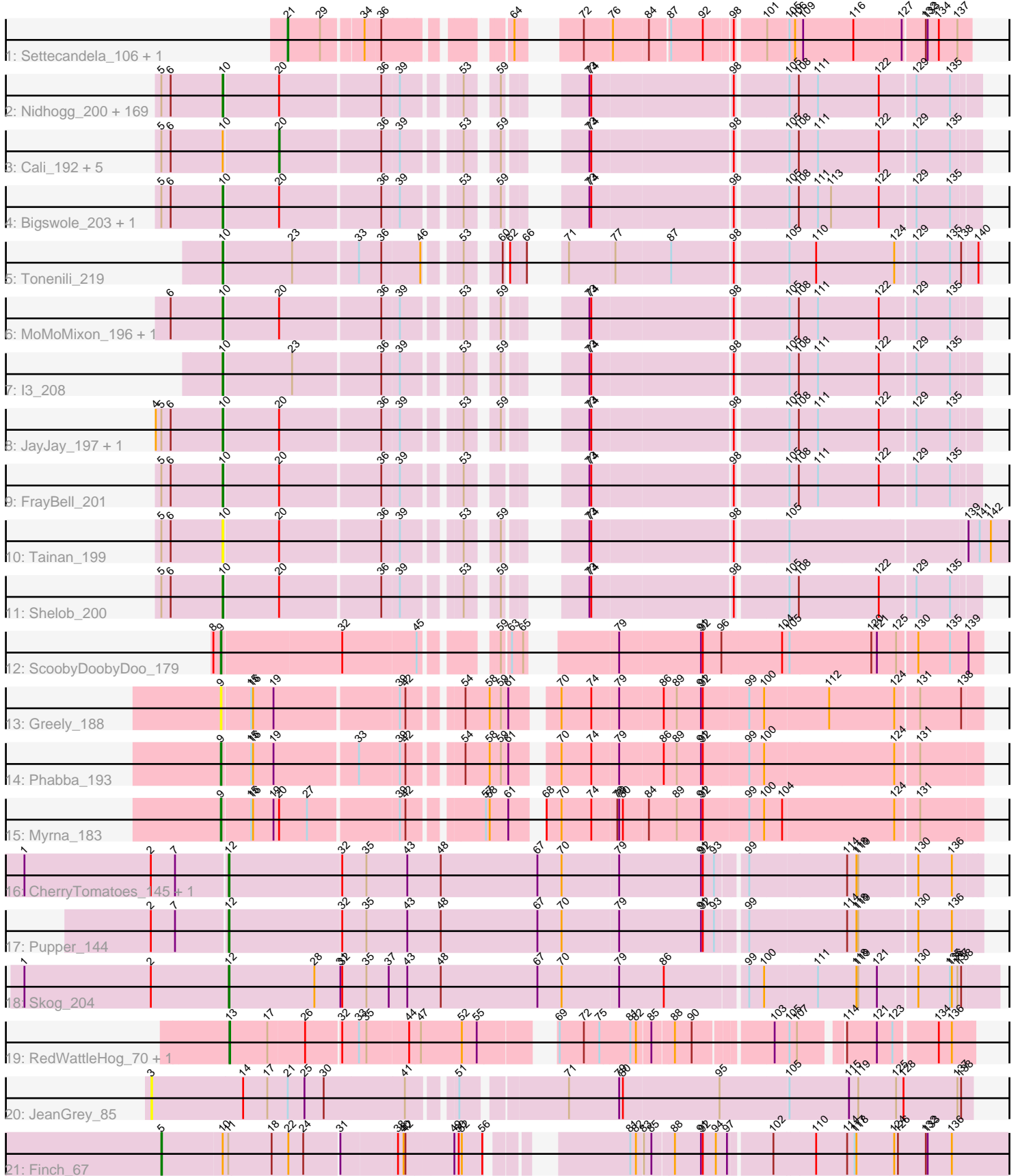


# Pham 191067



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 191067 Report

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

Pham number 191067 has 201 members, 20 are drafts.

Phages represented in each track:

- Track 1 : Settecandela\_106, Phrappuccino\_106
- Track 2 : Nidhogg\_200, NoodleTree\_205, Cane17\_190, LifeSavor\_197, NuevoMundo\_201, Derek\_195, Adlitam\_197, BigCity\_207, Jessibeth14\_199, SmallFry\_198, Littleton\_201, Spec\_193, Grasshills\_206, Rabinovich\_192, LolaVinca\_196, Teardrop\_195, Astraea\_192, Gizmo\_204, Guwapp\_193, Chomp\_198, RoMag\_193, JPickles\_194, Burrough\_200, Willis\_199, Amataga\_199, Pio\_206, Darko\_197, SilverDipper\_202, Shrimp\_200, YemiJoy2021\_199, Napoleon13\_196, Yassified\_195, ZygoTaiga\_195, Audrick\_201, ChaylaJr\_196, Erdmann\_200, ChickenPhender\_195, Babyland\_201, Concombre\_203, Dietrick\_188, MikeLiesIn\_200, NedWong\_198, Naval22\_204, Domi\_192, BadAgartude\_192, Basquiat\_196, Janiyra\_202, Patter\_199, EmToTheThree\_199, Phlegm\_202, Sauce\_194, HyRo\_186, Capablanca\_203, Naija\_199, Ngannou\_195, Bread\_194, InterFolia\_201, Khaleesi\_198, McGee\_198, Bipolarisk\_197, Lee7\_199, Melpomini\_193, Demodog\_204, ArcherS7\_198, Delilah\_197, BeanWater\_190, Breeniome\_197, Issimir\_192, CharlieB\_192, Turret\_192, Norm\_198, Ava3\_197, Blackdragon\_193, McWolfish\_196, EasyJones\_202, Megamind\_196, ErnieJ\_191, LRRHood\_191, Phusco\_197, Phox\_199, EmmaElysia\_201, Koguma\_197, Delylah\_200, IkeLoa\_190, Kamryn\_197, Daffodil\_203, EggyFarm\_207, Pinkcreek\_183, ShiaLabeouf\_195, CindyLou\_199, Halldule\_191, Sprinklers\_196, Zalkecks\_198, Gabriel\_201, Quasimodo\_201, StubbySaigey\_203, Salacia\_198, Wally\_197, Izajani\_197, Iota\_193, Yucca\_199, Chargie21\_196, Asterius\_195, Stubby\_183, Mikro\_194, BananaFence\_195, Bangla1971\_198, InigoMontoya\_201, Trinitium\_195, Lukilu\_189, BackyardAgain\_195, Maby2021\_198, Tyke\_196, YoungMoneyMata\_197, DrPhinkDaddy\_196, Cactojaque\_194, Matsumoto\_198, FudgeTart\_194, JustHall\_193, Pleione\_203, Dandelion\_206, Momo\_199, LinStu\_197, PurduePete\_199, TinyTim\_197, FoxtrotP1\_197, StephanieG\_195, Flabslab\_194, ScottMcG\_192, Fludd\_199, Sebata\_200, Gamgam\_199, Rahel\_199, ValleyTerrace\_199, Jemmno\_197, JigglyPuff\_205, ET08\_186, Grungle\_183, Drazdys\_196, QBert\_190, Pier\_199, Colt\_190, Specks\_202, Shnickers\_196, Atlantean\_198, LordLeafolot\_200, Tortoise16\_196, Ading\_199, Ewok\_198, Pivoine\_199, DTDevon\_200, Roots515\_201, Blubba\_188, Morizzled23\_196, Kboogie\_202, Blackbrain\_196, Jaygup\_194, JulietS\_191, Nappy\_199, Ronan\_194, Latch\_198, Shaqnato\_190, Zeenon\_201, Essence\_195, Ghost\_198, Bonray\_201, ParkTD\_197, SrishMeg2525\_196, Loanshark\_196, Jedediah\_198
- Track 3 : Cali\_192, Spud\_193, Rizal\_191, Bxz1\_188, Alice\_185, Catera\_192
- Track 4 : Bigswole\_203, Mangeria\_199
- Track 5 : Tonenili\_219

- Track 6 : MoMoMixon\_196, Caravan\_189
- Track 7 : I3\_208
- Track 8 : JayJay\_197, DirtMonster\_192
- Track 9 : FrayBell\_201
- Track 10 : Tainan\_199
- Track 11 : Shelob\_200
- Track 12 : ScoobyDoobyDoo\_179
- Track 13 : Greely\_188
- Track 14 : Phabba\_193
- Track 15 : Myrna\_183
- Track 16 : CherryTomatoes\_145, SCentae\_143
- Track 17 : Pupper\_144
- Track 18 : Skog\_204
- Track 19 : RedWattleHog\_70, Stormageddon\_67
- Track 20 : JeanGrey\_85
- Track 21 : Finch\_67

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

The start number called the most often in the published annotations is 10, it was called in 163 of the 181 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ading\_199, Adlitam\_197, Amataga\_199, ArcherS7\_198, Asterius\_195, Astraea\_192, Atlantean\_198, Audrick\_201, Ava3\_197, Babyland\_201, BackyardAgain\_195, BadAgartude\_192, BananaFence\_195, Bangla1971\_198, Basquiat\_196, BeanWater\_190, BigCity\_207, Bigswole\_203, Bipolarisk\_197, Blackbrain\_196, Blackdragon\_193, Blubba\_188, Bonray\_201, Bread\_194, Breeniome\_197, Burrough\_200, Cactojaque\_194, Cane17\_190, Capablanca\_203, Caravan\_189, Chargie21\_196, CharlieB\_192, ChaylaJr\_196, ChickenPhender\_195, Chomp\_198, CindyLou\_199, Colt\_190, Concombre\_203, DTDevon\_200, Daffodil\_203, Dandelion\_206, Darko\_197, Delilah\_197, Delylah\_200, Demodog\_204, Derek\_195, Dietrick\_188, DirtMonster\_192, Domi\_192, DrPhinkDaddy\_196, Drazdys\_196, ET08\_186, EasyJones\_202, EggyFarm\_207, EmToTheThree\_199, EmmaElysia\_201, Erdmann\_200, ErnieJ\_191, Essence\_195, Ewok\_198, Flabslab\_194, Fludd\_199, FoxtrotP1\_197, FrayBell\_201, FudgeTart\_194, Gabriel\_201, Gamgam\_199, Ghost\_198, Gizmo\_204, Grasshills\_206, Grungle\_183, Guwapp\_193, Halldule\_191, HyRo\_186, I3\_208, IkeLoa\_190, InigoMontoya\_201, InterFolia\_201, Iota\_193, Issimir\_192, Izajani\_197, JPickles\_194, Janiyra\_202, JayJay\_197, Jaygup\_194, Jediah\_198, Jemmno\_197, Jessibeth14\_199, JigglyPuff\_205, JulietS\_191, JustHall\_193, Kamryn\_197, Kboogie\_202, Khaleesi\_198, Koguma\_197, LRRHood\_191, Latch\_198, Lee7\_199, LifeSavor\_197, LinStu\_197, Littleton\_201, Loanshark\_196, LolaVinca\_196, LordLeafolot\_200, Lukilu\_189, Maby2021\_198, Mangeria\_199, Matsumoto\_198, McGee\_198, McWolfish\_196, Megamind\_196, Melpomini\_193, MikeLiesIn\_200, Mikro\_194, MoMoMixon\_196, Momo\_199, Morizzled23\_196, Naija\_199, Napoleon13\_196, Nappy\_199, Naval22\_204, NedWong\_198, Ngannou\_195, Nidhogg\_200, NoodleTree\_205, Norm\_198, NuevoMundo\_201, ParkTD\_197, Patter\_199, Phlegm\_202, Phox\_199, Phusco\_197, Pier\_199, Pinkcreek\_183, Pio\_206, Pivoine\_199, Pleione\_203, PurduePete\_199, QBert\_190, Quasimodo\_201,

Rabinovish\_192, Rahel\_199, RoMag\_193, Ronan\_194, Roots515\_201, Salacia\_198, Sauce\_194, ScottMcG\_192, Sebata\_200, Shaqnato\_190, Shelob\_200, ShiaLabeouf\_195, Shnickers\_196, Shrimp\_200, SilverDipper\_202, SmallFry\_198, Spec\_193, Specks\_202, Sprinklers\_196, SrishMeg2525\_196, StephanieG\_195, StubbySaigey\_203, Stubby\_183, Tainan\_199, Teardrop\_195, TinyTim\_197, Tonenili\_219, Tortoise16\_196, Trinitium\_195, Turret\_192, Tyke\_196, ValleyTerrace\_199, Wally\_197, Willis\_199, Yassified\_195, YemiJoy2021\_199, YoungMoneyMata\_197, Yucca\_199, Zalkecks\_198, Zeenon\_201, ZygoTaiga\_195,

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

- Alice\_185, Bxz1\_188, Cali\_192, Catera\_192, Finch\_67, Rizal\_191, Spud\_193,

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

- CherryTomatoes\_145, Greely\_188, JeanGrey\_85, Myrna\_183, Phabba\_193, Phrappuccino\_106, Pupper\_144, RedWattleHog\_70, SCentae\_143, ScoobyDoobyDoo\_179, Settecandela\_106, Skog\_204, Stormageddon\_67,

### Summary by start number:

Start 3:

- Found in 1 of 201 ( 0.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JeanGrey\_85 (singleton),

Start 5:

- Found in 184 of 201 ( 91.5% ) of genes in pham
- Manual Annotations of this start: 1 of 181
- Called 0.5% of time when present
- Phage (with cluster) where this start called: Finch\_67 (singleton),

Start 9:

- Found in 4 of 201 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 3 of 181
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Greely\_188 (C2), Myrna\_183 (C2), Phabba\_193 (C2), ScoobyDoobyDoo\_179 (C2),

Start 10:

- Found in 188 of 201 ( 93.5% ) of genes in pham
- Manual Annotations of this start: 163 of 181
- Called 96.3% of time when present
- Phage (with cluster) where this start called: Ading\_199 (C1), Adlitam\_197 (C1), Amataga\_199 (C1), ArcherS7\_198 (C1), Asterius\_195 (C1), Astraea\_192 (C1), Atlantean\_198 (C1), Audrick\_201 (C1), Ava3\_197 (C1), Babyland\_201 (C1), BackyardAgain\_195 (C1), BadAgartude\_192 (C1), BananaFence\_195 (C1), Bangla1971\_198 (C1), Basquiat\_196 (C1), BeanWater\_190 (C1), BigCity\_207 (C1), Bigswole\_203 (C1), Bipolarisk\_197 (C1), Blackbrain\_196 (C1), Blackdragon\_193 (C1), Blubba\_188 (C1), Bonray\_201 (C1), Bread\_194 (C1), Breeniome\_197 (C1), Burrough\_200 (C1), Cactojaque\_194 (C1), Cane17\_190 (C1), Capablanca\_203 (C1), Caravan\_189 (C1), Chargie21\_196 (C1), CharlieB\_192 (C1), ChaylaJr\_196 (C1), ChickenPhender\_195 (C1), Chomp\_198 (C1), CindyLou\_199 (C1), Colt\_190 (C1), Concombre\_203 (C1), DTDevon\_200 (C1), Daffodil\_203 (C1), Dandelion\_206 (C1),

Darko\_197 (C1), Delilah\_197 (C1), Delylah\_200 (C1), Demodog\_204 (C1), Derek\_195 (C1), Dietrick\_188 (C1), DirtMonster\_192 (C1), Domi\_192 (C1), DrPhinkDaddy\_196 (C1), Drazdys\_196 (C1), ET08\_186 (C1), EasyJones\_202 (C1), EggyFarm\_207 (C1), EmToTheThree\_199 (C1), EmmaElysia\_201 (C1), Erdmann\_200 (C1), ErnieJ\_191 (C1), Essence\_195 (C1), Ewok\_198 (C1), Flabslab\_194 (C1), Fludd\_199 (C1), FoxtrotP1\_197 (C1), FrayBell\_201 (C1), FudgeTart\_194 (C1), Gabriel\_201 (C1), Gamgam\_199 (C1), Ghost\_198 (C1), Gizmo\_204 (C1), Grasshills\_206 (C1), Grungle\_183 (C1), Guwapp\_193 (C1), Halldule\_191 (C1), HyRo\_186 (C1), I3\_208 (C1), IkeLoa\_190 (C1), InigoMontoya\_201 (C1), InterFolia\_201 (C1), Iota\_193 (C1), Issimir\_192 (C1), Izajani\_197 (C1), JPickles\_194 (C1), Janiyr\_202 (C1), JayJay\_197 (C1), Jaygup\_194 (C1), Jedediah\_198 (C1), Jemmno\_197 (C1), Jessibeth14\_199 (C1), JigglyPuff\_205 (C1), JulietS\_191 (C1), JustHall\_193 (C1), Kamryn\_197 (C1), Kboogie\_202 (C1), Khaleesi\_198 (C1), Koguma\_197 (C1), LRRHood\_191 (C1), Latch\_198 (C1), Lee7\_199 (C1), LifeSavor\_197 (C1), LinStu\_197 (C1), Littleton\_201 (C1), Loanshark\_196 (C1), LolaVinca\_196 (C1), LordLeafolot\_200 (C1), Lukilu\_189 (C1), Maby2021\_198 (C1), Mangeria\_199 (C1), Matsumoto\_198 (C1), McGee\_198 (C1), McWolfish\_196 (C1), Megamind\_196 (C1), Melpomini\_193 (C1), MikeLiesIn\_200 (C1), Mikro\_194 (C1), MoMoMixon\_196 (C1), Momo\_199 (C1), Morizzled23\_196 (C1), Naija\_199 (C1), Napoleon13\_196 (C1), Nappy\_199 (C1), Naval22\_204 (C1), NedWong\_198 (C1), Ngannou\_195 (C1), Nidhogg\_200 (C1), NoodleTree\_205 (C1), Norm\_198 (C1), NuevoMundo\_201 (C1), ParkTD\_197 (C1), Patter\_199 (C1), Phlegm\_202 (C1), Phox\_199 (C1), Phusco\_197 (C1), Pier\_199 (C1), Pinkcreek\_183 (C1), Pio\_206 (C1), Pivoine\_199 (C1), Pleione\_203 (C1), PurduePete\_199 (C1), QBert\_190 (C1), Quasimodo\_201 (C1), Rabinovish\_192 (C1), Rahel\_199 (C1), RoMag\_193 (C1), Ronan\_194 (C1), Roots515\_201 (C1), Salacia\_198 (C1), Sauce\_194 (C1), ScottMcG\_192 (C1), Sebata\_200 (C1), Shaqato\_190 (C1), Shelob\_200 (C1), ShiaLabeouf\_195 (C1), Shnickers\_196 (C1), Shrimp\_200 (C1), SilverDipper\_202 (C1), SmallFry\_198 (C1), Spec\_193 (C1), Specks\_202 (C1), Sprinklers\_196 (C1), SrishMeg2525\_196 (C1), StephanieG\_195 (C1), StubbySaigey\_203 (C1), Stubby\_183 (C1), Tainan\_199 (C1), Teardrop\_195 (C1), TinyTim\_197 (C1), Tonenili\_219 (C1), Tortoise16\_196 (C1), Trinitium\_195 (C1), Turret\_192 (C1), Tyke\_196 (C1), ValleyTerrace\_199 (C1), Wally\_197 (C1), Willis\_199 (C1), Yassified\_195 (C1), YemiJoy2021\_199 (C1), YoungMoneyMata\_197 (C1), Yucca\_199 (C1), Zalkecks\_198 (C1), Zeenon\_201 (C1), ZygoTaiga\_195 (C1),

#### Start 12:

- Found in 4 of 201 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 4 of 181
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CherryTomatoes\_145 (DO), Pupper\_144 (DO), SCentae\_143 (DO), Skog\_204 (DO),

#### Start 13:

- Found in 2 of 201 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 2 of 181
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog\_70 (DX), Stormageddon\_67 (DX),

#### Start 20:

- Found in 186 of 201 ( 92.5% ) of genes in pham
- Manual Annotations of this start: 6 of 181

- Called 3.2% of time when present
- Phage (with cluster) where this start called: Alice\_185 (C1), Bxz1\_188 (C1), Cali\_192 (C1), Catera\_192 (C1), Rizal\_191 (C1), Spud\_193 (C1),

Start 21:

- Found in 3 of 201 ( 1.5% ) of genes in pham
- Manual Annotations of this start: 2 of 181
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Phrappuccino\_106 (AA), Settecandela\_106 (AA),

### **Summary by clusters:**

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

Info for manual annotations of cluster AA:

- Start number 21 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster C1:

- Start number 10 was manually annotated 163 times for cluster C1.
- Start number 20 was manually annotated 6 times for cluster C1.

Info for manual annotations of cluster C2:

- Start number 9 was manually annotated 3 times for cluster C2.

Info for manual annotations of cluster DO:

- Start number 12 was manually annotated 4 times for cluster DO.

Info for manual annotations of cluster DX:

- Start number 13 was manually annotated 2 times for cluster DX.

### **Gene Information:**

Gene: Ading\_199 Start: 106055, Stop: 107098, Start Num: 10

Candidate Starts for Ading\_199:

(Start: 5 @105956 has 1 MA's), (6, 105971), (Start: 10 @106055 has 163 MA's), (Start: 20 @106142 has 6 MA's), (36, 106298), (39, 106325), (53, 106400), (59, 106436), (73, 106511), (74, 106514), (98, 106730), (105, 106805), (108, 106820), (111, 106850), (122, 106946), (129, 107000), (135, 107054),

Gene: Adlitam\_197 Start: 104659, Stop: 105702, Start Num: 10

Candidate Starts for Adlitam\_197:

(Start: 5 @104560 has 1 MA's), (6, 104575), (Start: 10 @104659 has 163 MA's), (Start: 20 @104746 has 6 MA's), (36, 104902), (39, 104929), (53, 105004), (59, 105040), (73, 105115), (74, 105118), (98, 105334), (105, 105409), (108, 105424), (111, 105454), (122, 105550), (129, 105604), (135, 105658),

Gene: Alice\_185 Start: 104714, Stop: 105670, Start Num: 20

Candidate Starts for Alice\_185:

(Start: 5 @104528 has 1 MA's), (6, 104543), (Start: 10 @104627 has 163 MA's), (Start: 20 @104714 has 6 MA's), (36, 104870), (39, 104897), (53, 104972), (59, 105008), (73, 105083), (74, 105086), (98, 105302), (105, 105377), (108, 105392), (111, 105422), (122, 105518), (129, 105572), (135, 105626),

Gene: Amataga\_199 Start: 104471, Stop: 105514, Start Num: 10

Candidate Starts for Amataga\_199:

(Start: 5 @104372 has 1 MA's), (6, 104387), (Start: 10 @104471 has 163 MA's), (Start: 20 @104558 has 6 MA's), (36, 104714), (39, 104741), (53, 104816), (59, 104852), (73, 104927), (74, 104930), (98, 105146), (105, 105221), (108, 105236), (111, 105266), (122, 105362), (129, 105416), (135, 105470),

Gene: ArcherS7\_198 Start: 105513, Stop: 106556, Start Num: 10

Candidate Starts for ArcherS7\_198:

(Start: 5 @105414 has 1 MA's), (6, 105429), (Start: 10 @105513 has 163 MA's), (Start: 20 @105600 has 6 MA's), (36, 105756), (39, 105783), (53, 105858), (59, 105894), (73, 105969), (74, 105972), (98, 106188), (105, 106263), (108, 106278), (111, 106308), (122, 106404), (129, 106458), (135, 106512),

Gene: Asterius\_195 Start: 105189, Stop: 106232, Start Num: 10

Candidate Starts for Asterius\_195:

(Start: 5 @105090 has 1 MA's), (6, 105105), (Start: 10 @105189 has 163 MA's), (Start: 20 @105276 has 6 MA's), (36, 105432), (39, 105459), (53, 105534), (59, 105570), (73, 105645), (74, 105648), (98, 105864), (105, 105939), (108, 105954), (111, 105984), (122, 106080), (129, 106134), (135, 106188),

Gene: Astraea\_192 Start: 104077, Stop: 105120, Start Num: 10

Candidate Starts for Astraea\_192:

(Start: 5 @103978 has 1 MA's), (6, 103993), (Start: 10 @104077 has 163 MA's), (Start: 20 @104164 has 6 MA's), (36, 104320), (39, 104347), (53, 104422), (59, 104458), (73, 104533), (74, 104536), (98, 104752), (105, 104827), (108, 104842), (111, 104872), (122, 104968), (129, 105022), (135, 105076),

Gene: Atlantean\_198 Start: 104471, Stop: 105514, Start Num: 10

Candidate Starts for Atlantean\_198:

(Start: 5 @104372 has 1 MA's), (6, 104387), (Start: 10 @104471 has 163 MA's), (Start: 20 @104558 has 6 MA's), (36, 104714), (39, 104741), (53, 104816), (59, 104852), (73, 104927), (74, 104930), (98, 105146), (105, 105221), (108, 105236), (111, 105266), (122, 105362), (129, 105416), (135, 105470),

Gene: Audrick\_201 Start: 104670, Stop: 105713, Start Num: 10

Candidate Starts for Audrick\_201:

(Start: 5 @104571 has 1 MA's), (6, 104586), (Start: 10 @104670 has 163 MA's), (Start: 20 @104757 has 6 MA's), (36, 104913), (39, 104940), (53, 105015), (59, 105051), (73, 105126), (74, 105129), (98, 105345), (105, 105420), (108, 105435), (111, 105465), (122, 105561), (129, 105615), (135, 105669),

Gene: Ava3\_197 Start: 105214, Stop: 106257, Start Num: 10

Candidate Starts for Ava3\_197:

(Start: 5 @105115 has 1 MA's), (6, 105130), (Start: 10 @105214 has 163 MA's), (Start: 20 @105301 has 6 MA's), (36, 105457), (39, 105484), (53, 105559), (59, 105595), (73, 105670), (74, 105673), (98, 105889), (105, 105964), (108, 105979), (111, 106009), (122, 106105), (129, 106159), (135, 106213),

Gene: Babyland\_201 Start: 105248, Stop: 106291, Start Num: 10

Candidate Starts for Babyland\_201:

(Start: 5 @105149 has 1 MA's), (6, 105164), (Start: 10 @105248 has 163 MA's), (Start: 20 @105335 has 6 MA's), (36, 105491), (39, 105518), (53, 105593), (59, 105629), (73, 105704), (74, 105707), (98, 105923), (105, 105998), (108, 106013), (111, 106043), (122, 106139), (129, 106193), (135, 106247),

Gene: BackyardAgain\_195 Start: 103466, Stop: 104509, Start Num: 10

Candidate Starts for BackyardAgain\_195:

(Start: 5 @103367 has 1 MA's), (6, 103382), (Start: 10 @103466 has 163 MA's), (Start: 20 @103553 has 6 MA's), (36, 103709), (39, 103736), (53, 103811), (59, 103847), (73, 103922), (74, 103925), (98, 104141), (105, 104216), (108, 104231), (111, 104261), (122, 104357), (129, 104411), (135, 104465),

Gene: BadAgartude\_192 Start: 104570, Stop: 105613, Start Num: 10

Candidate Starts for BadAgartude\_192:

(Start: 5 @104471 has 1 MA's), (6, 104486), (Start: 10 @104570 has 163 MA's), (Start: 20 @104657 has 6 MA's), (36, 104813), (39, 104840), (53, 104915), (59, 104951), (73, 105026), (74, 105029), (98, 105245), (105, 105320), (108, 105335), (111, 105365), (122, 105461), (129, 105515), (135, 105569),

Gene: BananaFence\_195 Start: 104706, Stop: 105749, Start Num: 10

Candidate Starts for BananaFence\_195:

(Start: 5 @104607 has 1 MA's), (6, 104622), (Start: 10 @104706 has 163 MA's), (Start: 20 @104793 has 6 MA's), (36, 104949), (39, 104976), (53, 105051), (59, 105087), (73, 105162), (74, 105165), (98, 105381), (105, 105456), (108, 105471), (111, 105501), (122, 105597), (129, 105651), (135, 105705),

Gene: Bangla1971\_198 Start: 104477, Stop: 105520, Start Num: 10

Candidate Starts for Bangla1971\_198:

(Start: 5 @104378 has 1 MA's), (6, 104393), (Start: 10 @104477 has 163 MA's), (Start: 20 @104564 has 6 MA's), (36, 104720), (39, 104747), (53, 104822), (59, 104858), (73, 104933), (74, 104936), (98, 105152), (105, 105227), (108, 105242), (111, 105272), (122, 105368), (129, 105422), (135, 105476),

Gene: Basquiat\_196 Start: 104292, Stop: 105335, Start Num: 10

Candidate Starts for Basquiat\_196:

(Start: 5 @104193 has 1 MA's), (6, 104208), (Start: 10 @104292 has 163 MA's), (Start: 20 @104379 has 6 MA's), (36, 104535), (39, 104562), (53, 104637), (59, 104673), (73, 104748), (74, 104751), (98, 104967), (105, 105042), (108, 105057), (111, 105087), (122, 105183), (129, 105237), (135, 105291),

Gene: BeanWater\_190 Start: 104509, Stop: 105552, Start Num: 10

Candidate Starts for BeanWater\_190:

(Start: 5 @104410 has 1 MA's), (6, 104425), (Start: 10 @104509 has 163 MA's), (Start: 20 @104596 has 6 MA's), (36, 104752), (39, 104779), (53, 104854), (59, 104890), (73, 104965), (74, 104968), (98, 105184), (105, 105259), (108, 105274), (111, 105304), (122, 105400), (129, 105454), (135, 105508),

Gene: BigCity\_207 Start: 108080, Stop: 109123, Start Num: 10

Candidate Starts for BigCity\_207:

(Start: 5 @107981 has 1 MA's), (6, 107996), (Start: 10 @108080 has 163 MA's), (Start: 20 @108167 has 6 MA's), (36, 108323), (39, 108350), (53, 108425), (59, 108461), (73, 108536), (74, 108539), (98, 108755), (105, 108830), (108, 108845), (111, 108875), (122, 108971), (129, 109025), (135, 109079),

Gene: Bigswole\_203 Start: 107931, Stop: 108974, Start Num: 10

Candidate Starts for Bigswole\_203:

(Start: 5 @107832 has 1 MA's), (6, 107847), (Start: 10 @107931 has 163 MA's), (Start: 20 @108018 has 6 MA's), (36, 108174), (39, 108201), (53, 108276), (59, 108312), (73, 108387), (74, 108390), (98, 108606), (105, 108681), (108, 108696), (111, 108726), (113, 108747), (122, 108822), (129, 108876), (135, 108930),

Gene: Bipolarisk\_197 Start: 105483, Stop: 106526, Start Num: 10

Candidate Starts for Bipolarisk\_197:

(Start: 5 @105384 has 1 MA's), (6, 105399), (Start: 10 @105483 has 163 MA's), (Start: 20 @105570 has 6 MA's), (36, 105726), (39, 105753), (53, 105828), (59, 105864), (73, 105939), (74, 105942), (98, 106158), (105, 106233), (108, 106248), (111, 106278), (122, 106374), (129, 106428), (135, 106482),

Gene: Blackbrain\_196 Start: 105377, Stop: 106420, Start Num: 10

Candidate Starts for Blackbrain\_196:



(Start: 5 @105278 has 1 MA's), (6, 105293), (Start: 10 @105377 has 163 MA's), (Start: 20 @105464 has 6 MA's), (36, 105620), (39, 105647), (53, 105722), (59, 105758), (73, 105833), (74, 105836), (98, 106052), (105, 106127), (108, 106142), (111, 106172), (122, 106268), (129, 106322), (135, 106376),

Gene: Blackdragon\_193 Start: 104807, Stop: 105850, Start Num: 10

Candidate Starts for Blackdragon\_193:

(Start: 5 @104708 has 1 MA's), (6, 104723), (Start: 10 @104807 has 163 MA's), (Start: 20 @104894 has 6 MA's), (36, 105050), (39, 105077), (53, 105152), (59, 105188), (73, 105263), (74, 105266), (98, 105482), (105, 105557), (108, 105572), (111, 105602), (122, 105698), (129, 105752), (135, 105806),

Gene: Blubba\_188 Start: 108675, Stop: 109718, Start Num: 10

Candidate Starts for Blubba\_188:

(Start: 5 @108576 has 1 MA's), (6, 108591), (Start: 10 @108675 has 163 MA's), (Start: 20 @108762 has 6 MA's), (36, 108918), (39, 108945), (53, 109020), (59, 109056), (73, 109131), (74, 109134), (98, 109350), (105, 109425), (108, 109440), (111, 109470), (122, 109566), (129, 109620), (135, 109674),

Gene: Bonray\_201 Start: 106885, Stop: 107928, Start Num: 10

Candidate Starts for Bonray\_201:

(Start: 5 @106786 has 1 MA's), (6, 106801), (Start: 10 @106885 has 163 MA's), (Start: 20 @106972 has 6 MA's), (36, 107128), (39, 107155), (53, 107230), (59, 107266), (73, 107341), (74, 107344), (98, 107560), (105, 107635), (108, 107650), (111, 107680), (122, 107776), (129, 107830), (135, 107884),

Gene: Bread\_194 Start: 104883, Stop: 105926, Start Num: 10

Candidate Starts for Bread\_194:

(Start: 5 @104784 has 1 MA's), (6, 104799), (Start: 10 @104883 has 163 MA's), (Start: 20 @104970 has 6 MA's), (36, 105126), (39, 105153), (53, 105228), (59, 105264), (73, 105339), (74, 105342), (98, 105558), (105, 105633), (108, 105648), (111, 105678), (122, 105774), (129, 105828), (135, 105882),

Gene: Breeniome\_197 Start: 104028, Stop: 105071, Start Num: 10

Candidate Starts for Breeniome\_197:

(Start: 5 @103929 has 1 MA's), (6, 103944), (Start: 10 @104028 has 163 MA's), (Start: 20 @104115 has 6 MA's), (36, 104271), (39, 104298), (53, 104373), (59, 104409), (73, 104484), (74, 104487), (98, 104703), (105, 104778), (108, 104793), (111, 104823), (122, 104919), (129, 104973), (135, 105027),

Gene: Burrough\_200 Start: 106344, Stop: 107387, Start Num: 10

Candidate Starts for Burrough\_200:

(Start: 5 @106245 has 1 MA's), (6, 106260), (Start: 10 @106344 has 163 MA's), (Start: 20 @106431 has 6 MA's), (36, 106587), (39, 106614), (53, 106689), (59, 106725), (73, 106800), (74, 106803), (98, 107019), (105, 107094), (108, 107109), (111, 107139), (122, 107235), (129, 107289), (135, 107343),

Gene: Bxz1\_188 Start: 107630, Stop: 108586, Start Num: 20

Candidate Starts for Bxz1\_188:

(Start: 5 @107444 has 1 MA's), (6, 107459), (Start: 10 @107543 has 163 MA's), (Start: 20 @107630 has 6 MA's), (36, 107786), (39, 107813), (53, 107888), (59, 107924), (73, 107999), (74, 108002), (98, 108218), (105, 108293), (108, 108308), (111, 108338), (122, 108434), (129, 108488), (135, 108542),

Gene: Cactojaque\_194 Start: 104312, Stop: 105355, Start Num: 10

Candidate Starts for Cactojaque\_194:

(Start: 5 @104213 has 1 MA's), (6, 104228), (Start: 10 @104312 has 163 MA's), (Start: 20 @104399 has 6 MA's), (36, 104555), (39, 104582), (53, 104657), (59, 104693), (73, 104768), (74, 104771), (98, 104987), (105, 105062), (108, 105077), (111, 105107), (122, 105203), (129, 105257), (135, 105311),

Gene: Cali\_192 Start: 106346, Stop: 107302, Start Num: 20

Candidate Starts for Cali\_192:

(Start: 5 @106160 has 1 MA's), (6, 106175), (Start: 10 @106259 has 163 MA's), (Start: 20 @106346 has 6 MA's), (36, 106502), (39, 106529), (53, 106604), (59, 106640), (73, 106715), (74, 106718), (98, 106934), (105, 107009), (108, 107024), (111, 107054), (122, 107150), (129, 107204), (135, 107258),

Gene: Cane17\_190 Start: 109084, Stop: 110127, Start Num: 10

Candidate Starts for Cane17\_190:

(Start: 5 @108985 has 1 MA's), (6, 109000), (Start: 10 @109084 has 163 MA's), (Start: 20 @109171 has 6 MA's), (36, 109327), (39, 109354), (53, 109429), (59, 109465), (73, 109540), (74, 109543), (98, 109759), (105, 109834), (108, 109849), (111, 109879), (122, 109975), (129, 110029), (135, 110083),

Gene: Capablanca\_203 Start: 107480, Stop: 108523, Start Num: 10

Candidate Starts for Capablanca\_203:

(Start: 5 @107381 has 1 MA's), (6, 107396), (Start: 10 @107480 has 163 MA's), (Start: 20 @107567 has 6 MA's), (36, 107723), (39, 107750), (53, 107825), (59, 107861), (73, 107936), (74, 107939), (98, 108155), (105, 108230), (108, 108245), (111, 108275), (122, 108371), (129, 108425), (135, 108479),

Gene: Caravan\_189 Start: 105291, Stop: 106334, Start Num: 10

Candidate Starts for Caravan\_189:

(6, 105207), (Start: 10 @105291 has 163 MA's), (Start: 20 @105378 has 6 MA's), (36, 105534), (39, 105561), (53, 105636), (59, 105672), (73, 105747), (74, 105750), (98, 105966), (105, 106041), (108, 106056), (111, 106086), (122, 106182), (129, 106236), (135, 106290),

Gene: Catera\_192 Start: 104080, Stop: 105036, Start Num: 20

Candidate Starts for Catera\_192:

(Start: 5 @103894 has 1 MA's), (6, 103909), (Start: 10 @103993 has 163 MA's), (Start: 20 @104080 has 6 MA's), (36, 104236), (39, 104263), (53, 104338), (59, 104374), (73, 104449), (74, 104452), (98, 104668), (105, 104743), (108, 104758), (111, 104788), (122, 104884), (129, 104938), (135, 104992),

Gene: Chargie21\_196 Start: 104292, Stop: 105335, Start Num: 10

Candidate Starts for Chargie21\_196:

(Start: 5 @104193 has 1 MA's), (6, 104208), (Start: 10 @104292 has 163 MA's), (Start: 20 @104379 has 6 MA's), (36, 104535), (39, 104562), (53, 104637), (59, 104673), (73, 104748), (74, 104751), (98, 104967), (105, 105042), (108, 105057), (111, 105087), (122, 105183), (129, 105237), (135, 105291),

Gene: CharlieB\_192 Start: 104711, Stop: 105754, Start Num: 10

Candidate Starts for CharlieB\_192:

(Start: 5 @104612 has 1 MA's), (6, 104627), (Start: 10 @104711 has 163 MA's), (Start: 20 @104798 has 6 MA's), (36, 104954), (39, 104981), (53, 105056), (59, 105092), (73, 105167), (74, 105170), (98, 105386), (105, 105461), (108, 105476), (111, 105506), (122, 105602), (129, 105656), (135, 105710),

Gene: ChaylaJr\_196 Start: 104720, Stop: 105763, Start Num: 10

Candidate Starts for ChaylaJr\_196:

(Start: 5 @104621 has 1 MA's), (6, 104636), (Start: 10 @104720 has 163 MA's), (Start: 20 @104807 has 6 MA's), (36, 104963), (39, 104990), (53, 105065), (59, 105101), (73, 105176), (74, 105179), (98, 105395), (105, 105470), (108, 105485), (111, 105515), (122, 105611), (129, 105665), (135, 105719),

Gene: CherryTomatoes\_145 Start: 99224, Stop: 100399, Start Num: 12

Candidate Starts for CherryTomatoes\_145:

(1, 98900), (2, 99104), (7, 99143), (Start: 12 @99224 has 4 MA's), (32, 99404), (35, 99443), (43, 99509), (48, 99563), (67, 99719), (70, 99758), (79, 99848), (91, 99980), (92, 99983), (93, 100001), (99, 100043), (114, 100193), (118, 100208), (119, 100211), (130, 100301), (136, 100355),

Gene: ChickenPhender\_195 Start: 104439, Stop: 105482, Start Num: 10

Candidate Starts for ChickenPhender\_195:

(Start: 5 @104340 has 1 MA's), (6, 104355), (Start: 10 @104439 has 163 MA's), (Start: 20 @104526 has 6 MA's), (36, 104682), (39, 104709), (53, 104784), (59, 104820), (73, 104895), (74, 104898), (98, 105114), (105, 105189), (108, 105204), (111, 105234), (122, 105330), (129, 105384), (135, 105438),

Gene: Chomp\_198 Start: 105760, Stop: 106803, Start Num: 10

Candidate Starts for Chomp\_198:

(Start: 5 @105661 has 1 MA's), (6, 105676), (Start: 10 @105760 has 163 MA's), (Start: 20 @105847 has 6 MA's), (36, 106003), (39, 106030), (53, 106105), (59, 106141), (73, 106216), (74, 106219), (98, 106435), (105, 106510), (108, 106525), (111, 106555), (122, 106651), (129, 106705), (135, 106759),

Gene: CindyLou\_199 Start: 106020, Stop: 107063, Start Num: 10

Candidate Starts for CindyLou\_199:

(Start: 5 @105921 has 1 MA's), (6, 105936), (Start: 10 @106020 has 163 MA's), (Start: 20 @106107 has 6 MA's), (36, 106263), (39, 106290), (53, 106365), (59, 106401), (73, 106476), (74, 106479), (98, 106695), (105, 106770), (108, 106785), (111, 106815), (122, 106911), (129, 106965), (135, 107019),

Gene: Colt\_190 Start: 108315, Stop: 109358, Start Num: 10

Candidate Starts for Colt\_190:

(Start: 5 @108216 has 1 MA's), (6, 108231), (Start: 10 @108315 has 163 MA's), (Start: 20 @108402 has 6 MA's), (36, 108558), (39, 108585), (53, 108660), (59, 108696), (73, 108771), (74, 108774), (98, 108990), (105, 109065), (108, 109080), (111, 109110), (122, 109206), (129, 109260), (135, 109314),

Gene: Concombre\_203 Start: 107623, Stop: 108666, Start Num: 10

Candidate Starts for Concombre\_203:

(Start: 5 @107524 has 1 MA's), (6, 107539), (Start: 10 @107623 has 163 MA's), (Start: 20 @107710 has 6 MA's), (36, 107866), (39, 107893), (53, 107968), (59, 108004), (73, 108079), (74, 108082), (98, 108298), (105, 108373), (108, 108388), (111, 108418), (122, 108514), (129, 108568), (135, 108622),

Gene: DTDevon\_200 Start: 106509, Stop: 107552, Start Num: 10

Candidate Starts for DTDevon\_200:

(Start: 5 @106410 has 1 MA's), (6, 106425), (Start: 10 @106509 has 163 MA's), (Start: 20 @106596 has 6 MA's), (36, 106752), (39, 106779), (53, 106854), (59, 106890), (73, 106965), (74, 106968), (98, 107184), (105, 107259), (108, 107274), (111, 107304), (122, 107400), (129, 107454), (135, 107508),

Gene: Daffodil\_203 Start: 105783, Stop: 106826, Start Num: 10

Candidate Starts for Daffodil\_203:

(Start: 5 @105684 has 1 MA's), (6, 105699), (Start: 10 @105783 has 163 MA's), (Start: 20 @105870 has 6 MA's), (36, 106026), (39, 106053), (53, 106128), (59, 106164), (73, 106239), (74, 106242), (98, 106458), (105, 106533), (108, 106548), (111, 106578), (122, 106674), (129, 106728), (135, 106782),

Gene: Dandelion\_206 Start: 109416, Stop: 110459, Start Num: 10

Candidate Starts for Dandelion\_206:

(Start: 5 @109317 has 1 MA's), (6, 109332), (Start: 10 @109416 has 163 MA's), (Start: 20 @109503 has 6 MA's), (36, 109659), (39, 109686), (53, 109761), (59, 109797), (73, 109872), (74, 109875), (98, 110091), (105, 110166), (108, 110181), (111, 110211), (122, 110307), (129, 110361), (135, 110415),

Gene: Darko\_197 Start: 104710, Stop: 105753, Start Num: 10

Candidate Starts for Darko\_197:

(Start: 5 @104611 has 1 MA's), (6, 104626), (Start: 10 @104710 has 163 MA's), (Start: 20 @104797 has 6 MA's), (36, 104953), (39, 104980), (53, 105055), (59, 105091), (73, 105166), (74, 105169), (98, 105385), (105, 105460), (108, 105475), (111, 105505), (122, 105601), (129, 105655), (135, 105709),

Gene: Delilah\_197 Start: 105901, Stop: 106944, Start Num: 10

Candidate Starts for Delilah\_197:

(Start: 5 @105802 has 1 MA's), (6, 105817), (Start: 10 @105901 has 163 MA's), (Start: 20 @105988 has 6 MA's), (36, 106144), (39, 106171), (53, 106246), (59, 106282), (73, 106357), (74, 106360), (98, 106576), (105, 106651), (108, 106666), (111, 106696), (122, 106792), (129, 106846), (135, 106900),

Gene: Delylah\_200 Start: 105881, Stop: 106924, Start Num: 10

Candidate Starts for Delylah\_200:

(Start: 5 @105782 has 1 MA's), (6, 105797), (Start: 10 @105881 has 163 MA's), (Start: 20 @105968 has 6 MA's), (36, 106124), (39, 106151), (53, 106226), (59, 106262), (73, 106337), (74, 106340), (98, 106556), (105, 106631), (108, 106646), (111, 106676), (122, 106772), (129, 106826), (135, 106880),

Gene: Demodog\_204 Start: 107633, Stop: 108676, Start Num: 10

Candidate Starts for Demodog\_204:

(Start: 5 @107534 has 1 MA's), (6, 107549), (Start: 10 @107633 has 163 MA's), (Start: 20 @107720 has 6 MA's), (36, 107876), (39, 107903), (53, 107978), (59, 108014), (73, 108089), (74, 108092), (98, 108308), (105, 108383), (108, 108398), (111, 108428), (122, 108524), (129, 108578), (135, 108632),

Gene: Derek\_195 Start: 105037, Stop: 106080, Start Num: 10

Candidate Starts for Derek\_195:

(Start: 5 @104938 has 1 MA's), (6, 104953), (Start: 10 @105037 has 163 MA's), (Start: 20 @105124 has 6 MA's), (36, 105280), (39, 105307), (53, 105382), (59, 105418), (73, 105493), (74, 105496), (98, 105712), (105, 105787), (108, 105802), (111, 105832), (122, 105928), (129, 105982), (135, 106036),

Gene: Dietrick\_188 Start: 104022, Stop: 105065, Start Num: 10

Candidate Starts for Dietrick\_188:

(Start: 5 @103923 has 1 MA's), (6, 103938), (Start: 10 @104022 has 163 MA's), (Start: 20 @104109 has 6 MA's), (36, 104265), (39, 104292), (53, 104367), (59, 104403), (73, 104478), (74, 104481), (98, 104697), (105, 104772), (108, 104787), (111, 104817), (122, 104913), (129, 104967), (135, 105021),

Gene: DirtMonster\_192 Start: 105262, Stop: 106305, Start Num: 10

Candidate Starts for DirtMonster\_192:

(4, 105154), (Start: 5 @105163 has 1 MA's), (6, 105178), (Start: 10 @105262 has 163 MA's), (Start: 20 @105349 has 6 MA's), (36, 105505), (39, 105532), (53, 105607), (59, 105643), (73, 105718), (74, 105721), (98, 105937), (105, 106012), (108, 106027), (111, 106057), (122, 106153), (129, 106207), (135, 106261),

Gene: Domi\_192 Start: 105064, Stop: 106107, Start Num: 10

Candidate Starts for Domi\_192:

(Start: 5 @104965 has 1 MA's), (6, 104980), (Start: 10 @105064 has 163 MA's), (Start: 20 @105151 has 6 MA's), (36, 105307), (39, 105334), (53, 105409), (59, 105445), (73, 105520), (74, 105523), (98, 105739), (105, 105814), (108, 105829), (111, 105859), (122, 105955), (129, 106009), (135, 106063),

Gene: DrPhinkDaddy\_196 Start: 106561, Stop: 107604, Start Num: 10

Candidate Starts for DrPhinkDaddy\_196:

(Start: 5 @106462 has 1 MA's), (6, 106477), (Start: 10 @106561 has 163 MA's), (Start: 20 @106648 has 6 MA's), (36, 106804), (39, 106831), (53, 106906), (59, 106942), (73, 107017), (74, 107020), (98, 107236), (105, 107311), (108, 107326), (111, 107356), (122, 107452), (129, 107506), (135, 107560),

Gene: Drazdys\_196 Start: 105154, Stop: 106197, Start Num: 10

Candidate Starts for Drazdys\_196:

(Start: 5 @105055 has 1 MA's), (6, 105070), (Start: 10 @105154 has 163 MA's), (Start: 20 @105241 has 6 MA's), (36, 105397), (39, 105424), (53, 105499), (59, 105535), (73, 105610), (74, 105613), (98, 105829), (105, 105904), (108, 105919), (111, 105949), (122, 106045), (129, 106099), (135, 106153),

Gene: ET08\_186 Start: 104745, Stop: 105788, Start Num: 10

Candidate Starts for ET08\_186:

(Start: 5 @104646 has 1 MA's), (6, 104661), (Start: 10 @104745 has 163 MA's), (Start: 20 @104832 has 6 MA's), (36, 104988), (39, 105015), (53, 105090), (59, 105126), (73, 105201), (74, 105204), (98, 105420), (105, 105495), (108, 105510), (111, 105540), (122, 105636), (129, 105690), (135, 105744),

Gene: EasyJones\_202 Start: 105535, Stop: 106578, Start Num: 10

Candidate Starts for EasyJones\_202:

(Start: 5 @105436 has 1 MA's), (6, 105451), (Start: 10 @105535 has 163 MA's), (Start: 20 @105622 has 6 MA's), (36, 105778), (39, 105805), (53, 105880), (59, 105916), (73, 105991), (74, 105994), (98, 106210), (105, 106285), (108, 106300), (111, 106330), (122, 106426), (129, 106480), (135, 106534),

Gene: EggyFarm\_207 Start: 108081, Stop: 109124, Start Num: 10

Candidate Starts for EggyFarm\_207:

(Start: 5 @107982 has 1 MA's), (6, 107997), (Start: 10 @108081 has 163 MA's), (Start: 20 @108168 has 6 MA's), (36, 108324), (39, 108351), (53, 108426), (59, 108462), (73, 108537), (74, 108540), (98, 108756), (105, 108831), (108, 108846), (111, 108876), (122, 108972), (129, 109026), (135, 109080),

Gene: EmToTheThree\_199 Start: 105934, Stop: 106977, Start Num: 10

Candidate Starts for EmToTheThree\_199:

(Start: 5 @105835 has 1 MA's), (6, 105850), (Start: 10 @105934 has 163 MA's), (Start: 20 @106021 has 6 MA's), (36, 106177), (39, 106204), (53, 106279), (59, 106315), (73, 106390), (74, 106393), (98, 106609), (105, 106684), (108, 106699), (111, 106729), (122, 106825), (129, 106879), (135, 106933),

Gene: EmmaElysia\_201 Start: 105644, Stop: 106687, Start Num: 10

Candidate Starts for EmmaElysia\_201:

(Start: 5 @105545 has 1 MA's), (6, 105560), (Start: 10 @105644 has 163 MA's), (Start: 20 @105731 has 6 MA's), (36, 105887), (39, 105914), (53, 105989), (59, 106025), (73, 106100), (74, 106103), (98, 106319), (105, 106394), (108, 106409), (111, 106439), (122, 106535), (129, 106589), (135, 106643),

Gene: Erdmann\_200 Start: 105892, Stop: 106935, Start Num: 10

Candidate Starts for Erdmann\_200:

(Start: 5 @105793 has 1 MA's), (6, 105808), (Start: 10 @105892 has 163 MA's), (Start: 20 @105979 has 6 MA's), (36, 106135), (39, 106162), (53, 106237), (59, 106273), (73, 106348), (74, 106351), (98, 106567), (105, 106642), (108, 106657), (111, 106687), (122, 106783), (129, 106837), (135, 106891),

Gene: ErnieJ\_191 Start: 103714, Stop: 104757, Start Num: 10

Candidate Starts for ErnieJ\_191:

(Start: 5 @103615 has 1 MA's), (6, 103630), (Start: 10 @103714 has 163 MA's), (Start: 20 @103801 has 6 MA's), (36, 103957), (39, 103984), (53, 104059), (59, 104095), (73, 104170), (74, 104173), (98, 104389), (105, 104464), (108, 104479), (111, 104509), (122, 104605), (129, 104659), (135, 104713),

Gene: Essence\_195 Start: 104366, Stop: 105409, Start Num: 10

Candidate Starts for Essence\_195:

(Start: 5 @104267 has 1 MA's), (6, 104282), (Start: 10 @104366 has 163 MA's), (Start: 20 @104453 has 6 MA's), (36, 104609), (39, 104636), (53, 104711), (59, 104747), (73, 104822), (74, 104825), (98, 105041), (105, 105116), (108, 105131), (111, 105161), (122, 105257), (129, 105311), (135, 105365),

Gene: Ewok\_198 Start: 105811, Stop: 106854, Start Num: 10

Candidate Starts for Ewok\_198:

(Start: 5 @105712 has 1 MA's), (6, 105727), (Start: 10 @105811 has 163 MA's), (Start: 20 @105898 has 6 MA's), (36, 106054), (39, 106081), (53, 106156), (59, 106192), (73, 106267), (74, 106270), (98, 106486), (105, 106561), (108, 106576), (111, 106606), (122, 106702), (129, 106756), (135, 106810),

Gene: Finch\_67 Start: 57570, Stop: 58805, Start Num: 5

Candidate Starts for Finch\_67:

(Start: 5 @57570 has 1 MA's), (Start: 10 @57666 has 163 MA's), (11, 57675), (18, 57744), (22, 57771), (24, 57795), (31, 57849), (38, 57936), (40, 57945), (42, 57948), (49, 58020), (50, 58026), (52, 58029), (56, 58062), (81, 58227), (82, 58236), (83, 58245), (85, 58254), (88, 58287), (91, 58329), (92, 58332), (94, 58353), (97, 58371), (102, 58434), (110, 58500), (114, 58548), (117, 58560), (118, 58563), (124, 58623), (126, 58629), (132, 58674), (133, 58677), (136, 58716),

Gene: Flabslab\_194 Start: 103856, Stop: 104899, Start Num: 10

Candidate Starts for Flabslab\_194:

(Start: 5 @103757 has 1 MA's), (6, 103772), (Start: 10 @103856 has 163 MA's), (Start: 20 @103943 has 6 MA's), (36, 104099), (39, 104126), (53, 104201), (59, 104237), (73, 104312), (74, 104315), (98, 104531), (105, 104606), (108, 104621), (111, 104651), (122, 104747), (129, 104801), (135, 104855),

Gene: Fludd\_199 Start: 105247, Stop: 106290, Start Num: 10

Candidate Starts for Fludd\_199:

(Start: 5 @105148 has 1 MA's), (6, 105163), (Start: 10 @105247 has 163 MA's), (Start: 20 @105334 has 6 MA's), (36, 105490), (39, 105517), (53, 105592), (59, 105628), (73, 105703), (74, 105706), (98, 105922), (105, 105997), (108, 106012), (111, 106042), (122, 106138), (129, 106192), (135, 106246),

Gene: FoxtrotP1\_197 Start: 106491, Stop: 107534, Start Num: 10

Candidate Starts for FoxtrotP1\_197:

(Start: 5 @106392 has 1 MA's), (6, 106407), (Start: 10 @106491 has 163 MA's), (Start: 20 @106578 has 6 MA's), (36, 106734), (39, 106761), (53, 106836), (59, 106872), (73, 106947), (74, 106950), (98, 107166), (105, 107241), (108, 107256), (111, 107286), (122, 107382), (129, 107436), (135, 107490),

Gene: FrayBell\_201 Start: 105029, Stop: 106072, Start Num: 10

Candidate Starts for FrayBell\_201:

(Start: 5 @104930 has 1 MA's), (6, 104945), (Start: 10 @105029 has 163 MA's), (Start: 20 @105116 has 6 MA's), (36, 105272), (39, 105299), (53, 105374), (73, 105485), (74, 105488), (98, 105704), (105, 105779), (108, 105794), (111, 105824), (122, 105920), (129, 105974), (135, 106028),

Gene: FudgeTart\_194 Start: 104958, Stop: 106001, Start Num: 10

Candidate Starts for FudgeTart\_194:

(Start: 5 @104859 has 1 MA's), (6, 104874), (Start: 10 @104958 has 163 MA's), (Start: 20 @105045 has 6 MA's), (36, 105201), (39, 105228), (53, 105303), (59, 105339), (73, 105414), (74, 105417), (98, 105633), (105, 105708), (108, 105723), (111, 105753), (122, 105849), (129, 105903), (135, 105957),

Gene: Gabriel\_201 Start: 104104, Stop: 105147, Start Num: 10

Candidate Starts for Gabriel\_201:

(Start: 5 @104005 has 1 MA's), (6, 104020), (Start: 10 @104104 has 163 MA's), (Start: 20 @104191 has 6 MA's), (36, 104347), (39, 104374), (53, 104449), (59, 104485), (73, 104560), (74, 104563), (98, 104779), (105, 104854), (108, 104869), (111, 104899), (122, 104995), (129, 105049), (135, 105103),

Gene: Gamgam\_199 Start: 104461, Stop: 105504, Start Num: 10

Candidate Starts for Gamgam\_199:

(Start: 5 @104362 has 1 MA's), (6, 104377), (Start: 10 @104461 has 163 MA's), (Start: 20 @104548 has 6 MA's), (36, 104704), (39, 104731), (53, 104806), (59, 104842), (73, 104917), (74, 104920), (98,

105136), (105, 105211), (108, 105226), (111, 105256), (122, 105352), (129, 105406), (135, 105460),

Gene: Ghost\_198 Start: 104691, Stop: 105734, Start Num: 10

Candidate Starts for Ghost\_198:

(Start: 5 @104592 has 1 MA's), (6, 104607), (Start: 10 @104691 has 163 MA's), (Start: 20 @104778 has 6 MA's), (36, 104934), (39, 104961), (53, 105036), (59, 105072), (73, 105147), (74, 105150), (98, 105366), (105, 105441), (108, 105456), (111, 105486), (122, 105582), (129, 105636), (135, 105690),

Gene: Gizmo\_204 Start: 107809, Stop: 108852, Start Num: 10

Candidate Starts for Gizmo\_204:

(Start: 5 @107710 has 1 MA's), (6, 107725), (Start: 10 @107809 has 163 MA's), (Start: 20 @107896 has 6 MA's), (36, 108052), (39, 108079), (53, 108154), (59, 108190), (73, 108265), (74, 108268), (98, 108484), (105, 108559), (108, 108574), (111, 108604), (122, 108700), (129, 108754), (135, 108808),

Gene: Grasshills\_206 Start: 108080, Stop: 109123, Start Num: 10

Candidate Starts for Grasshills\_206:

(Start: 5 @107981 has 1 MA's), (6, 107996), (Start: 10 @108080 has 163 MA's), (Start: 20 @108167 has 6 MA's), (36, 108323), (39, 108350), (53, 108425), (59, 108461), (73, 108536), (74, 108539), (98, 108755), (105, 108830), (108, 108845), (111, 108875), (122, 108971), (129, 109025), (135, 109079),

Gene: Greely\_188 Start: 102641, Stop: 103768, Start Num: 9

Candidate Starts for Greely\_188:

(Start: 9 @102641 has 3 MA's), (15, 102686), (16, 102689), (19, 102722), (39, 102914), (42, 102923), (54, 102992), (58, 103031), (59, 103049), (61, 103061), (70, 103118), (74, 103166), (79, 103208), (86, 103277), (89, 103298), (91, 103337), (92, 103340), (99, 103409), (100, 103433), (112, 103532), (124, 103634), (131, 103670), (138, 103736),

Gene: Grungle\_183 Start: 102728, Stop: 103771, Start Num: 10

Candidate Starts for Grungle\_183:

(Start: 5 @102629 has 1 MA's), (6, 102644), (Start: 10 @102728 has 163 MA's), (Start: 20 @102815 has 6 MA's), (36, 102971), (39, 102998), (53, 103073), (59, 103109), (73, 103184), (74, 103187), (98, 103403), (105, 103478), (108, 103493), (111, 103523), (122, 103619), (129, 103673), (135, 103727),

Gene: Guwapp\_193 Start: 103216, Stop: 104259, Start Num: 10

Candidate Starts for Guwapp\_193:

(Start: 5 @103117 has 1 MA's), (6, 103132), (Start: 10 @103216 has 163 MA's), (Start: 20 @103303 has 6 MA's), (36, 103459), (39, 103486), (53, 103561), (59, 103597), (73, 103672), (74, 103675), (98, 103891), (105, 103966), (108, 103981), (111, 104011), (122, 104107), (129, 104161), (135, 104215),

Gene: Halldule\_191 Start: 103601, Stop: 104644, Start Num: 10

Candidate Starts for Halldule\_191:

(Start: 5 @103502 has 1 MA's), (6, 103517), (Start: 10 @103601 has 163 MA's), (Start: 20 @103688 has 6 MA's), (36, 103844), (39, 103871), (53, 103946), (59, 103982), (73, 104057), (74, 104060), (98, 104276), (105, 104351), (108, 104366), (111, 104396), (122, 104492), (129, 104546), (135, 104600),

Gene: HyRo\_186 Start: 104725, Stop: 105768, Start Num: 10

Candidate Starts for HyRo\_186:

(Start: 5 @104626 has 1 MA's), (6, 104641), (Start: 10 @104725 has 163 MA's), (Start: 20 @104812 has 6 MA's), (36, 104968), (39, 104995), (53, 105070), (59, 105106), (73, 105181), (74, 105184), (98, 105400), (105, 105475), (108, 105490), (111, 105520), (122, 105616), (129, 105670), (135, 105724),

Gene: I3\_208 Start: 107461, Stop: 108504, Start Num: 10

Candidate Starts for I3\_208:

(Start: 10 @107461 has 163 MA's), (23, 107569), (36, 107704), (39, 107731), (53, 107806), (59, 107842), (73, 107917), (74, 107920), (98, 108136), (105, 108211), (108, 108226), (111, 108256), (122, 108352), (129, 108406), (135, 108460),

Gene: IkeLoa\_190 Start: 104123, Stop: 105166, Start Num: 10

Candidate Starts for IkeLoa\_190:

(Start: 5 @104024 has 1 MA's), (6, 104039), (Start: 10 @104123 has 163 MA's), (Start: 20 @104210 has 6 MA's), (36, 104366), (39, 104393), (53, 104468), (59, 104504), (73, 104579), (74, 104582), (98, 104798), (105, 104873), (108, 104888), (111, 104918), (122, 105014), (129, 105068), (135, 105122),

Gene: InigoMontoya\_201 Start: 105135, Stop: 106178, Start Num: 10

Candidate Starts for InigoMontoya\_201:

(Start: 5 @105036 has 1 MA's), (6, 105051), (Start: 10 @105135 has 163 MA's), (Start: 20 @105222 has 6 MA's), (36, 105378), (39, 105405), (53, 105480), (59, 105516), (73, 105591), (74, 105594), (98, 105810), (105, 105885), (108, 105900), (111, 105930), (122, 106026), (129, 106080), (135, 106134),

Gene: InterFolia\_201 Start: 106835, Stop: 107878, Start Num: 10

Candidate Starts for InterFolia\_201:

(Start: 5 @106736 has 1 MA's), (6, 106751), (Start: 10 @106835 has 163 MA's), (Start: 20 @106922 has 6 MA's), (36, 107078), (39, 107105), (53, 107180), (59, 107216), (73, 107291), (74, 107294), (98, 107510), (105, 107585), (108, 107600), (111, 107630), (122, 107726), (129, 107780), (135, 107834),

Gene: Iota\_193 Start: 104820, Stop: 105863, Start Num: 10

Candidate Starts for Iota\_193:

(Start: 5 @104721 has 1 MA's), (6, 104736), (Start: 10 @104820 has 163 MA's), (Start: 20 @104907 has 6 MA's), (36, 105063), (39, 105090), (53, 105165), (59, 105201), (73, 105276), (74, 105279), (98, 105495), (105, 105570), (108, 105585), (111, 105615), (122, 105711), (129, 105765), (135, 105819),

Gene: Issimir\_192 Start: 105082, Stop: 106125, Start Num: 10

Candidate Starts for Issimir\_192:

(Start: 5 @104983 has 1 MA's), (6, 104998), (Start: 10 @105082 has 163 MA's), (Start: 20 @105169 has 6 MA's), (36, 105325), (39, 105352), (53, 105427), (59, 105463), (73, 105538), (74, 105541), (98, 105757), (105, 105832), (108, 105847), (111, 105877), (122, 105973), (129, 106027), (135, 106081),

Gene: Izajani\_197 Start: 105951, Stop: 106994, Start Num: 10

Candidate Starts for Izajani\_197:

(Start: 5 @105852 has 1 MA's), (6, 105867), (Start: 10 @105951 has 163 MA's), (Start: 20 @106038 has 6 MA's), (36, 106194), (39, 106221), (53, 106296), (59, 106332), (73, 106407), (74, 106410), (98, 106626), (105, 106701), (108, 106716), (111, 106746), (122, 106842), (129, 106896), (135, 106950),

Gene: JPickles\_194 Start: 103120, Stop: 104163, Start Num: 10

Candidate Starts for JPickles\_194:

(Start: 5 @103021 has 1 MA's), (6, 103036), (Start: 10 @103120 has 163 MA's), (Start: 20 @103207 has 6 MA's), (36, 103363), (39, 103390), (53, 103465), (59, 103501), (73, 103576), (74, 103579), (98, 103795), (105, 103870), (108, 103885), (111, 103915), (122, 104011), (129, 104065), (135, 104119),

Gene: Janiyra\_202 Start: 105669, Stop: 106712, Start Num: 10

Candidate Starts for Janiyra\_202:

(Start: 5 @105570 has 1 MA's), (6, 105585), (Start: 10 @105669 has 163 MA's), (Start: 20 @105756 has 6 MA's), (36, 105912), (39, 105939), (53, 106014), (59, 106050), (73, 106125), (74, 106128), (98, 106344), (105, 106419), (108, 106434), (111, 106464), (122, 106560), (129, 106614), (135, 106668),

Gene: JayJay\_197 Start: 106366, Stop: 107409, Start Num: 10



Candidate Starts for JayJay\_197:

(4, 106258), (Start: 5 @106267 has 1 MA's), (6, 106282), (Start: 10 @106366 has 163 MA's), (Start: 20 @106453 has 6 MA's), (36, 106609), (39, 106636), (53, 106711), (59, 106747), (73, 106822), (74, 106825), (98, 107041), (105, 107116), (108, 107131), (111, 107161), (122, 107257), (129, 107311), (135, 107365),

Gene: Jaygup\_194 Start: 104181, Stop: 105224, Start Num: 10

Candidate Starts for Jaygup\_194:

(Start: 5 @104082 has 1 MA's), (6, 104097), (Start: 10 @104181 has 163 MA's), (Start: 20 @104268 has 6 MA's), (36, 104424), (39, 104451), (53, 104526), (59, 104562), (73, 104637), (74, 104640), (98, 104856), (105, 104931), (108, 104946), (111, 104976), (122, 105072), (129, 105126), (135, 105180),

Gene: JeanGrey\_85 Start: 67624, Stop: 68880, Start Num: 3

Candidate Starts for JeanGrey\_85:

(3, 67624), (14, 67771), (17, 67810), (Start: 21 @67843 has 2 MA's), (25, 67870), (30, 67900), (41, 68029), (51, 68092), (71, 68242), (79, 68323), (80, 68329), (95, 68482), (105, 68590), (115, 68683), (119, 68698), (125, 68758), (128, 68770), (137, 68857), (138, 68863),

Gene: Jedediah\_198 Start: 105234, Stop: 106277, Start Num: 10

Candidate Starts for Jedediah\_198:

(Start: 5 @105135 has 1 MA's), (6, 105150), (Start: 10 @105234 has 163 MA's), (Start: 20 @105321 has 6 MA's), (36, 105477), (39, 105504), (53, 105579), (59, 105615), (73, 105690), (74, 105693), (98, 105909), (105, 105984), (108, 105999), (111, 106029), (122, 106125), (129, 106179), (135, 106233),

Gene: Jemmno\_197 Start: 104063, Stop: 105106, Start Num: 10

Candidate Starts for Jemmno\_197:

(Start: 5 @103964 has 1 MA's), (6, 103979), (Start: 10 @104063 has 163 MA's), (Start: 20 @104150 has 6 MA's), (36, 104306), (39, 104333), (53, 104408), (59, 104444), (73, 104519), (74, 104522), (98, 104738), (105, 104813), (108, 104828), (111, 104858), (122, 104954), (129, 105008), (135, 105062),

Gene: Jessibeth14\_199 Start: 106560, Stop: 107603, Start Num: 10

Candidate Starts for Jessibeth14\_199:

(Start: 5 @106461 has 1 MA's), (6, 106476), (Start: 10 @106560 has 163 MA's), (Start: 20 @106647 has 6 MA's), (36, 106803), (39, 106830), (53, 106905), (59, 106941), (73, 107016), (74, 107019), (98, 107235), (105, 107310), (108, 107325), (111, 107355), (122, 107451), (129, 107505), (135, 107559),

Gene: JigglyPuff\_205 Start: 107631, Stop: 108674, Start Num: 10

Candidate Starts for JigglyPuff\_205:

(Start: 5 @107532 has 1 MA's), (6, 107547), (Start: 10 @107631 has 163 MA's), (Start: 20 @107718 has 6 MA's), (36, 107874), (39, 107901), (53, 107976), (59, 108012), (73, 108087), (74, 108090), (98, 108306), (105, 108381), (108, 108396), (111, 108426), (122, 108522), (129, 108576), (135, 108630),

Gene: JulietS\_191 Start: 102352, Stop: 103395, Start Num: 10

Candidate Starts for JulietS\_191:

(Start: 5 @102253 has 1 MA's), (6, 102268), (Start: 10 @102352 has 163 MA's), (Start: 20 @102439 has 6 MA's), (36, 102595), (39, 102622), (53, 102697), (59, 102733), (73, 102808), (74, 102811), (98, 103027), (105, 103102), (108, 103117), (111, 103147), (122, 103243), (129, 103297), (135, 103351),

Gene: JustHall\_193 Start: 104576, Stop: 105619, Start Num: 10

Candidate Starts for JustHall\_193:

(Start: 5 @104477 has 1 MA's), (6, 104492), (Start: 10 @104576 has 163 MA's), (Start: 20 @104663 has 6 MA's), (36, 104819), (39, 104846), (53, 104921), (59, 104957), (73, 105032), (74, 105035), (98, 105251), (105, 105326), (108, 105341), (111, 105371), (122, 105467), (129, 105521), (135, 105575),

Gene: Kamryn\_197 Start: 105897, Stop: 106940, Start Num: 10

Candidate Starts for Kamryn\_197:

(Start: 5 @105798 has 1 MA's), (6, 105813), (Start: 10 @105897 has 163 MA's), (Start: 20 @105984 has 6 MA's), (36, 106140), (39, 106167), (53, 106242), (59, 106278), (73, 106353), (74, 106356), (98, 106572), (105, 106647), (108, 106662), (111, 106692), (122, 106788), (129, 106842), (135, 106896),

Gene: Kboogie\_202 Start: 105234, Stop: 106277, Start Num: 10

Candidate Starts for Kboogie\_202:

(Start: 5 @105135 has 1 MA's), (6, 105150), (Start: 10 @105234 has 163 MA's), (Start: 20 @105321 has 6 MA's), (36, 105477), (39, 105504), (53, 105579), (59, 105615), (73, 105690), (74, 105693), (98, 105909), (105, 105984), (108, 105999), (111, 106029), (122, 106125), (129, 106179), (135, 106233),

Gene: Khaleesi\_198 Start: 106027, Stop: 107070, Start Num: 10

Candidate Starts for Khaleesi\_198:

(Start: 5 @105928 has 1 MA's), (6, 105943), (Start: 10 @106027 has 163 MA's), (Start: 20 @106114 has 6 MA's), (36, 106270), (39, 106297), (53, 106372), (59, 106408), (73, 106483), (74, 106486), (98, 106702), (105, 106777), (108, 106792), (111, 106822), (122, 106918), (129, 106972), (135, 107026),

Gene: Koguma\_197 Start: 104578, Stop: 105621, Start Num: 10

Candidate Starts for Koguma\_197:

(Start: 5 @104479 has 1 MA's), (6, 104494), (Start: 10 @104578 has 163 MA's), (Start: 20 @104665 has 6 MA's), (36, 104821), (39, 104848), (53, 104923), (59, 104959), (73, 105034), (74, 105037), (98, 105253), (105, 105328), (108, 105343), (111, 105373), (122, 105469), (129, 105523), (135, 105577),

Gene: LRRHood\_191 Start: 104923, Stop: 105966, Start Num: 10

Candidate Starts for LRRHood\_191:

(Start: 5 @104824 has 1 MA's), (6, 104839), (Start: 10 @104923 has 163 MA's), (Start: 20 @105010 has 6 MA's), (36, 105166), (39, 105193), (53, 105268), (59, 105304), (73, 105379), (74, 105382), (98, 105598), (105, 105673), (108, 105688), (111, 105718), (122, 105814), (129, 105868), (135, 105922),

Gene: Latch\_198 Start: 104471, Stop: 105514, Start Num: 10

Candidate Starts for Latch\_198:

(Start: 5 @104372 has 1 MA's), (6, 104387), (Start: 10 @104471 has 163 MA's), (Start: 20 @104558 has 6 MA's), (36, 104714), (39, 104741), (53, 104816), (59, 104852), (73, 104927), (74, 104930), (98, 105146), (105, 105221), (108, 105236), (111, 105266), (122, 105362), (129, 105416), (135, 105470),

Gene: Lee7\_199 Start: 107407, Stop: 108450, Start Num: 10

Candidate Starts for Lee7\_199:

(Start: 5 @107308 has 1 MA's), (6, 107323), (Start: 10 @107407 has 163 MA's), (Start: 20 @107494 has 6 MA's), (36, 107650), (39, 107677), (53, 107752), (59, 107788), (73, 107863), (74, 107866), (98, 108082), (105, 108157), (108, 108172), (111, 108202), (122, 108298), (129, 108352), (135, 108406),

Gene: LifeSavor\_197 Start: 104996, Stop: 106039, Start Num: 10

Candidate Starts for LifeSavor\_197:

(Start: 5 @104897 has 1 MA's), (6, 104912), (Start: 10 @104996 has 163 MA's), (Start: 20 @105083 has 6 MA's), (36, 105239), (39, 105266), (53, 105341), (59, 105377), (73, 105452), (74, 105455), (98, 105671), (105, 105746), (108, 105761), (111, 105791), (122, 105887), (129, 105941), (135, 105995),

Gene: LinStu\_197 Start: 105519, Stop: 106562, Start Num: 10

Candidate Starts for LinStu\_197:

(Start: 5 @105420 has 1 MA's), (6, 105435), (Start: 10 @105519 has 163 MA's), (Start: 20 @105606 has 6 MA's), (36, 105762), (39, 105789), (53, 105864), (59, 105900), (73, 105975), (74, 105978), (98,

106194), (105, 106269), (108, 106284), (111, 106314), (122, 106410), (129, 106464), (135, 106518),

Gene: Littleton\_201 Start: 105708, Stop: 106751, Start Num: 10

Candidate Starts for Littleton\_201:

(Start: 5 @105609 has 1 MA's), (6, 105624), (Start: 10 @105708 has 163 MA's), (Start: 20 @105795 has 6 MA's), (36, 105951), (39, 105978), (53, 106053), (59, 106089), (73, 106164), (74, 106167), (98, 106383), (105, 106458), (108, 106473), (111, 106503), (122, 106599), (129, 106653), (135, 106707),

Gene: Loanshark\_196 Start: 105342, Stop: 106385, Start Num: 10

Candidate Starts for Loanshark\_196:

(Start: 5 @105243 has 1 MA's), (6, 105258), (Start: 10 @105342 has 163 MA's), (Start: 20 @105429 has 6 MA's), (36, 105585), (39, 105612), (53, 105687), (59, 105723), (73, 105798), (74, 105801), (98, 106017), (105, 106092), (108, 106107), (111, 106137), (122, 106233), (129, 106287), (135, 106341),

Gene: LolaVinca\_196 Start: 106265, Stop: 107308, Start Num: 10

Candidate Starts for LolaVinca\_196:

(Start: 5 @106166 has 1 MA's), (6, 106181), (Start: 10 @106265 has 163 MA's), (Start: 20 @106352 has 6 MA's), (36, 106508), (39, 106535), (53, 106610), (59, 106646), (73, 106721), (74, 106724), (98, 106940), (105, 107015), (108, 107030), (111, 107060), (122, 107156), (129, 107210), (135, 107264),

Gene: LordLeafolot\_200 Start: 105877, Stop: 106920, Start Num: 10

Candidate Starts for LordLeafolot\_200:

(Start: 5 @105778 has 1 MA's), (6, 105793), (Start: 10 @105877 has 163 MA's), (Start: 20 @105964 has 6 MA's), (36, 106120), (39, 106147), (53, 106222), (59, 106258), (73, 106333), (74, 106336), (98, 106552), (105, 106627), (108, 106642), (111, 106672), (122, 106768), (129, 106822), (135, 106876),

Gene: Lukilu\_189 Start: 105933, Stop: 106976, Start Num: 10

Candidate Starts for Lukilu\_189:

(Start: 5 @105834 has 1 MA's), (6, 105849), (Start: 10 @105933 has 163 MA's), (Start: 20 @106020 has 6 MA's), (36, 106176), (39, 106203), (53, 106278), (59, 106314), (73, 106389), (74, 106392), (98, 106608), (105, 106683), (108, 106698), (111, 106728), (122, 106824), (129, 106878), (135, 106932),

Gene: Maby2021\_198 Start: 106471, Stop: 107514, Start Num: 10

Candidate Starts for Maby2021\_198:

(Start: 5 @106372 has 1 MA's), (6, 106387), (Start: 10 @106471 has 163 MA's), (Start: 20 @106558 has 6 MA's), (36, 106714), (39, 106741), (53, 106816), (59, 106852), (73, 106927), (74, 106930), (98, 107146), (105, 107221), (108, 107236), (111, 107266), (122, 107362), (129, 107416), (135, 107470),

Gene: Mangeria\_199 Start: 106264, Stop: 107307, Start Num: 10

Candidate Starts for Mangeria\_199:

(Start: 5 @106165 has 1 MA's), (6, 106180), (Start: 10 @106264 has 163 MA's), (Start: 20 @106351 has 6 MA's), (36, 106507), (39, 106534), (53, 106609), (59, 106645), (73, 106720), (74, 106723), (98, 106939), (105, 107014), (108, 107029), (111, 107059), (113, 107080), (122, 107155), (129, 107209), (135, 107263),

Gene: Matsumoto\_198 Start: 105222, Stop: 106265, Start Num: 10

Candidate Starts for Matsumoto\_198:

(Start: 5 @105123 has 1 MA's), (6, 105138), (Start: 10 @105222 has 163 MA's), (Start: 20 @105309 has 6 MA's), (36, 105465), (39, 105492), (53, 105567), (59, 105603), (73, 105678), (74, 105681), (98, 105897), (105, 105972), (108, 105987), (111, 106017), (122, 106113), (129, 106167), (135, 106221),

Gene: McGee\_198 Start: 104416, Stop: 105459, Start Num: 10

Candidate Starts for McGee\_198:

(Start: 5 @104317 has 1 MA's), (6, 104332), (Start: 10 @104416 has 163 MA's), (Start: 20 @104503 has 6 MA's), (36, 104659), (39, 104686), (53, 104761), (59, 104797), (73, 104872), (74, 104875), (98, 105091), (105, 105166), (108, 105181), (111, 105211), (122, 105307), (129, 105361), (135, 105415),

Gene: McWolfish\_196 Start: 105238, Stop: 106281, Start Num: 10

Candidate Starts for McWolfish\_196:

(Start: 5 @105139 has 1 MA's), (6, 105154), (Start: 10 @105238 has 163 MA's), (Start: 20 @105325 has 6 MA's), (36, 105481), (39, 105508), (53, 105583), (59, 105619), (73, 105694), (74, 105697), (98, 105913), (105, 105988), (108, 106003), (111, 106033), (122, 106129), (129, 106183), (135, 106237),

Gene: Megamind\_196 Start: 105529, Stop: 106572, Start Num: 10

Candidate Starts for Megamind\_196:

(Start: 5 @105430 has 1 MA's), (6, 105445), (Start: 10 @105529 has 163 MA's), (Start: 20 @105616 has 6 MA's), (36, 105772), (39, 105799), (53, 105874), (59, 105910), (73, 105985), (74, 105988), (98, 106204), (105, 106279), (108, 106294), (111, 106324), (122, 106420), (129, 106474), (135, 106528),

Gene: Melpomini\_193 Start: 104005, Stop: 105048, Start Num: 10

Candidate Starts for Melpomini\_193:

(Start: 5 @103906 has 1 MA's), (6, 103921), (Start: 10 @104005 has 163 MA's), (Start: 20 @104092 has 6 MA's), (36, 104248), (39, 104275), (53, 104350), (59, 104386), (73, 104461), (74, 104464), (98, 104680), (105, 104755), (108, 104770), (111, 104800), (122, 104896), (129, 104950), (135, 105004),

Gene: MikeLiesIn\_200 Start: 106665, Stop: 107708, Start Num: 10

Candidate Starts for MikeLiesIn\_200:

(Start: 5 @106566 has 1 MA's), (6, 106581), (Start: 10 @106665 has 163 MA's), (Start: 20 @106752 has 6 MA's), (36, 106908), (39, 106935), (53, 107010), (59, 107046), (73, 107121), (74, 107124), (98, 107340), (105, 107415), (108, 107430), (111, 107460), (122, 107556), (129, 107610), (135, 107664),

Gene: Mikro\_194 Start: 106905, Stop: 107948, Start Num: 10

Candidate Starts for Mikro\_194:

(Start: 5 @106806 has 1 MA's), (6, 106821), (Start: 10 @106905 has 163 MA's), (Start: 20 @106992 has 6 MA's), (36, 107148), (39, 107175), (53, 107250), (59, 107286), (73, 107361), (74, 107364), (98, 107580), (105, 107655), (108, 107670), (111, 107700), (122, 107796), (129, 107850), (135, 107904),

Gene: MoMoMixon\_196 Start: 105395, Stop: 106438, Start Num: 10

Candidate Starts for MoMoMixon\_196:

(6, 105311), (Start: 10 @105395 has 163 MA's), (Start: 20 @105482 has 6 MA's), (36, 105638), (39, 105665), (53, 105740), (59, 105776), (73, 105851), (74, 105854), (98, 106070), (105, 106145), (108, 106160), (111, 106190), (122, 106286), (129, 106340), (135, 106394),

Gene: Momo\_199 Start: 104471, Stop: 105514, Start Num: 10

Candidate Starts for Momo\_199:

(Start: 5 @104372 has 1 MA's), (6, 104387), (Start: 10 @104471 has 163 MA's), (Start: 20 @104558 has 6 MA's), (36, 104714), (39, 104741), (53, 104816), (59, 104852), (73, 104927), (74, 104930), (98, 105146), (105, 105221), (108, 105236), (111, 105266), (122, 105362), (129, 105416), (135, 105470),

Gene: Morizzled23\_196 Start: 104147, Stop: 105190, Start Num: 10

Candidate Starts for Morizzled23\_196:

(Start: 5 @104048 has 1 MA's), (6, 104063), (Start: 10 @104147 has 163 MA's), (Start: 20 @104234 has 6 MA's), (36, 104390), (39, 104417), (53, 104492), (59, 104528), (73, 104603), (74, 104606), (98, 104822), (105, 104897), (108, 104912), (111, 104942), (122, 105038), (129, 105092), (135, 105146),

Gene: Myrna\_183 Start: 102308, Stop: 103435, Start Num: 9

Candidate Starts for Myrna\_183:

(Start: 9 @102308 has 3 MA's), (15, 102353), (16, 102356), (19, 102389), (Start: 20 @102398 has 6 MA's), (27, 102443), (39, 102581), (42, 102590), (57, 102692), (58, 102698), (61, 102728), (68, 102761), (70, 102785), (74, 102833), (78, 102872), (79, 102875), (80, 102881), (84, 102920), (89, 102965), (91, 103004), (92, 103007), (99, 103076), (100, 103100), (104, 103127), (124, 103301), (131, 103337),

Gene: Naija\_199 Start: 105174, Stop: 106217, Start Num: 10

Candidate Starts for Naija\_199:

(Start: 5 @105075 has 1 MA's), (6, 105090), (Start: 10 @105174 has 163 MA's), (Start: 20 @105261 has 6 MA's), (36, 105417), (39, 105444), (53, 105519), (59, 105555), (73, 105630), (74, 105633), (98, 105849), (105, 105924), (108, 105939), (111, 105969), (122, 106065), (129, 106119), (135, 106173),

Gene: Napoleon13\_196 Start: 104511, Stop: 105554, Start Num: 10

Candidate Starts for Napoleon13\_196:

(Start: 5 @104412 has 1 MA's), (6, 104427), (Start: 10 @104511 has 163 MA's), (Start: 20 @104598 has 6 MA's), (36, 104754), (39, 104781), (53, 104856), (59, 104892), (73, 104967), (74, 104970), (98, 105186), (105, 105261), (108, 105276), (111, 105306), (122, 105402), (129, 105456), (135, 105510),

Gene: Nappy\_199 Start: 106867, Stop: 107910, Start Num: 10

Candidate Starts for Nappy\_199:

(Start: 5 @106768 has 1 MA's), (6, 106783), (Start: 10 @106867 has 163 MA's), (Start: 20 @106954 has 6 MA's), (36, 107110), (39, 107137), (53, 107212), (59, 107248), (73, 107323), (74, 107326), (98, 107542), (105, 107617), (108, 107632), (111, 107662), (122, 107758), (129, 107812), (135, 107866),

Gene: Naval22\_204 Start: 107260, Stop: 108303, Start Num: 10

Candidate Starts for Naval22\_204:

(Start: 5 @107161 has 1 MA's), (6, 107176), (Start: 10 @107260 has 163 MA's), (Start: 20 @107347 has 6 MA's), (36, 107503), (39, 107530), (53, 107605), (59, 107641), (73, 107716), (74, 107719), (98, 107935), (105, 108010), (108, 108025), (111, 108055), (122, 108151), (129, 108205), (135, 108259),

Gene: NedWong\_198 Start: 105916, Stop: 106959, Start Num: 10

Candidate Starts for NedWong\_198:

(Start: 5 @105817 has 1 MA's), (6, 105832), (Start: 10 @105916 has 163 MA's), (Start: 20 @106003 has 6 MA's), (36, 106159), (39, 106186), (53, 106261), (59, 106297), (73, 106372), (74, 106375), (98, 106591), (105, 106666), (108, 106681), (111, 106711), (122, 106807), (129, 106861), (135, 106915),

Gene: Ngannou\_195 Start: 103453, Stop: 104496, Start Num: 10

Candidate Starts for Ngannou\_195:

(Start: 5 @103354 has 1 MA's), (6, 103369), (Start: 10 @103453 has 163 MA's), (Start: 20 @103540 has 6 MA's), (36, 103696), (39, 103723), (53, 103798), (59, 103834), (73, 103909), (74, 103912), (98, 104128), (105, 104203), (108, 104218), (111, 104248), (122, 104344), (129, 104398), (135, 104452),

Gene: Nidhogg\_200 Start: 106309, Stop: 107352, Start Num: 10

Candidate Starts for Nidhogg\_200:

(Start: 5 @106210 has 1 MA's), (6, 106225), (Start: 10 @106309 has 163 MA's), (Start: 20 @106396 has 6 MA's), (36, 106552), (39, 106579), (53, 106654), (59, 106690), (73, 106765), (74, 106768), (98, 106984), (105, 107059), (108, 107074), (111, 107104), (122, 107200), (129, 107254), (135, 107308),

Gene: NoodleTree\_205 Start: 106216, Stop: 107259, Start Num: 10

Candidate Starts for NoodleTree\_205:

(Start: 5 @106117 has 1 MA's), (6, 106132), (Start: 10 @106216 has 163 MA's), (Start: 20 @106303 has 6 MA's), (36, 106459), (39, 106486), (53, 106561), (59, 106597), (73, 106672), (74, 106675), (98,

106891), (105, 106966), (108, 106981), (111, 107011), (122, 107107), (129, 107161), (135, 107215),

Gene: Norm\_198 Start: 105909, Stop: 106952, Start Num: 10

Candidate Starts for Norm\_198:

(Start: 5 @105810 has 1 MA's), (6, 105825), (Start: 10 @105909 has 163 MA's), (Start: 20 @105996 has 6 MA's), (36, 106152), (39, 106179), (53, 106254), (59, 106290), (73, 106365), (74, 106368), (98, 106584), (105, 106659), (108, 106674), (111, 106704), (122, 106800), (129, 106854), (135, 106908),

Gene: NuevoMundo\_201 Start: 107461, Stop: 108504, Start Num: 10

Candidate Starts for NuevoMundo\_201:

(Start: 5 @107362 has 1 MA's), (6, 107377), (Start: 10 @107461 has 163 MA's), (Start: 20 @107548 has 6 MA's), (36, 107704), (39, 107731), (53, 107806), (59, 107842), (73, 107917), (74, 107920), (98, 108136), (105, 108211), (108, 108226), (111, 108256), (122, 108352), (129, 108406), (135, 108460),

Gene: ParkTD\_197 Start: 105780, Stop: 106823, Start Num: 10

Candidate Starts for ParkTD\_197:

(Start: 5 @105681 has 1 MA's), (6, 105696), (Start: 10 @105780 has 163 MA's), (Start: 20 @105867 has 6 MA's), (36, 106023), (39, 106050), (53, 106125), (59, 106161), (73, 106236), (74, 106239), (98, 106455), (105, 106530), (108, 106545), (111, 106575), (122, 106671), (129, 106725), (135, 106779),

Gene: Patter\_199 Start: 104485, Stop: 105528, Start Num: 10

Candidate Starts for Patter\_199:

(Start: 5 @104386 has 1 MA's), (6, 104401), (Start: 10 @104485 has 163 MA's), (Start: 20 @104572 has 6 MA's), (36, 104728), (39, 104755), (53, 104830), (59, 104866), (73, 104941), (74, 104944), (98, 105160), (105, 105235), (108, 105250), (111, 105280), (122, 105376), (129, 105430), (135, 105484),

Gene: Phabba\_193 Start: 102216, Stop: 103343, Start Num: 9

Candidate Starts for Phabba\_193:

(Start: 9 @102216 has 3 MA's), (15, 102261), (16, 102264), (19, 102297), (33, 102426), (39, 102489), (42, 102498), (54, 102567), (58, 102606), (59, 102624), (61, 102636), (70, 102693), (74, 102741), (79, 102783), (86, 102852), (89, 102873), (91, 102912), (92, 102915), (99, 102984), (100, 103008), (124, 103209), (131, 103245),

Gene: Phlegm\_202 Start: 105174, Stop: 106217, Start Num: 10

Candidate Starts for Phlegm\_202:

(Start: 5 @105075 has 1 MA's), (6, 105090), (Start: 10 @105174 has 163 MA's), (Start: 20 @105261 has 6 MA's), (36, 105417), (39, 105444), (53, 105519), (59, 105555), (73, 105630), (74, 105633), (98, 105849), (105, 105924), (108, 105939), (111, 105969), (122, 106065), (129, 106119), (135, 106173),

Gene: Phox\_199 Start: 106129, Stop: 107172, Start Num: 10

Candidate Starts for Phox\_199:

(Start: 5 @106030 has 1 MA's), (6, 106045), (Start: 10 @106129 has 163 MA's), (Start: 20 @106216 has 6 MA's), (36, 106372), (39, 106399), (53, 106474), (59, 106510), (73, 106585), (74, 106588), (98, 106804), (105, 106879), (108, 106894), (111, 106924), (122, 107020), (129, 107074), (135, 107128),

Gene: Phrappuccino\_106 Start: 78400, Stop: 79317, Start Num: 21

Candidate Starts for Phrappuccino\_106:

(Start: 21 @78400 has 2 MA's), (29, 78451), (34, 78511), (36, 78535), (64, 78685), (72, 78742), (76, 78784), (84, 78838), (87, 78868), (92, 78919), (98, 78961), (101, 79003), (105, 79036), (106, 79045), (109, 79057), (116, 79138), (127, 79213), (132, 79246), (133, 79249), (134, 79267), (137, 79297),

Gene: Phusco\_197 Start: 104315, Stop: 105358, Start Num: 10

Candidate Starts for Phusco\_197:

(Start: 5 @104216 has 1 MA's), (6, 104231), (Start: 10 @104315 has 163 MA's), (Start: 20 @104402 has 6 MA's), (36, 104558), (39, 104585), (53, 104660), (59, 104696), (73, 104771), (74, 104774), (98, 104990), (105, 105065), (108, 105080), (111, 105110), (122, 105206), (129, 105260), (135, 105314),

Gene: Pier\_199 Start: 107003, Stop: 108046, Start Num: 10

Candidate Starts for Pier\_199:

(Start: 5 @106904 has 1 MA's), (6, 106919), (Start: 10 @107003 has 163 MA's), (Start: 20 @107090 has 6 MA's), (36, 107246), (39, 107273), (53, 107348), (59, 107384), (73, 107459), (74, 107462), (98, 107678), (105, 107753), (108, 107768), (111, 107798), (122, 107894), (129, 107948), (135, 108002),

Gene: Pinkcreek\_183 Start: 104691, Stop: 105734, Start Num: 10

Candidate Starts for Pinkcreek\_183:

(Start: 5 @104592 has 1 MA's), (6, 104607), (Start: 10 @104691 has 163 MA's), (Start: 20 @104778 has 6 MA's), (36, 104934), (39, 104961), (53, 105036), (59, 105072), (73, 105147), (74, 105150), (98, 105366), (105, 105441), (108, 105456), (111, 105486), (122, 105582), (129, 105636), (135, 105690),

Gene: Pio\_206 Start: 108198, Stop: 109241, Start Num: 10

Candidate Starts for Pio\_206:

(Start: 5 @108099 has 1 MA's), (6, 108114), (Start: 10 @108198 has 163 MA's), (Start: 20 @108285 has 6 MA's), (36, 108441), (39, 108468), (53, 108543), (59, 108579), (73, 108654), (74, 108657), (98, 108873), (105, 108948), (108, 108963), (111, 108993), (122, 109089), (129, 109143), (135, 109197),

Gene: Pivoine\_199 Start: 105174, Stop: 106217, Start Num: 10

Candidate Starts for Pivoine\_199:

(Start: 5 @105075 has 1 MA's), (6, 105090), (Start: 10 @105174 has 163 MA's), (Start: 20 @105261 has 6 MA's), (36, 105417), (39, 105444), (53, 105519), (59, 105555), (73, 105630), (74, 105633), (98, 105849), (105, 105924), (108, 105939), (111, 105969), (122, 106065), (129, 106119), (135, 106173),

Gene: Pleione\_203 Start: 106258, Stop: 107301, Start Num: 10

Candidate Starts for Pleione\_203:

(Start: 5 @106159 has 1 MA's), (6, 106174), (Start: 10 @106258 has 163 MA's), (Start: 20 @106345 has 6 MA's), (36, 106501), (39, 106528), (53, 106603), (59, 106639), (73, 106714), (74, 106717), (98, 106933), (105, 107008), (108, 107023), (111, 107053), (122, 107149), (129, 107203), (135, 107257),

Gene: Pupper\_144 Start: 99464, Stop: 100639, Start Num: 12

Candidate Starts for Pupper\_144:

(2, 99344), (7, 99383), (Start: 12 @99464 has 4 MA's), (32, 99644), (35, 99683), (43, 99749), (48, 99803), (67, 99959), (70, 99998), (79, 100088), (91, 100220), (92, 100223), (93, 100241), (99, 100283), (114, 100433), (118, 100448), (119, 100451), (130, 100541), (136, 100595),

Gene: PurduePete\_199 Start: 106486, Stop: 107529, Start Num: 10

Candidate Starts for PurduePete\_199:

(Start: 5 @106387 has 1 MA's), (6, 106402), (Start: 10 @106486 has 163 MA's), (Start: 20 @106573 has 6 MA's), (36, 106729), (39, 106756), (53, 106831), (59, 106867), (73, 106942), (74, 106945), (98, 107161), (105, 107236), (108, 107251), (111, 107281), (122, 107377), (129, 107431), (135, 107485),

Gene: QBert\_190 Start: 104530, Stop: 105573, Start Num: 10

Candidate Starts for QBert\_190:

(Start: 5 @104431 has 1 MA's), (6, 104446), (Start: 10 @104530 has 163 MA's), (Start: 20 @104617 has 6 MA's), (36, 104773), (39, 104800), (53, 104875), (59, 104911), (73, 104986), (74, 104989), (98, 105205), (105, 105280), (108, 105295), (111, 105325), (122, 105421), (129, 105475), (135, 105529),

Gene: Quasimodo\_201 Start: 106109, Stop: 107152, Start Num: 10

Candidate Starts for Quasimodo\_201:

(Start: 5 @106010 has 1 MA's), (6, 106025), (Start: 10 @106109 has 163 MA's), (Start: 20 @106196 has 6 MA's), (36, 106352), (39, 106379), (53, 106454), (59, 106490), (73, 106565), (74, 106568), (98, 106784), (105, 106859), (108, 106874), (111, 106904), (122, 107000), (129, 107054), (135, 107108),

Gene: Rabinovish\_192 Start: 106384, Stop: 107427, Start Num: 10

Candidate Starts for Rabinovish\_192:

(Start: 5 @106285 has 1 MA's), (6, 106300), (Start: 10 @106384 has 163 MA's), (Start: 20 @106471 has 6 MA's), (36, 106627), (39, 106654), (53, 106729), (59, 106765), (73, 106840), (74, 106843), (98, 107059), (105, 107134), (108, 107149), (111, 107179), (122, 107275), (129, 107329), (135, 107383),

Gene: Rahel\_199 Start: 104909, Stop: 105952, Start Num: 10

Candidate Starts for Rahel\_199:

(Start: 5 @104810 has 1 MA's), (6, 104825), (Start: 10 @104909 has 163 MA's), (Start: 20 @104996 has 6 MA's), (36, 105152), (39, 105179), (53, 105254), (59, 105290), (73, 105365), (74, 105368), (98, 105584), (105, 105659), (108, 105674), (111, 105704), (122, 105800), (129, 105854), (135, 105908),

Gene: RedWattleHog\_70 Start: 64415, Stop: 65479, Start Num: 13

Candidate Starts for RedWattleHog\_70:

(Start: 13 @64415 has 2 MA's), (17, 64475), (26, 64532), (32, 64583), (33, 64610), (35, 64622), (44, 64688), (47, 64706), (52, 64769), (55, 64793), (69, 64880), (72, 64919), (75, 64943), (81, 64991), (82, 65000), (85, 65021), (88, 65054), (90, 65081), (103, 65192), (105, 65216), (107, 65228), (114, 65285), (121, 65333), (123, 65357), (134, 65423), (136, 65444),

Gene: Rizal\_191 Start: 103823, Stop: 104779, Start Num: 20

Candidate Starts for Rizal\_191:

(Start: 5 @103637 has 1 MA's), (6, 103652), (Start: 10 @103736 has 163 MA's), (Start: 20 @103823 has 6 MA's), (36, 103979), (39, 104006), (53, 104081), (59, 104117), (73, 104192), (74, 104195), (98, 104411), (105, 104486), (108, 104501), (111, 104531), (122, 104627), (129, 104681), (135, 104735),

Gene: RoMag\_193 Start: 105220, Stop: 106263, Start Num: 10

Candidate Starts for RoMag\_193:

(Start: 5 @105121 has 1 MA's), (6, 105136), (Start: 10 @105220 has 163 MA's), (Start: 20 @105307 has 6 MA's), (36, 105463), (39, 105490), (53, 105565), (59, 105601), (73, 105676), (74, 105679), (98, 105895), (105, 105970), (108, 105985), (111, 106015), (122, 106111), (129, 106165), (135, 106219),

Gene: Ronan\_194 Start: 103612, Stop: 104655, Start Num: 10

Candidate Starts for Ronan\_194:

(Start: 5 @103513 has 1 MA's), (6, 103528), (Start: 10 @103612 has 163 MA's), (Start: 20 @103699 has 6 MA's), (36, 103855), (39, 103882), (53, 103957), (59, 103993), (73, 104068), (74, 104071), (98, 104287), (105, 104362), (108, 104377), (111, 104407), (122, 104503), (129, 104557), (135, 104611),

Gene: Roots515\_201 Start: 107037, Stop: 108080, Start Num: 10

Candidate Starts for Roots515\_201:

(Start: 5 @106938 has 1 MA's), (6, 106953), (Start: 10 @107037 has 163 MA's), (Start: 20 @107124 has 6 MA's), (36, 107280), (39, 107307), (53, 107382), (59, 107418), (73, 107493), (74, 107496), (98, 107712), (105, 107787), (108, 107802), (111, 107832), (122, 107928), (129, 107982), (135, 108036),

Gene: SCentae\_143 Start: 99615, Stop: 100790, Start Num: 12

Candidate Starts for SCentae\_143:

(1, 99291), (2, 99495), (7, 99534), (Start: 12 @99615 has 4 MA's), (32, 99795), (35, 99834), (43, 99900), (48, 99954), (67, 100110), (70, 100149), (79, 100239), (91, 100371), (92, 100374), (93, 100392), (99, 100434), (114, 100584), (118, 100599), (119, 100602), (130, 100692), (136, 100746),



Gene: Salacia\_198 Start: 105312, Stop: 106355, Start Num: 10

Candidate Starts for Salacia\_198:

(Start: 5 @105213 has 1 MA's), (6, 105228), (Start: 10 @105312 has 163 MA's), (Start: 20 @105399 has 6 MA's), (36, 105555), (39, 105582), (53, 105657), (59, 105693), (73, 105768), (74, 105771), (98, 105987), (105, 106062), (108, 106077), (111, 106107), (122, 106203), (129, 106257), (135, 106311),

Gene: Sauce\_194 Start: 104126, Stop: 105169, Start Num: 10

Candidate Starts for Sauce\_194:

(Start: 5 @104027 has 1 MA's), (6, 104042), (Start: 10 @104126 has 163 MA's), (Start: 20 @104213 has 6 MA's), (36, 104369), (39, 104396), (53, 104471), (59, 104507), (73, 104582), (74, 104585), (98, 104801), (105, 104876), (108, 104891), (111, 104921), (122, 105017), (129, 105071), (135, 105125),

Gene: ScoobyDoobyDoo\_179 Start: 98925, Stop: 100013, Start Num: 9

Candidate Starts for ScoobyDoobyDoo\_179:

(8, 98913), (Start: 9 @98925 has 3 MA's), (32, 99114), (45, 99231), (59, 99318), (63, 99330), (65, 99348), (79, 99450), (91, 99579), (92, 99582), (96, 99612), (104, 99705), (105, 99714), (120, 99843), (121, 99852), (125, 99882), (130, 99912), (135, 99963), (139, 99990),

Gene: ScottMcG\_192 Start: 104242, Stop: 105285, Start Num: 10

Candidate Starts for ScottMcG\_192:

(Start: 5 @104143 has 1 MA's), (6, 104158), (Start: 10 @104242 has 163 MA's), (Start: 20 @104329 has 6 MA's), (36, 104485), (39, 104512), (53, 104587), (59, 104623), (73, 104698), (74, 104701), (98, 104917), (105, 104992), (108, 105007), (111, 105037), (122, 105133), (129, 105187), (135, 105241),

Gene: Sebata\_200 Start: 106944, Stop: 107987, Start Num: 10

Candidate Starts for Sebata\_200:

(Start: 5 @106845 has 1 MA's), (6, 106860), (Start: 10 @106944 has 163 MA's), (Start: 20 @107031 has 6 MA's), (36, 107187), (39, 107214), (53, 107289), (59, 107325), (73, 107400), (74, 107403), (98, 107619), (105, 107694), (108, 107709), (111, 107739), (122, 107835), (129, 107889), (135, 107943),

Gene: Settecandela\_106 Start: 78400, Stop: 79317, Start Num: 21

Candidate Starts for Settecandela\_106:

(Start: 21 @78400 has 2 MA's), (29, 78451), (34, 78511), (36, 78535), (64, 78685), (72, 78742), (76, 78784), (84, 78838), (87, 78868), (92, 78919), (98, 78961), (101, 79003), (105, 79036), (106, 79045), (109, 79057), (116, 79138), (127, 79213), (132, 79246), (133, 79249), (134, 79267), (137, 79297),

Gene: Shaqnato\_190 Start: 104652, Stop: 105695, Start Num: 10

Candidate Starts for Shaqnato\_190:

(Start: 5 @104553 has 1 MA's), (6, 104568), (Start: 10 @104652 has 163 MA's), (Start: 20 @104739 has 6 MA's), (36, 104895), (39, 104922), (53, 104997), (59, 105033), (73, 105108), (74, 105111), (98, 105327), (105, 105402), (108, 105417), (111, 105447), (122, 105543), (129, 105597), (135, 105651),

Gene: Shelob\_200 Start: 107392, Stop: 108435, Start Num: 10

Candidate Starts for Shelob\_200:

(Start: 5 @107293 has 1 MA's), (6, 107308), (Start: 10 @107392 has 163 MA's), (Start: 20 @107479 has 6 MA's), (36, 107635), (39, 107662), (53, 107737), (59, 107773), (73, 107848), (74, 107851), (98, 108067), (105, 108142), (108, 108157), (122, 108283), (129, 108337), (135, 108391),

Gene: ShiaLabeouf\_195 Start: 104117, Stop: 105160, Start Num: 10

Candidate Starts for ShiaLabeouf\_195:

(Start: 5 @104018 has 1 MA's), (6, 104033), (Start: 10 @104117 has 163 MA's), (Start: 20 @104204 has 6 MA's), (36, 104360), (39, 104387), (53, 104462), (59, 104498), (73, 104573), (74, 104576), (98,

104792), (105, 104867), (108, 104882), (111, 104912), (122, 105008), (129, 105062), (135, 105116),

Gene: Shnickers\_196 Start: 104181, Stop: 105224, Start Num: 10

Candidate Starts for Shnickers\_196:

(Start: 5 @104082 has 1 MA's), (6, 104097), (Start: 10 @104181 has 163 MA's), (Start: 20 @104268 has 6 MA's), (36, 104424), (39, 104451), (53, 104526), (59, 104562), (73, 104637), (74, 104640), (98, 104856), (105, 104931), (108, 104946), (111, 104976), (122, 105072), (129, 105126), (135, 105180),

Gene: Shrimp\_200 Start: 106238, Stop: 107281, Start Num: 10

Candidate Starts for Shrimp\_200:

(Start: 5 @106139 has 1 MA's), (6, 106154), (Start: 10 @106238 has 163 MA's), (Start: 20 @106325 has 6 MA's), (36, 106481), (39, 106508), (53, 106583), (59, 106619), (73, 106694), (74, 106697), (98, 106913), (105, 106988), (108, 107003), (111, 107033), (122, 107129), (129, 107183), (135, 107237),

Gene: SilverDipper\_202 Start: 105730, Stop: 106773, Start Num: 10

Candidate Starts for SilverDipper\_202:

(Start: 5 @105631 has 1 MA's), (6, 105646), (Start: 10 @105730 has 163 MA's), (Start: 20 @105817 has 6 MA's), (36, 105973), (39, 106000), (53, 106075), (59, 106111), (73, 106186), (74, 106189), (98, 106405), (105, 106480), (108, 106495), (111, 106525), (122, 106621), (129, 106675), (135, 106729),

Gene: Skog\_204 Start: 128821, Stop: 130023, Start Num: 12

Candidate Starts for Skog\_204:

(1, 128491), (2, 128695), (Start: 12 @128821 has 4 MA's), (28, 128959), (31, 128998), (32, 129001), (35, 129040), (37, 129076), (43, 129106), (48, 129160), (67, 129316), (70, 129355), (79, 129445), (86, 129517), (99, 129640), (100, 129664), (111, 129745), (118, 129805), (119, 129808), (121, 129838), (130, 129898), (135, 129949), (136, 129952), (137, 129961), (138, 129967),

Gene: SmallFry\_198 Start: 104275, Stop: 105318, Start Num: 10

Candidate Starts for SmallFry\_198:

(Start: 5 @104176 has 1 MA's), (6, 104191), (Start: 10 @104275 has 163 MA's), (Start: 20 @104362 has 6 MA's), (36, 104518), (39, 104545), (53, 104620), (59, 104656), (73, 104731), (74, 104734), (98, 104950), (105, 105025), (108, 105040), (111, 105070), (122, 105166), (129, 105220), (135, 105274),

Gene: Spec\_193 Start: 104466, Stop: 105509, Start Num: 10

Candidate Starts for Spec\_193:

(Start: 5 @104367 has 1 MA's), (6, 104382), (Start: 10 @104466 has 163 MA's), (Start: 20 @104553 has 6 MA's), (36, 104709), (39, 104736), (53, 104811), (59, 104847), (73, 104922), (74, 104925), (98, 105141), (105, 105216), (108, 105231), (111, 105261), (122, 105357), (129, 105411), (135, 105465),

Gene: Specks\_202 Start: 106584, Stop: 107627, Start Num: 10

Candidate Starts for Specks\_202:

(Start: 5 @106485 has 1 MA's), (6, 106500), (Start: 10 @106584 has 163 MA's), (Start: 20 @106671 has 6 MA's), (36, 106827), (39, 106854), (53, 106929), (59, 106965), (73, 107040), (74, 107043), (98, 107259), (105, 107334), (108, 107349), (111, 107379), (122, 107475), (129, 107529), (135, 107583),

Gene: Sprinklers\_196 Start: 104833, Stop: 105876, Start Num: 10

Candidate Starts for Sprinklers\_196:

(Start: 5 @104734 has 1 MA's), (6, 104749), (Start: 10 @104833 has 163 MA's), (Start: 20 @104920 has 6 MA's), (36, 105076), (39, 105103), (53, 105178), (59, 105214), (73, 105289), (74, 105292), (98, 105508), (105, 105583), (108, 105598), (111, 105628), (122, 105724), (129, 105778), (135, 105832),

Gene: Spud\_193 Start: 104941, Stop: 105897, Start Num: 20

Candidate Starts for Spud\_193:

(Start: 5 @104755 has 1 MA's), (6, 104770), (Start: 10 @104854 has 163 MA's), (Start: 20 @104941 has 6 MA's), (36, 105097), (39, 105124), (53, 105199), (59, 105235), (73, 105310), (74, 105313), (98, 105529), (105, 105604), (108, 105619), (111, 105649), (122, 105745), (129, 105799), (135, 105853),

Gene: SrishMeg2525\_196 Start: 106018, Stop: 107061, Start Num: 10

Candidate Starts for SrishMeg2525\_196:

(Start: 5 @105919 has 1 MA's), (6, 105934), (Start: 10 @106018 has 163 MA's), (Start: 20 @106105 has 6 MA's), (36, 106261), (39, 106288), (53, 106363), (59, 106399), (73, 106474), (74, 106477), (98, 106693), (105, 106768), (108, 106783), (111, 106813), (122, 106909), (129, 106963), (135, 107017),

Gene: StephanieG\_195 Start: 106049, Stop: 107092, Start Num: 10

Candidate Starts for StephanieG\_195:

(Start: 5 @105950 has 1 MA's), (6, 105965), (Start: 10 @106049 has 163 MA's), (Start: 20 @106136 has 6 MA's), (36, 106292), (39, 106319), (53, 106394), (59, 106430), (73, 106505), (74, 106508), (98, 106724), (105, 106799), (108, 106814), (111, 106844), (122, 106940), (129, 106994), (135, 107048),

Gene: Stormageddon\_67 Start: 64396, Stop: 65460, Start Num: 13

Candidate Starts for Stormageddon\_67:

(Start: 13 @64396 has 2 MA's), (17, 64456), (26, 64513), (32, 64564), (33, 64591), (35, 64603), (44, 64669), (47, 64687), (52, 64750), (55, 64774), (69, 64861), (72, 64900), (75, 64924), (81, 64972), (82, 64981), (85, 65002), (88, 65035), (90, 65062), (103, 65173), (105, 65197), (107, 65209), (114, 65266), (121, 65314), (123, 65338), (134, 65404), (136, 65425),

Gene: Stubby\_183 Start: 104894, Stop: 105937, Start Num: 10

Candidate Starts for Stubby\_183:

(Start: 5 @104795 has 1 MA's), (6, 104810), (Start: 10 @104894 has 163 MA's), (Start: 20 @104981 has 6 MA's), (36, 105137), (39, 105164), (53, 105239), (59, 105275), (73, 105350), (74, 105353), (98, 105569), (105, 105644), (108, 105659), (111, 105689), (122, 105785), (129, 105839), (135, 105893),

Gene: StubbySaigey\_203 Start: 105264, Stop: 106307, Start Num: 10

Candidate Starts for StubbySaigey\_203:

(Start: 5 @105165 has 1 MA's), (6, 105180), (Start: 10 @105264 has 163 MA's), (Start: 20 @105351 has 6 MA's), (36, 105507), (39, 105534), (53, 105609), (59, 105645), (73, 105720), (74, 105723), (98, 105939), (105, 106014), (108, 106029), (111, 106059), (122, 106155), (129, 106209), (135, 106263),

Gene: Tainan\_199 Start: 105603, Stop: 106694, Start Num: 10

Candidate Starts for Tainan\_199:

(Start: 5 @105504 has 1 MA's), (6, 105519), (Start: 10 @105603 has 163 MA's), (Start: 20 @105690 has 6 MA's), (36, 105846), (39, 105873), (53, 105948), (59, 105984), (73, 106059), (74, 106062), (98, 106278), (105, 106353), (139, 106626), (141, 106644), (142, 106662),

Gene: Teardrop\_195 Start: 103779, Stop: 104822, Start Num: 10

Candidate Starts for Teardrop\_195:

(Start: 5 @103680 has 1 MA's), (6, 103695), (Start: 10 @103779 has 163 MA's), (Start: 20 @103866 has 6 MA's), (36, 104022), (39, 104049), (53, 104124), (59, 104160), (73, 104235), (74, 104238), (98, 104454), (105, 104529), (108, 104544), (111, 104574), (122, 104670), (129, 104724), (135, 104778),

Gene: TinyTim\_197 Start: 104867, Stop: 105910, Start Num: 10

Candidate Starts for TinyTim\_197:

(Start: 5 @104768 has 1 MA's), (6, 104783), (Start: 10 @104867 has 163 MA's), (Start: 20 @104954 has 6 MA's), (36, 105110), (39, 105137), (53, 105212), (59, 105248), (73, 105323), (74, 105326), (98, 105542), (105, 105617), (108, 105632), (111, 105662), (122, 105758), (129, 105812), (135, 105866),

Gene: Tonenili\_219 Start: 111161, Stop: 112204, Start Num: 10

Candidate Starts for Tonenili\_219:

(Start: 10 @111161 has 163 MA's), (23, 111269), (33, 111368), (36, 111404), (46, 111464), (53, 111506), (60, 111545), (62, 111548), (66, 111572), (71, 111584), (77, 111656), (87, 111743), (98, 111836), (105, 111911), (110, 111953), (124, 112076), (129, 112106), (135, 112160), (138, 112175), (140, 112199),

Gene: Tortoise16\_196 Start: 105020, Stop: 106063, Start Num: 10

Candidate Starts for Tortoise16\_196:

(Start: 5 @104921 has 1 MA's), (6, 104936), (Start: 10 @105020 has 163 MA's), (Start: 20 @105107 has 6 MA's), (36, 105263), (39, 105290), (53, 105365), (59, 105401), (73, 105476), (74, 105479), (98, 105695), (105, 105770), (108, 105785), (111, 105815), (122, 105911), (129, 105965), (135, 106019),

Gene: Trinitium\_195 Start: 104614, Stop: 105657, Start Num: 10

Candidate Starts for Trinitium\_195:

(Start: 5 @104515 has 1 MA's), (6, 104530), (Start: 10 @104614 has 163 MA's), (Start: 20 @104701 has 6 MA's), (36, 104857), (39, 104884), (53, 104959), (59, 104995), (73, 105070), (74, 105073), (98, 105289), (105, 105364), (108, 105379), (111, 105409), (122, 105505), (129, 105559), (135, 105613),

Gene: Turret\_192 Start: 104196, Stop: 105239, Start Num: 10

Candidate Starts for Turret\_192:

(Start: 5 @104097 has 1 MA's), (6, 104112), (Start: 10 @104196 has 163 MA's), (Start: 20 @104283 has 6 MA's), (36, 104439), (39, 104466), (53, 104541), (59, 104577), (73, 104652), (74, 104655), (98, 104871), (105, 104946), (108, 104961), (111, 104991), (122, 105087), (129, 105141), (135, 105195),

Gene: Tyke\_196 Start: 106387, Stop: 107430, Start Num: 10

Candidate Starts for Tyke\_196:

(Start: 5 @106288 has 1 MA's), (6, 106303), (Start: 10 @106387 has 163 MA's), (Start: 20 @106474 has 6 MA's), (36, 106630), (39, 106657), (53, 106732), (59, 106768), (73, 106843), (74, 106846), (98, 107062), (105, 107137), (108, 107152), (111, 107182), (122, 107278), (129, 107332), (135, 107386),

Gene: ValleyTerrace\_199 Start: 104471, Stop: 105514, Start Num: 10

Candidate Starts for ValleyTerrace\_199:

(Start: 5 @104372 has 1 MA's), (6, 104387), (Start: 10 @104471 has 163 MA's), (Start: 20 @104558 has 6 MA's), (36, 104714), (39, 104741), (53, 104816), (59, 104852), (73, 104927), (74, 104930), (98, 105146), (105, 105221), (108, 105236), (111, 105266), (122, 105362), (129, 105416), (135, 105470),

Gene: Wally\_197 Start: 104764, Stop: 105807, Start Num: 10

Candidate Starts for Wally\_197:

(Start: 5 @104665 has 1 MA's), (6, 104680), (Start: 10 @104764 has 163 MA's), (Start: 20 @104851 has 6 MA's), (36, 105007), (39, 105034), (53, 105109), (59, 105145), (73, 105220), (74, 105223), (98, 105439), (105, 105514), (108, 105529), (111, 105559), (122, 105655), (129, 105709), (135, 105763),

Gene: Willis\_199 Start: 105678, Stop: 106721, Start Num: 10

Candidate Starts for Willis\_199:

(Start: 5 @105579 has 1 MA's), (6, 105594), (Start: 10 @105678 has 163 MA's), (Start: 20 @105765 has 6 MA's), (36, 105921), (39, 105948), (53, 106023), (59, 106059), (73, 106134), (74, 106137), (98, 106353), (105, 106428), (108, 106443), (111, 106473), (122, 106569), (129, 106623), (135, 106677),

Gene: Yassified\_195 Start: 104810, Stop: 105853, Start Num: 10

Candidate Starts for Yassified\_195:

(Start: 5 @104711 has 1 MA's), (6, 104726), (Start: 10 @104810 has 163 MA's), (Start: 20 @104897 has 6 MA's), (36, 105053), (39, 105080), (53, 105155), (59, 105191), (73, 105266), (74, 105269), (98,

105485), (105, 105560), (108, 105575), (111, 105605), (122, 105701), (129, 105755), (135, 105809),

Gene: YemiJoy2021\_199 Start: 106434, Stop: 107477, Start Num: 10

Candidate Starts for YemiJoy2021\_199:

(Start: 5 @106335 has 1 MA's), (6, 106350), (Start: 10 @106434 has 163 MA's), (Start: 20 @106521 has 6 MA's), (36, 106677), (39, 106704), (53, 106779), (59, 106815), (73, 106890), (74, 106893), (98, 107109), (105, 107184), (108, 107199), (111, 107229), (122, 107325), (129, 107379), (135, 107433),

Gene: YoungMoneyMata\_197 Start: 104976, Stop: 106019, Start Num: 10

Candidate Starts for YoungMoneyMata\_197:

(Start: 5 @104877 has 1 MA's), (6, 104892), (Start: 10 @104976 has 163 MA's), (Start: 20 @105063 has 6 MA's), (36, 105219), (39, 105246), (53, 105321), (59, 105357), (73, 105432), (74, 105435), (98, 105651), (105, 105726), (108, 105741), (111, 105771), (122, 105867), (129, 105921), (135, 105975),

Gene: Yucca\_199 Start: 106426, Stop: 107469, Start Num: 10

Candidate Starts for Yucca\_199:

(Start: 5 @106327 has 1 MA's), (6, 106342), (Start: 10 @106426 has 163 MA's), (Start: 20 @106513 has 6 MA's), (36, 106669), (39, 106696), (53, 106771), (59, 106807), (73, 106882), (74, 106885), (98, 107101), (105, 107176), (108, 107191), (111, 107221), (122, 107317), (129, 107371), (135, 107425),

Gene: Zalkecks\_198 Start: 105507, Stop: 106550, Start Num: 10

Candidate Starts for Zalkecks\_198:

(Start: 5 @105408 has 1 MA's), (6, 105423), (Start: 10 @105507 has 163 MA's), (Start: 20 @105594 has 6 MA's), (36, 105750), (39, 105777), (53, 105852), (59, 105888), (73, 105963), (74, 105966), (98, 106182), (105, 106257), (108, 106272), (111, 106302), (122, 106398), (129, 106452), (135, 106506),

Gene: Zeenon\_201 Start: 106078, Stop: 107121, Start Num: 10

Candidate Starts for Zeenon\_201:

(Start: 5 @105979 has 1 MA's), (6, 105994), (Start: 10 @106078 has 163 MA's), (Start: 20 @106165 has 6 MA's), (36, 106321), (39, 106348), (53, 106423), (59, 106459), (73, 106534), (74, 106537), (98, 106753), (105, 106828), (108, 106843), (111, 106873), (122, 106969), (129, 107023), (135, 107077),

Gene: ZygoTaiga\_195 Start: 106698, Stop: 107741, Start Num: 10

Candidate Starts for ZygoTaiga\_195:

(Start: 5 @106599 has 1 MA's), (6, 106614), (Start: 10 @106698 has 163 MA's), (Start: 20 @106785 has 6 MA's), (36, 106941), (39, 106968), (53, 107043), (59, 107079), (73, 107154), (74, 107157), (98, 107373), (105, 107448), (108, 107463), (111, 107493), (122, 107589), (129, 107643), (135, 107697),