19, 109098), (23, 109131), (37, 109221), (Start: 38 @109230 has 2 MA's), (44, 109326), (47, 109347), (99, 109755), (104, 109785), (108, 109809), (109, 109812), (119, 109872), (122, 109914), (132, 109974), (134, 109986), (140, 110025), (144, 110043), (146, 110049), (150, 110073), (157, 110109), (159, 110118), (162, 110133),

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

Candidate Starts for Morizzled23\_202:

(9, 108405), (Start: 14 @108432 has 177 MA's), (19, 108465), (23, 108498), (37, 108588), (Start: 38 @108597 has 2 MA's), (44, 108693), (47, 108714), (99, 109122), (104, 109152), (108, 109176), (109, 109179), (119, 109239), (122, 109281), (132, 109341), (134, 109353), (140, 109392), (144, 109410), (146, 109416), (150, 109440), (157, 109476), (159, 109485), (162, 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), (32, 106735), (37, 106759), (Start: 38 @106768 has 2 MA's), (44, 106885), (46, 106900), (47, 106906), (50, 106936), (54, 106990), (57, 107014), (61, 107047), (69, 107107), (82, 107209), (92, 107263), (94, 107272), (107, 107353), (126, 107491), (139, 107566), (164, 107710),

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

Candidate Starts for Naija\_206:

(9, 109741), (Start: 14 @109768 has 177 MA's), (19, 109801), (23, 109834), (37, 109924), (Start: 38 @109933 has 2 MA's), (44, 110029), (47, 110050), (99, 110458), (104, 110488), (108, 110512), (109, 110515), (119, 110575), (122, 110617), (132, 110677), (134, 110689), (140, 110728), (144, 110746), (146, 110752), (150, 110776), (157, 110812), (159, 110821), (162, 110836),

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

Candidate Starts for Napoleon13\_202:

(9, 108769), (Start: 14 @108796 has 177 MA's), (19, 108829), (23, 108862), (37, 108952), (Start: 38 @108961 has 2 MA's), (44, 109057), (47, 109078), (99, 109486), (104, 109516), (108, 109540), (109, 109543), (119, 109603), (122, 109645), (132, 109705), (134, 109717), (140, 109756), (144, 109774), (146, 109780), (150, 109804), (157, 109840), (159, 109849), (162, 109864),

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

Candidate Starts for Nappy\_206:

(9, 111435), (Start: 14 @111462 has 177 MA's), (19, 111495), (23, 111528), (37, 111618), (Start: 38 @111627 has 2 MA's), (44, 111723), (47, 111744), (99, 112152), (104, 112182), (108, 112206), (109, 112209), (119, 112269), (122, 112311), (132, 112371), (134, 112383), (140, 112422), (144, 112440), (146, 112446), (150, 112470), (157, 112506), (159, 112515), (162, 112530),

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

Candidate Starts for Naval22\_210:

(9, 111518), (Start: 14 @111545 has 177 MA's), (19, 111578), (23, 111611), (37, 111701), (Start: 38 @111710 has 2 MA's), (44, 111806), (47, 111827), (99, 112235), (104, 112265), (108, 112289), (109, 112292), (119, 112352), (122, 112394), (132, 112454), (134, 112466), (140, 112505), (144, 112523), (146, 112529), (150, 112553), (157, 112589), (159, 112598), (162, 112613),

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

Candidate Starts for NedWong\_204:

(9, 110174), (Start: 14 @110201 has 177 MA's), (19, 110234), (23, 110267), (37, 110357), (Start: 38 @110366 has 2 MA's), (44, 110462), (47, 110483), (99, 110891), (104, 110921), (108, 110945), (109, 110948), (119, 111008), (122, 111050), (132, 111110), (134, 111122), (140, 111161), (144, 111179), (146, 111185), (150, 111209), (157, 111245), (159, 111254), (162, 111269),

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

Candidate Starts for Ngannou\_202:

(9, 108020), (Start: 14 @108047 has 177 MA's), (19, 108080), (23, 108113), (37, 108203), (Start: 38 @108212 has 2 MA's), (44, 108308), (47, 108329), (99, 108737), (104, 108767), (108, 108791), (109, 108794), (119, 108854), (122, 108896), (132, 108956), (134, 108968), (140, 109007), (144, 109025), (146, 109031), (150, 109055), (157, 109091), (159, 109100), (162, 109115),

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

Candidate Starts for Nidhogg\_206:

(9, 110567), (Start: 14 @110594 has 177 MA's), (19, 110627), (23, 110660), (37, 110750), (Start: 38 @110759 has 2 MA's), (44, 110855), (47, 110876), (99, 111284), (104, 111314), (108, 111338), (109, 111341), (119, 111401), (122, 111443), (132, 111503), (134, 111515), (140, 111554), (144, 111572), (146, 111578), (150, 111602), (157, 111638), (159, 111647), (162, 111662),

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

Candidate Starts for NoodleTree\_211:

(9, 110474), (Start: 14 @110501 has 177 MA's), (19, 110534), (23, 110567), (37, 110657), (Start: 38 @110666 has 2 MA's), (44, 110762), (47, 110783), (99, 111191), (104, 111221), (108, 111245), (109, 111248), (119, 111308), (122, 111350), (132, 111410), (134, 111422), (140, 111461), (144, 111479), (146, 111485), (150, 111509), (157, 111545), (159, 111554), (162, 111569),

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

Candidate Starts for Norm\_205:

(9, 110476), (Start: 14 @110503 has 177 MA's), (19, 110536), (23, 110569), (37, 110659), (Start: 38 @110668 has 2 MA's), (44, 110764), (47, 110785), (99, 111193), (104, 111223), (108, 111247), (109, 111250), (119, 111310), (122, 111352), (132, 111412), (134, 111424), (140, 111463), (144, 111481), (146, 111487), (150, 111511), (157, 111547), (159, 111556), (162, 111571),

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

Candidate Starts for NuevoMundo\_208:

(9, 112028), (Start: 14 @112055 has 177 MA's), (19, 112088), (23, 112121), (37, 112211), (Start: 38 @112220 has 2 MA's), (44, 112316), (47, 112337), (99, 112745), (104, 112775), (108, 112799), (109, 112802), (119, 112862), (122, 112904), (132, 112964), (134, 112976), (140, 113015), (144, 113033), (146, 113039), (150, 113063), (157, 113099), (159, 113108), (162, 113123),

Gene: Oogie\_65 Start: 54451, Stop: 53513, Start Num: 26

Candidate Starts for Oogie\_65:

(Start: 26 @54451 has 8 MA's), (Start: 38 @54364 has 2 MA's), (48, 54223), (49, 54217), (54, 54151), (56, 54133), (68, 54046), (70, 54034), (75, 53992), (76, 53989), (77, 53977), (86, 53902), (90, 53872), (91, 53869), (95, 53842), (106, 53761), (109, 53752), (116, 53701), (127, 53623), (148, 53539),

Gene: Pakusa\_63 Start: 52472, Stop: 51534, Start Num: 26

Candidate Starts for Pakusa\_63:

(Start: 26 @52472 has 8 MA's), (Start: 38 @52385 has 2 MA's), (48, 52244), (49, 52238), (54, 52172), (56, 52154), (68, 52067), (70, 52055), (75, 52013), (76, 52010), (77, 51998), (86, 51923), (90, 51893), (91, 51890), (95, 51863), (106, 51782), (109, 51773), (116, 51722), (127, 51644), (148, 51560),

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

Candidate Starts for ParkTD\_204:

(9, 110038), (Start: 14 @110065 has 177 MA's), (19, 110098), (23, 110131), (37, 110221), (Start: 38 @110230 has 2 MA's), (44, 110326), (47, 110347), (99, 110755), (104, 110785), (108, 110809), (109, 110812), (119, 110872), (122, 110914), (132, 110974), (134, 110986), (140, 111025), (144, 111043), (146, 111049), (150, 111073), (157, 111109), (159, 111118), (162, 111133),

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

Candidate Starts for Patter\_206:

(9, 109052), (Start: 14 @109079 has 177 MA's), (19, 109112), (23, 109145), (37, 109235), (Start: 38 @109244 has 2 MA's), (44, 109340), (47, 109361), (99, 109769), (104, 109799), (108, 109823), (109, 109826), (119, 109886), (122, 109928), (132, 109988), (134, 110000), (140, 110039), (144, 110057), (146, 110063), (150, 110087), (157, 110123), (159, 110132), (162, 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), (32, 106640), (Start: 38 @106673 has 2 MA's), (44, 106790), (46, 106805), (47, 106811), (50, 106841), (54, 106895), (55, 106907), (57, 106919), (61, 106952), (69, 107012), (82, 107114), (92, 107168), (94, 107177), (107, 107258), (126, 107396), (139, 107471), (163, 107591),

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

Candidate Starts for Phlegm\_209:

(9, 109741), (Start: 14 @109768 has 177 MA's), (19, 109801), (23, 109834), (37, 109924), (Start: 38 @109933 has 2 MA's), (44, 110029), (47, 110050), (99, 110458), (104, 110488), (108, 110512), (109, 110515), (119, 110575), (122, 110617), (132, 110677), (134, 110689), (140, 110728), (144, 110746), (146, 110752), (150, 110776), (157, 110812), (159, 110821), (162, 110836),

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

Candidate Starts for Phox\_206:

(9, 110696), (Start: 14 @110723 has 177 MA's), (19, 110756), (23, 110789), (37, 110879), (Start: 38 @110888 has 2 MA's), (44, 110984), (47, 111005), (99, 111413), (104, 111443), (108, 111467), (109, 111470), (119, 111530), (122, 111572), (132, 111632), (134, 111644), (140, 111683), (144, 111701), (146, 111707), (150, 111731), (157, 111767), (159, 111776), (162, 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), (34, 83455), (66, 83776), (78, 83863), (97, 83980), (110, 84043), (111, 84055), (112, 84061), (114, 84073), (119, 84097), (123, 84142), (125, 84166), (137, 84235), (139, 84247), (140, 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 177 MA's), (19, 108633), (23, 108666), (37, 108756), (Start: 38 @108765 has 2 MA's), (44, 108861), (47, 108882), (99, 109290), (104, 109320), (108, 109344), (109, 109347), (119, 109407), (122, 109449), (132, 109509), (134, 109521), (140, 109560), (144, 109578), (146, 109584), (150, 109608), (157, 109644), (159, 109653), (162, 109668),

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

Candidate Starts for Pier\_206:

(9, 111570), (Start: 14 @111597 has 177 MA's), (19, 111630), (23, 111663), (37, 111753), (Start: 38 @111762 has 2 MA's), (44, 111858), (47, 111879), (99, 112287), (104, 112317), (108, 112341), (109, 112344), (119, 112404), (122, 112446), (132, 112506), (134, 112518), (140, 112557), (144, 112575), (146, 112581), (150, 112605), (157, 112641), (159, 112650), (162, 112665),

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

Candidate Starts for Pinkcreek\_189:

(9, 108949), (Start: 14 @108976 has 177 MA's), (19, 109009), (23, 109042), (37, 109132), (Start: 38 @109141 has 2 MA's), (44, 109237), (47, 109258), (99, 109666), (104, 109696), (108, 109720), (109, 109723), (119, 109783), (122, 109825), (132, 109885), (134, 109897), (140, 109936), (144, 109954), (146, 109960), (150, 109984), (157, 110020), (159, 110029), (162, 110044),

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

Candidate Starts for Pio\_213:

(9, 112765), (Start: 14 @112792 has 177 MA's), (19, 112825), (23, 112858), (37, 112948), (Start: 38 @112957 has 2 MA's), (44, 113053), (47, 113074), (99, 113482), (104, 113512), (108, 113536), (109, 113539), (119, 113599), (122, 113641), (132, 113701), (134, 113713), (140, 113752), (144, 113770), (146, 113776), (150, 113800), (157, 113836), (159, 113845), (162, 113860),

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

Candidate Starts for Pivoine\_206:

(9, 109741), (Start: 14 @109768 has 177 MA's), (19, 109801), (23, 109834), (37, 109924), (Start: 38 @109933 has 2 MA's), (44, 110029), (47, 110050), (99, 110458), (104, 110488), (108, 110512), (109, 110515), (119, 110575), (122, 110617), (132, 110677), (134, 110689), (140, 110728), (144, 110746), (146, 110752), (150, 110776), (157, 110812), (159, 110821), (162, 110836),

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

Candidate Starts for Pleione\_209:

(9, 110516), (Start: 14 @110543 has 177 MA's), (19, 110576), (23, 110609), (37, 110699), (Start: 38 @110708 has 2 MA's), (44, 110804), (47, 110825), (99, 111233), (104, 111263), (108, 111287), (109, 111290), (119, 111350), (122, 111392), (132, 111452), (134, 111464), (140, 111503), (144, 111521), (146, 111527), (150, 111551), (157, 111587), (159, 111596), (162, 111611),

Gene: Primadonna\_200 Start: 109429, Stop: 110502, Start Num: 14

Candidate Starts for Primadonna\_200:

(9, 109402), (Start: 14 @109429 has 177 MA's), (19, 109462), (23, 109495), (37, 109585), (Start: 38 @109594 has 2 MA's), (44, 109690), (47, 109711), (99, 110119), (104, 110149), (108, 110173), (109, 110176), (119, 110236), (122, 110278), (132, 110338), (134, 110350), (140, 110389), (144, 110407), (146, 110413), (150, 110437), (157, 110473), (159, 110482), (162, 110497),

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

Candidate Starts for Pupper\_148:

(Start: 14 @103120 has 177 MA's), (19, 103162), (24, 103204), (31, 103240), (Start: 38 @103297 has 2 MA's), (42, 103354), (46, 103408), (47, 103414), (58, 103528), (62, 103585), (64, 103600), (66, 103621), (83, 103756), (111, 103903), (112, 103909), (118, 103945), (126, 104023), (139, 104095), (156, 104173), (160, 104197),

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

Candidate Starts for PurduePete\_205:

(9, 110744), (Start: 14 @110771 has 177 MA's), (19, 110804), (23, 110837), (37, 110927), (Start: 38 @110936 has 2 MA's), (44, 111032), (47, 111053), (99, 111461), (104, 111491), (108, 111515), (109, 111518), (119, 111578), (122, 111620), (132, 111680), (134, 111692), (140, 111731), (144, 111749), (146, 111755), (150, 111779), (157, 111815), (159, 111824), (162, 111839),

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

Candidate Starts for QBert\_197:

(9, 109097), (Start: 14 @109124 has 177 MA's), (19, 109157), (23, 109190), (37, 109280), (Start: 38 @109289 has 2 MA's), (44, 109385), (47, 109406), (99, 109814), (104, 109844), (108, 109868), (109, 109871), (119, 109931), (122, 109973), (132, 110033), (134, 110045), (140, 110084), (144, 110102), (146, 110108), (150, 110132), (157, 110168), (159, 110177), (162, 110192),

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

Candidate Starts for Quasimodo\_207:

(9, 110367), (Start: 14 @110394 has 177 MA's), (19, 110427), (23, 110460), (37, 110550), (Start: 38 @110559 has 2 MA's), (44, 110655), (47, 110676), (99, 111084), (104, 111114), (108, 111138), (109, 111141), (119, 111201), (122, 111243), (132, 111303), (134, 111315), (140, 111354), (144, 111372), (146, 111378), (150, 111402), (157, 111438), (159, 111447), (162, 111462),

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

Candidate Starts for Rabinovish\_198:

(9, 110642), (Start: 14 @110669 has 177 MA's), (19, 110702), (23, 110735), (37, 110825), (Start: 38 @110834 has 2 MA's), (44, 110930), (47, 110951), (99, 111359), (104, 111389), (108, 111413), (109, 111416), (119, 111476), (122, 111518), (132, 111578), (134, 111590), (140, 111629), (144, 111647), (146, 111653), (150, 111677), (157, 111713), (159, 111722), (162, 111737),

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

Candidate Starts for Rahel\_206:

(9, 109476), (Start: 14 @109503 has 177 MA's), (19, 109536), (23, 109569), (37, 109659), (Start: 38 @109668 has 2 MA's), (44, 109764), (47, 109785), (99, 110193), (104, 110223), (108, 110247), (109, 110250), (119, 110310), (122, 110352), (132, 110412), (134, 110424), (140, 110463), (144, 110481), (146, 110487), (150, 110511), (157, 110547), (159, 110556), (162, 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), (Start: 38 @68502 has 2 MA's), (47, 68619), (63, 68772), (80, 68895), (109, 69090), (111, 69105), (124, 69210), (125, 69216), (138, 69288), (140, 69300), (146, 69324), (151, 69348), (152, 69351), (154, 69360), (161, 69405),

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

Candidate Starts for Rizal\_197:

(9, 107994), (Start: 14 @108021 has 177 MA's), (19, 108054), (23, 108087), (37, 108177), (Start: 38 @108186 has 2 MA's), (44, 108282), (47, 108303), (99, 108711), (104, 108741), (108, 108765), (109, 108768), (119, 108828), (122, 108870), (132, 108930), (134, 108942), (140, 108981), (144, 108999), (146, 109005), (150, 109029), (157, 109065), (159, 109074), (162, 109089),

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

Candidate Starts for RoMag\_200:

(9, 109787), (Start: 14 @109814 has 177 MA's), (19, 109847), (23, 109880), (37, 109970), (Start: 38 @109979 has 2 MA's), (44, 110075), (47, 110096), (99, 110504), (104, 110534), (108, 110558), (109, 110561), (119, 110621), (122, 110663), (132, 110723), (134, 110735), (140, 110774), (144, 110792), (146, 110798), (150, 110822), (157, 110858), (159, 110867), (162, 110882),

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

Candidate Starts for Ronan\_201:

(9, 108179), (Start: 14 @108206 has 177 MA's), (19, 108239), (23, 108272), (37, 108362), (Start: 38 @108371 has 2 MA's), (44, 108467), (47, 108488), (99, 108896), (104, 108926), (108, 108950), (109, 108953), (119, 109013), (122, 109055), (132, 109115), (134, 109127), (140, 109166), (144, 109184), (146, 109190), (150, 109214), (157, 109250), (159, 109259), (162, 109274),

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

Candidate Starts for Roots515\_207:

(9, 111295), (Start: 14 @111322 has 177 MA's), (19, 111355), (23, 111388), (37, 111478), (Start: 38 @111487 has 2 MA's), (44, 111583), (47, 111604), (99, 112012), (104, 112042), (108, 112066), (109, 112069), (119, 112129), (122, 112171), (132, 112231), (134, 112243), (140, 112282), (144, 112300), (146, 112306), (150, 112330), (157, 112366), (159, 112375), (162, 112390),

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

Candidate Starts for SCentae\_147:

(5, 103007), (6, 103127), (Start: 14 @103271 has 177 MA's), (19, 103313), (31, 103391), (Start: 38 @103448 has 2 MA's), (42, 103505), (46, 103559), (47, 103565), (56, 103667), (58, 103679), (62, 103736), (64, 103751), (66, 103772), (83, 103907), (111, 104054), (112, 104060), (118, 104096), (126, 104174), (139, 104246), (156, 104324), (160, 104348),

Gene: SVoro\_202 Start: 110115, Stop: 111188, Start Num: 14

Candidate Starts for SVoro\_202:

(9, 110088), (Start: 14 @110115 has 177 MA's), (19, 110148), (23, 110181), (37, 110271), (Start: 38 @110280 has 2 MA's), (44, 110376), (47, 110397), (99, 110805), (104, 110835), (108, 110859), (109, 110862), (119, 110922), (122, 110964), (132, 111024), (134, 111036), (140, 111075), (144, 111093), (146, 111099), (150, 111123), (157, 111159), (159, 111168), (162, 111183),

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

Candidate Starts for Salacia\_205:

(9, 109879), (Start: 14 @109906 has 177 MA's), (19, 109939), (23, 109972), (37, 110062), (Start: 38 @110071 has 2 MA's), (44, 110167), (47, 110188), (99, 110596), (104, 110626), (108, 110650), (109, 110653), (119, 110713), (122, 110755), (132, 110815), (134, 110827), (140, 110866), (144, 110884), (146, 110890), (150, 110914), (157, 110950), (159, 110959), (162, 110974),

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

Candidate Starts for Sauce\_201:

(9, 108693), (Start: 14 @108720 has 177 MA's), (19, 108753), (23, 108786), (37, 108876), (Start: 38 @108885 has 2 MA's), (44, 108981), (47, 109002), (99, 109410), (104, 109440), (108, 109464), (109, 109467), (119, 109527), (122, 109569), (132, 109629), (134, 109641), (140, 109680), (144, 109698), (146, 109704), (150, 109728), (157, 109764), (159, 109773), (162, 109788),

Gene: ScarletRaider\_64 Start: 55642, Stop: 54704, Start Num: 26

Candidate Starts for ScarletRaider\_64:

(25, 55645), (Start: 26 @55642 has 8 MA's), (Start: 38 @55555 has 2 MA's), (48, 55414), (49, 55408), (54, 55342), (64, 55270), (68, 55237), (70, 55225), (76, 55180), (77, 55168), (86, 55093), (95, 55033), (96, 55027), (98, 55003), (106, 54952), (109, 54943), (111, 54928), (116, 54892), (128, 54811), (130, 54802), (143, 54742), (148, 54730),

Gene: Schomber\_64 Start: 52480, Stop: 51542, Start Num: 26

Candidate Starts for Schomber\_64:

(Start: 26 @52480 has 8 MA's), (Start: 38 @52393 has 2 MA's), (48, 52252), (49, 52246), (54, 52180), (56, 52162), (68, 52075), (70, 52063), (75, 52021), (76, 52018), (77, 52006), (86, 51931), (90, 51901), (91, 51898), (95, 51871), (106, 51790), (109, 51781), (116, 51730), (127, 51652), (148, 51568),

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

Candidate Starts for ScoobyDoobyDoo\_186:

(Start: 14 @103679 has 177 MA's), (18, 103700), (33, 103820), (44, 103964), (46, 103979), (50, 104015), (52, 104036), (53, 104060), (64, 104147), (82, 104285), (84, 104306), (100, 104402), (121, 104546), (126, 104585),

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

Candidate Starts for ScottMcG\_198:

(9, 108500), (Start: 14 @108527 has 177 MA's), (19, 108560), (23, 108593), (37, 108683), (Start: 38 @108692 has 2 MA's), (44, 108788), (47, 108809), (99, 109217), (104, 109247), (108, 109271), (109, 109274), (119, 109334), (122, 109376), (132, 109436), (134, 109448), (140, 109487), (144, 109505), (146, 109511), (150, 109535), (157, 109571), (159, 109580), (162, 109595),

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

Candidate Starts for Sebata\_206:

(9, 111202), (Start: 14 @111229 has 177 MA's), (19, 111262), (23, 111295), (37, 111385), (Start: 38 @111394 has 2 MA's), (44, 111490), (47, 111511), (99, 111919), (104, 111949), (108, 111973), (109, 111976), (119, 112036), (122, 112078), (132, 112138), (134, 112150), (140, 112189), (144, 112207), (146, 112213), (150, 112237), (157, 112273), (159, 112282), (162, 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), (34, 83455), (66, 83776), (78, 83863), (97, 83980), (110, 84043), (111, 84055), (112, 84061), (114, 84073), (119, 84097), (123, 84142), (125, 84166), (137, 84235), (139, 84247), (140, 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 177 MA's), (19, 108970), (23, 109003), (37, 109093), (Start: 38 @109102 has 2 MA's), (44, 109198), (47, 109219), (99, 109627), (104, 109657), (108, 109681), (109, 109684), (119, 109744), (122, 109786), (132, 109846), (134, 109858), (140, 109897), (144, 109915), (146, 109921), (150, 109945), (157, 109981), (159, 109990), (162, 110005),



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

Candidate Starts for Shelob\_206:

(9, 111650), (Start: 14 @111677 has 177 MA's), (19, 111710), (23, 111743), (37, 111833), (Start: 38 @111842 has 2 MA's), (44, 111938), (47, 111959), (99, 112367), (104, 112397), (108, 112421), (109, 112424), (119, 112484), (122, 112526), (132, 112586), (134, 112598), (140, 112637), (144, 112655), (146, 112661), (150, 112685), (157, 112721), (159, 112730), (162, 112745),

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

Candidate Starts for ShiaLabeouf\_202:

(9, 108684), (Start: 14 @108711 has 177 MA's), (19, 108744), (23, 108777), (37, 108867), (Start: 38 @108876 has 2 MA's), (44, 108972), (47, 108993), (99, 109401), (104, 109431), (108, 109455), (109, 109458), (119, 109518), (122, 109560), (132, 109620), (134, 109632), (140, 109671), (144, 109689), (146, 109695), (150, 109719), (157, 109755), (159, 109764), (162, 109779),

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

Candidate Starts for Shifa\_182:

(9, 109261), (Start: 14 @109288 has 177 MA's), (19, 109321), (23, 109354), (37, 109444), (Start: 38 @109453 has 2 MA's), (44, 109549), (47, 109570), (99, 109978), (104, 110008), (108, 110032), (109, 110035), (119, 110095), (122, 110137), (132, 110197), (134, 110209), (140, 110248), (144, 110266), (146, 110272), (150, 110296), (157, 110332), (159, 110341), (162, 110356),

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

Candidate Starts for Shnickers\_203:

(9, 108748), (Start: 14 @108775 has 177 MA's), (19, 108808), (23, 108841), (37, 108931), (Start: 38 @108940 has 2 MA's), (44, 109036), (47, 109057), (99, 109465), (104, 109495), (108, 109519), (109, 109522), (119, 109582), (122, 109624), (132, 109684), (134, 109696), (140, 109735), (144, 109753), (146, 109759), (150, 109783), (157, 109819), (159, 109828), (162, 109843),

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

Candidate Starts for Shrimp\_207:

(9, 110805), (Start: 14 @110832 has 177 MA's), (19, 110865), (23, 110898), (37, 110988), (Start: 38 @110997 has 2 MA's), (44, 111093), (47, 111114), (99, 111522), (104, 111552), (108, 111576), (109, 111579), (119, 111639), (122, 111681), (132, 111741), (134, 111753), (140, 111792), (144, 111810), (146, 111816), (150, 111840), (157, 111876), (159, 111885), (162, 111900),

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

Candidate Starts for SilverDipper\_209:

(9, 110297), (Start: 14 @110324 has 177 MA's), (19, 110357), (23, 110390), (37, 110480), (Start: 38 @110489 has 2 MA's), (44, 110585), (47, 110606), (99, 111014), (104, 111044), (108, 111068), (109, 111071), (119, 111131), (122, 111173), (132, 111233), (134, 111245), (140, 111284), (144, 111302), (146, 111308), (150, 111332), (157, 111368), (159, 111377), (162, 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 177 MA's), (19, 132544), (Start: 38 @132679 has 2 MA's), (46, 132790), (47, 132796), (58, 132910), (62, 132967), (64, 132982), (66, 133003), (107, 133264), (111, 133285), (112, 133291), (118, 133327), (119, 133330), (122, 133372), (126, 133405), (131, 133429), (136, 133456), (140, 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 177 MA's), (19, 108902), (23, 108935), (37, 109025), (Start: 38 @109034 has 2 MA's), (44, 109130), (47, 109151), (99, 109559), (104, 109589), (108, 109613), (109, 109616), (119, 109676), (122, 109718), (132, 109778), (134, 109790), (140, 109829), (144, 109847), (146, 109853), (150, 109877), (157, 109913), (159, 109922), (162, 109937),

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

Candidate Starts for Spec\_200:

(9, 109033), (Start: 14 @109060 has 177 MA's), (19, 109093), (23, 109126), (37, 109216), (Start: 38 @109225 has 2 MA's), (44, 109321), (47, 109342), (99, 109750), (104, 109780), (108, 109804), (109, 109807), (119, 109867), (122, 109909), (132, 109969), (134, 109981), (140, 110020), (144, 110038), (146, 110044), (150, 110068), (157, 110104), (159, 110113), (162, 110128),

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

Candidate Starts for Specks\_209:

(9, 111149), (Start: 14 @111176 has 177 MA's), (19, 111209), (23, 111242), (37, 111332), (Start: 38 @111341 has 2 MA's), (44, 111437), (47, 111458), (99, 111866), (104, 111896), (108, 111920), (109, 111923), (119, 111983), (122, 112025), (132, 112085), (134, 112097), (140, 112136), (144, 112154), (146, 112160), (150, 112184), (157, 112220), (159, 112229), (162, 112244),

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

Candidate Starts for Sprinklers\_203:

(9, 109400), (Start: 14 @109427 has 177 MA's), (19, 109460), (23, 109493), (37, 109583), (Start: 38 @109592 has 2 MA's), (44, 109688), (47, 109709), (99, 110117), (104, 110147), (108, 110171), (109, 110174), (119, 110234), (122, 110276), (132, 110336), (134, 110348), (140, 110387), (144, 110405), (146, 110411), (150, 110435), (157, 110471), (159, 110480), (162, 110495),

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

Candidate Starts for Spud\_199:

(9, 109112), (Start: 14 @109139 has 177 MA's), (19, 109172), (23, 109205), (37, 109295), (Start: 38 @109304 has 2 MA's), (44, 109400), (47, 109421), (99, 109829), (104, 109859), (108, 109883), (109, 109886), (119, 109946), (122, 109988), (132, 110048), (134, 110060), (140, 110099), (144, 110117), (146, 110123), (150, 110147), (157, 110183), (159, 110192), (162, 110207),

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

Candidate Starts for SrishMeg2525\_202:

(9, 110276), (Start: 14 @110303 has 177 MA's), (19, 110336), (23, 110369), (37, 110459), (Start: 38 @110468 has 2 MA's), (44, 110564), (47, 110585), (99, 110993), (104, 111023), (108, 111047), (109, 111050), (119, 111110), (122, 111152), (132, 111212), (134, 111224), (140, 111263), (144, 111281), (146, 111287), (150, 111311), (157, 111347), (159, 111356), (162, 111371),

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

Candidate Starts for StephanieG\_201:

(9, 110307), (Start: 14 @110334 has 177 MA's), (19, 110367), (23, 110400), (37, 110490), (Start: 38 @110499 has 2 MA's), (44, 110595), (47, 110616), (99, 111024), (104, 111054), (108, 111078), (109, 111081), (119, 111141), (122, 111183), (132, 111243), (134, 111255), (140, 111294), (144, 111312), (146, 111318), (150, 111342), (157, 111378), (159, 111387), (162, 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), (Start: 38 @68483 has 2 MA's), (47, 68600), (63, 68753), (80, 68876), (109, 69071), (111, 69086), (124, 69191), (125, 69197), (138, 69269), (140, 69281), (146, 69305), (151, 69329), (152, 69332), (154, 69341), (161, 69386),

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

Candidate Starts for Stubby\_189:

(9, 109152), (Start: 14 @109179 has 177 MA's), (19, 109212), (23, 109245), (37, 109335), (Start: 38 @109344 has 2 MA's), (44, 109440), (47, 109461), (99, 109869), (104, 109899), (108, 109923), (109, 109926), (119, 109986), (122, 110028), (132, 110088), (134, 110100), (140, 110139), (144, 110157), (146, 110163), (150, 110187), (157, 110223), (159, 110232), (162, 110247),

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

Candidate Starts for StubbySaigey\_210:

(9, 109831), (Start: 14 @109858 has 177 MA's), (19, 109891), (23, 109924), (37, 110014), (Start: 38 @110023 has 2 MA's), (44, 110119), (47, 110140), (99, 110548), (104, 110578), (108, 110602), (109, 110605), (119, 110665), (122, 110707), (132, 110767), (134, 110779), (140, 110818), (144, 110836), (146, 110842), (150, 110866), (157, 110902), (159, 110911), (162, 110926),

Gene: Tainan\_206 Start: 110196, Stop: 111269, Start Num: 14

Candidate Starts for Tainan\_206:

(9, 110169), (Start: 14 @110196 has 177 MA's), (19, 110229), (23, 110262), (37, 110352), (Start: 38 @110361 has 2 MA's), (44, 110457), (47, 110478), (99, 110886), (104, 110916), (108, 110940), (109, 110943), (119, 111003), (122, 111045), (132, 111105), (134, 111117), (140, 111156), (144, 111174), (146, 111180), (150, 111204), (157, 111240), (159, 111249), (162, 111264),

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

Candidate Starts for Teardrop\_202:

(9, 108344), (Start: 14 @108371 has 177 MA's), (19, 108404), (23, 108437), (37, 108527), (Start: 38 @108536 has 2 MA's), (44, 108632), (47, 108653), (99, 109061), (104, 109091), (108, 109115), (109, 109118), (119, 109178), (122, 109220), (132, 109280), (134, 109292), (140, 109331), (144, 109349), (146, 109355), (150, 109379), (157, 109415), (159, 109424), (162, 109439),

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

Candidate Starts for TinyTim\_203:

(9, 109125), (Start: 14 @109152 has 177 MA's), (19, 109185), (23, 109218), (37, 109308), (Start: 38 @109317 has 2 MA's), (44, 109413), (47, 109434), (99, 109842), (104, 109872), (108, 109896), (109, 109899), (119, 109959), (122, 110001), (132, 110061), (134, 110073), (140, 110112), (144, 110130), (146, 110136), (150, 110160), (157, 110196), (159, 110205), (162, 110220),

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

Candidate Starts for Tonenili\_226:

(6, 115823), (Start: 14 @115973 has 177 MA's), (19, 116006), (23, 116039), (28, 116066), (44, 116234), (47, 116255), (99, 116663), (108, 116717), (109, 116720), (119, 116780), (122, 116822), (132, 116882), (140, 116933), (144, 116951), (146, 116957), (150, 116981), (151, 116984), (157, 117017), (159, 117026), (162, 117041),

Gene: Toneprano\_63 Start: 52745, Stop: 51807, Start Num: 26

Candidate Starts for Toneprano\_63:

(Start: 26 @52745 has 8 MA's), (Start: 38 @52658 has 2 MA's), (48, 52517), (49, 52511), (54, 52445), (56, 52427), (68, 52340), (70, 52328), (75, 52286), (76, 52283), (77, 52271), (86, 52196), (90, 52166), (91, 52163), (95, 52136), (106, 52055), (109, 52046), (116, 51995), (127, 51917), (148, 51833),

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

Candidate Starts for Tortoise16\_203:

(9, 109587), (Start: 14 @109614 has 177 MA's), (19, 109647), (23, 109680), (37, 109770), (Start: 38 @109779 has 2 MA's), (44, 109875), (47, 109896), (99, 110304), (104, 110334), (108, 110358), (109, 110361), (119, 110421), (122, 110463), (132, 110523), (134, 110535), (140, 110574), (144, 110592),

(146, 110598), (150, 110622), (157, 110658), (159, 110667), (162, 110682),

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

Candidate Starts for Trinitium\_201:

(9, 108872), (Start: 14 @108899 has 177 MA's), (19, 108932), (23, 108965), (37, 109055), (Start: 38 @109064 has 2 MA's), (44, 109160), (47, 109181), (99, 109589), (104, 109619), (108, 109643), (109, 109646), (119, 109706), (122, 109748), (132, 109808), (134, 109820), (140, 109859), (144, 109877), (146, 109883), (150, 109907), (157, 109943), (159, 109952), (162, 109967),

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

Candidate Starts for Turret\_198:

(9, 108454), (Start: 14 @108481 has 177 MA's), (19, 108514), (23, 108547), (37, 108637), (Start: 38 @108646 has 2 MA's), (44, 108742), (47, 108763), (99, 109171), (104, 109201), (108, 109225), (109, 109228), (119, 109288), (122, 109330), (132, 109390), (134, 109402), (140, 109441), (144, 109459), (146, 109465), (150, 109489), (157, 109525), (159, 109534), (162, 109549),

Gene: Twin\_63 Start: 52643, Stop: 51792, Start Num: 38

Candidate Starts for Twin\_63:

(Start: 26 @52730 has 8 MA's), (Start: 38 @52643 has 2 MA's), (48, 52502), (49, 52496), (54, 52430), (56, 52412), (68, 52325), (70, 52313), (75, 52271), (76, 52268), (77, 52256), (86, 52181), (90, 52151), (91, 52148), (95, 52121), (106, 52040), (109, 52031), (116, 51980), (127, 51902), (148, 51818),

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

Candidate Starts for Tyke\_203:

(9, 110954), (Start: 14 @110981 has 177 MA's), (19, 111014), (23, 111047), (37, 111137), (Start: 38 @111146 has 2 MA's), (44, 111242), (47, 111263), (99, 111671), (104, 111701), (108, 111725), (109, 111728), (119, 111788), (122, 111830), (132, 111890), (134, 111902), (140, 111941), (144, 111959), (146, 111965), (150, 111989), (157, 112025), (159, 112034), (162, 112049),

Gene: UBSmoodge\_67 Start: 56124, Stop: 55186, Start Num: 26

Candidate Starts for UBSmoodge\_67:

(25, 56127), (Start: 26 @56124 has 8 MA's), (Start: 38 @56037 has 2 MA's), (48, 55896), (49, 55890), (54, 55824), (59, 55794), (64, 55752), (68, 55719), (70, 55707), (73, 55674), (76, 55662), (77, 55650), (86, 55575), (95, 55515), (96, 55509), (98, 55485), (106, 55434), (109, 55425), (116, 55374), (128, 55293), (130, 55284), (148, 55212),

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

Candidate Starts for ValleyTerrace\_206:

(9, 109038), (Start: 14 @109065 has 177 MA's), (19, 109098), (23, 109131), (37, 109221), (Start: 38 @109230 has 2 MA's), (44, 109326), (47, 109347), (99, 109755), (104, 109785), (108, 109809), (109, 109812), (119, 109872), (122, 109914), (132, 109974), (134, 109986), (140, 110025), (144, 110043), (146, 110049), (150, 110073), (157, 110109), (159, 110118), (162, 110133),

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

Candidate Starts for Wally\_203:

(9, 109022), (Start: 14 @109049 has 177 MA's), (19, 109082), (23, 109115), (37, 109205), (Start: 38 @109214 has 2 MA's), (44, 109310), (47, 109331), (99, 109739), (104, 109769), (108, 109793), (109, 109796), (119, 109856), (122, 109898), (132, 109958), (134, 109970), (140, 110009), (144, 110027), (146, 110033), (150, 110057), (157, 110093), (159, 110102), (162, 110117),

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

Candidate Starts for Willis\_206:

(9, 109936), (Start: 14 @109963 has 177 MA's), (19, 109996), (23, 110029), (37, 110119), (Start: 38 @110128 has 2 MA's), (44, 110224), (47, 110245), (99, 110653), (104, 110683), (108, 110707), (109, 110710), (119, 110770), (122, 110812), (132, 110872), (134, 110884), (140, 110923), (144, 110941), (146, 110947), (150, 110971), (157, 111007), (159, 111016), (162, 111031),

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

Candidate Starts for Yassified\_202:

(9, 109377), (Start: 14 @109404 has 177 MA's), (19, 109437), (23, 109470), (37, 109560), (Start: 38 @109569 has 2 MA's), (44, 109665), (47, 109686), (99, 110094), (104, 110124), (108, 110148), (109, 110151), (119, 110211), (122, 110253), (132, 110313), (134, 110325), (140, 110364), (144, 110382), (146, 110388), (150, 110412), (157, 110448), (159, 110457), (162, 110472),

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

Candidate Starts for YemiJoy2021\_206:

(9, 110692), (Start: 14 @110719 has 177 MA's), (19, 110752), (23, 110785), (37, 110875), (Start: 38 @110884 has 2 MA's), (44, 110980), (47, 111001), (99, 111409), (104, 111439), (108, 111463), (109, 111466), (119, 111526), (122, 111568), (132, 111628), (134, 111640), (140, 111679), (144, 111697), (146, 111703), (150, 111727), (157, 111763), (159, 111772), (162, 111787),

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

Candidate Starts for YoungMoneyMata\_203:

(9, 109234), (Start: 14 @109261 has 177 MA's), (19, 109294), (23, 109327), (37, 109417), (Start: 38 @109426 has 2 MA's), (44, 109522), (47, 109543), (99, 109951), (104, 109981), (108, 110005), (109, 110008), (119, 110068), (122, 110110), (132, 110170), (134, 110182), (140, 110221), (144, 110239), (146, 110245), (150, 110269), (157, 110305), (159, 110314), (162, 110329),

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

Candidate Starts for Yucca\_205:

(9, 110684), (Start: 14 @110711 has 177 MA's), (19, 110744), (23, 110777), (37, 110867), (Start: 38 @110876 has 2 MA's), (44, 110972), (47, 110993), (99, 111401), (104, 111431), (108, 111455), (109, 111458), (119, 111518), (122, 111560), (132, 111620), (134, 111632), (140, 111671), (144, 111689), (146, 111695), (150, 111719), (157, 111755), (159, 111764), (162, 111779),

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

Candidate Starts for Zalkecks\_204:

(9, 109765), (Start: 14 @109792 has 177 MA's), (19, 109825), (23, 109858), (37, 109948), (Start: 38 @109957 has 2 MA's), (44, 110053), (47, 110074), (99, 110482), (104, 110512), (108, 110536), (109, 110539), (119, 110599), (122, 110641), (132, 110701), (134, 110713), (140, 110752), (144, 110770), (146, 110776), (150, 110800), (157, 110836), (159, 110845), (162, 110860),

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

Candidate Starts for Zeenon\_207:

(9, 110336), (Start: 14 @110363 has 177 MA's), (19, 110396), (23, 110429), (37, 110519), (Start: 38 @110528 has 2 MA's), (44, 110624), (47, 110645), (99, 111053), (104, 111083), (108, 111107), (109, 111110), (119, 111170), (122, 111212), (132, 111272), (134, 111284), (140, 111323), (144, 111341), (146, 111347), (150, 111371), (157, 111407), (159, 111416), (162, 111431),

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

Candidate Starts for ZygoTaiga\_202:

(9, 110956), (Start: 14 @110983 has 177 MA's), (19, 111016), (23, 111049), (37, 111139), (Start: 38 @111148 has 2 MA's), (44, 111244), (47, 111265), (99, 111673), (104, 111703), (108, 111727), (109, 111730), (119, 111790), (122, 111832), (132, 111892), (134, 111904), (140, 111943), (144, 111961), (146, 111967), (150, 111991), (157, 112027), (159, 112036), (162, 112051),

