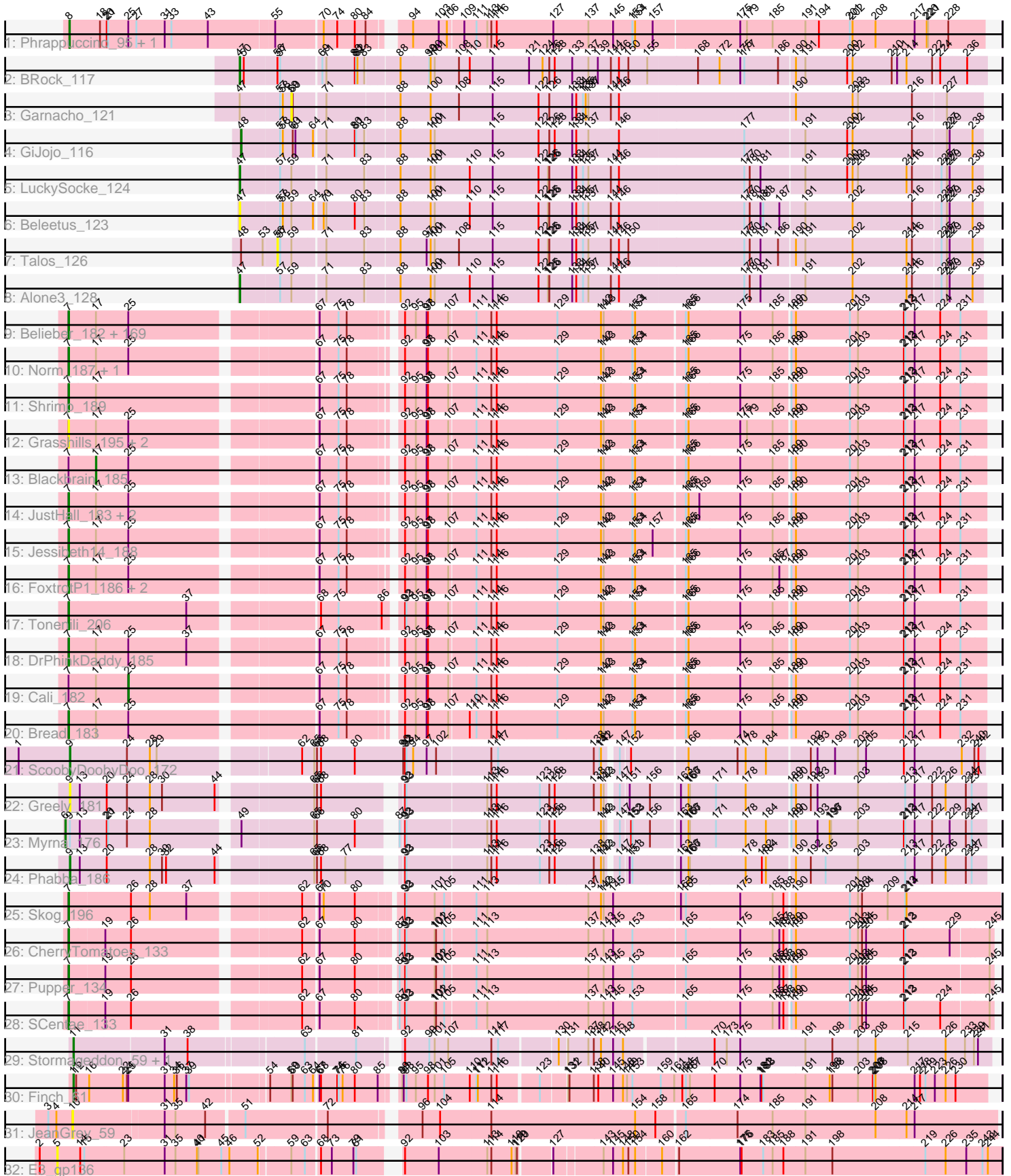


Pham 215836



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 215836 Report

This analysis was run 02/22/25 on database version 588.

Pham number 215836 has 210 members, 31 are drafts.

Phages represented in each track:

- Track 1 : Phrappuccino\_95, Settecandela\_95
- Track 2 : BRock\_117
- Track 3 : Garnacho\_121
- Track 4 : GiJojo\_116
- Track 5 : LuckySocke\_124
- Track 6 : Beleetus\_123
- Track 7 : Talos\_126
- Track 8 : Alone3\_128
- Track 9 : Belieber\_182, Kamryn\_187, Tortoise16\_186, Ading\_188, Lethe\_190, BackyardAgain\_185, Breeniome\_187, Turret\_182, JulietS\_181, Ronan\_183, Nappy\_188, Phlegm\_191, ChickenPhender\_185, Jedediah\_188, Phusco\_187, Jaygup\_184, NedWong\_187, Erdmann\_189, ParkTD\_186, Nidhogg\_189, Issimir\_182, Guwapp\_183, Trinitium\_185, Zalkecks\_187, Flabslab\_184, NuevoMundo\_191, Pio\_196, CharlieB\_181, McWolfish\_185, EmToTheThree\_189, Adlitam\_187, Shelob\_189, Gabriel\_191, FudgeTart\_183, ET08\_176, Chargie21\_186, Shifa\_180, Sauce\_184, Asterius\_189, FrayBell\_191, Kboogie\_192, Gizmo\_193, InterFolia\_191, Izajani\_186, McGee\_188, Halldule\_180, BananaFence\_185, SVoro\_185, Cactojaque\_184, Primadonna\_182, InigoMontoya\_190, LifeSavor\_187, StubbySaigey\_192, Morizzled23\_186, EmmaElysia\_191, NoodleTree\_194, Basquiat\_186, Phox\_188, Fludd\_189, IkeLoa\_180, Bonray\_190, Concombre\_192, Pleione\_192, Khaleesi\_187, Naval22\_193, Daffodil\_192, Rizal\_182, BadAgartude\_182, I3\_196, Janiyra\_192, Gamgam\_188, Domi\_182, Patter\_188, HyRo\_176, Yucca\_188, Demodog\_193, YoungMoneyMata\_187, Wally\_188, Ablatia\_187, Bxz1\_179, Tyke\_186, Capablanca\_192, Fongie\_189, Bangla1971\_188, Babyland\_190, Chomp\_187, Bipolarisk\_186, Teardrop\_185, Willis\_188, DTDevon\_190, Melpomini\_182, JPickles\_184, Darko\_187, Ewok\_187, LordLeafolot\_190, Pivoine\_188, Audrick\_191, SilverDipper\_191, Blackdragon\_182, YemiJoy2021\_188, JigglyPuff\_194, Matsumoto\_188, PurduePete\_188, LRRHood\_181, MoMoMixon\_186, LinStu\_186, Maby2021\_187, SrishMeg2525\_185, Sebata\_189, ChaylaJr\_186, Lee7\_188, Roots515\_190, Dietrick\_178, Tainan\_189, CindyLou\_189, Essence\_185, ValleyTerrace\_188, Naija\_188, Delylah\_189, Ava3\_187, Iota\_182, Mikro\_183, Caravan\_179, Spud\_184, GlutenPhree\_187, ShiaLabeouf\_185, Grungle\_173, Bigswole\_191, RoMag\_183, Rahel\_189, Burrough\_190, LolaVinca\_186, ArcherS7\_187, EasyJones\_192, ErnieJ\_181, Quasimodo\_191, Dandelion\_195, Momo\_188, Littleton\_191, Mangeria\_188, Loanshark\_185, TinyTim\_186, StephanieG\_185, DirtMonster\_181, Ghost\_188, Astraea\_182, MikeLiesIn\_189, Catera\_183, Amataga\_188, Derek\_185,

Yassified\_184, Drazdys\_186, Megamind\_185, Sprinklers\_185, Zeenon\_190, Jemmno\_187, Spec\_183, JayJay\_190, QBert\_179, Pier\_189, Latch\_187, Ngannou\_184, Napoleon13\_186, Atlantean\_187, Salacia\_188, ZygoTaiga\_184, Lukilu\_178, Delilah\_186, Jezreel\_185, Shnickers\_186

- Track 10 : Norm\_187, BeanWater\_179
- Track 11 : Shrimp\_189
- Track 12 : Grasshills\_195, EggyFarm\_196, BigCity\_196
- Track 13 : Blackbrain\_185
- Track 14 : JustHall\_183, DeejaClivia\_176, ScottMcG\_182
- Track 15 : Jessibeth14\_188
- Track 16 : FoxtrotP1\_186, SmallFry\_188, Specks\_192
- Track 17 : Tonenili\_206
- Track 18 : DrPhinkDaddy\_185
- Track 19 : Cali\_182
- Track 20 : Bread\_183
- Track 21 : ScoobyDoobyDoo\_172
- Track 22 : Greely\_181
- Track 23 : Myrna\_176
- Track 24 : Phabba\_186
- Track 25 : Skog\_196
- Track 26 : CherryTomatoes\_133
- Track 27 : Pupper\_134
- Track 28 : SCentae\_133
- Track 29 : Stormageddon\_59, RedWattleHog\_62
- Track 30 : Finch\_61
- Track 31 : JeanGrey\_59
- Track 32 : E3\_gp136

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

The start number called the most often in the published annotations is 7, it was called in 165 of the 179 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ablatia\_187, Ading\_188, Adlitam\_187, Amataga\_188, ArcherS7\_187, Asterius\_189, Astraea\_182, Atlantean\_187, Audrick\_191, Ava3\_187, Babyland\_190, BackyardAgain\_185, BadAgartude\_182, BananaFence\_185, Bangla1971\_188, Basquiat\_186, BeanWater\_179, Belieber\_182, BigCity\_196, Bigswole\_191, Bipolarisk\_186, Blackdragon\_182, Bonray\_190, Bread\_183, Breeniome\_187, Burrough\_190, Bxz1\_179, Cactojaque\_184, Capablanca\_192, Caravan\_179, Catera\_183, Chargie21\_186, CharlieB\_181, ChaylaJr\_186, CherryTomatoes\_133, ChickenPhender\_185, Chomp\_187, CindyLou\_189, Concombre\_192, DTDevon\_190, Daffodil\_192, Dandelion\_195, Darko\_187, DeejaClivia\_176, Delilah\_186, Delylah\_189, Demodog\_193, Derek\_185, Dietrick\_178, DirtMonster\_181, Domi\_182, DrPhinkDaddy\_185, Drazdys\_186, ET08\_176, EasyJones\_192, EggyFarm\_196, EmToTheThree\_189, EmmaElysia\_191, Erdmann\_189, ErnieJ\_181, Essence\_185, Ewok\_187, Flabslab\_184, Fludd\_189, Fongie\_189, FoxtrotP1\_186, FrayBell\_191, FudgeTart\_183, Gabriel\_191, Gamgam\_188, Ghost\_188, Gizmo\_193, GlutenPhree\_187, Grasshills\_195, Grungle\_173, Guwapp\_183, Halldule\_180, HyRo\_176, I3\_196, IkeLoa\_180, InigoMontoya\_190, InterFolia\_191, Iota\_182,

Issimir\_182, Izajani\_186, JPickles\_184, Janiyra\_192, JayJay\_190, Jaygup\_184, Jedediah\_188, Jemmno\_187, Jessibeth14\_188, Jezreel\_185, JigglyPuff\_194, JulietS\_181, JustHall\_183, Kamryn\_187, Kboogie\_192, Khaleesi\_187, LRRHood\_181, Latch\_187, Lee7\_188, Lethe\_190, LifeSavor\_187, LinStu\_186, Littleton\_191, Loanshark\_185, LolaVinca\_186, LordLeafolot\_190, Lukilu\_178, Maby2021\_187, Mangeria\_188, Matsumoto\_188, McGee\_188, McWolfish\_185, Megamind\_185, Melpomini\_182, MikeLiesIn\_189, Mikro\_183, MoMoMixon\_186, Momo\_188, Morizzled23\_186, Naija\_188, Napoleon13\_186, Nappy\_188, Naval22\_193, NedWong\_187, Ngannou\_184, Nidhogg\_189, NoodleTree\_194, Norm\_187, NuevoMundo\_191, ParkTD\_186, Patter\_188, Phlegm\_191, Phox\_188, Phusco\_187, Pier\_189, Pio\_196, Pivoine\_188, Pleione\_192, Primadonna\_182, Pupper\_134, PurduePete\_188, QBert\_179, Quasimodo\_191, Rahel\_189, Rizal\_182, RoMag\_183, Ronan\_183, Roots515\_190, SCentae\_133, SVoro\_185, Salacia\_188, Sauce\_184, ScottMcG\_182, Sebata\_189, Shelob\_189, ShiaLabeouf\_185, Shifa\_180, Shnickers\_186, Shrimp\_189, SilverDipper\_191, Skog\_196, SmallFry\_188, Spec\_183, Specks\_192, Sprinklers\_185, Spud\_184, SrishMeg2525\_185, StephanieG\_185, StubbySaigey\_192, Tainan\_189, Teardrop\_185, TinyTim\_186, Tonenili\_206, Tortoise16\_186, Trinitium\_185, Turret\_182, Tyke\_186, ValleyTerrace\_188, Wally\_188, Willis\_188, Yassified\_184, YemiJoy2021\_188, YoungMoneyMata\_187, Yucca\_188, Zalkecks\_187, Zeenon\_190, ZygoTaiga\_184,

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

- Blackbrain\_185, Cali\_182,

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

- Alone3\_128, BRock\_117, Beleetus\_123, E3\_gp136, Finch\_61, Garnacho\_121, GiJojo\_116, Greely\_181, JeanGrey\_59, LuckySocke\_124, Myrna\_176, Phabba\_186, Phrappuccino\_95, RedWattleHog\_62, ScoobyDoobyDoo\_172, Settecandela\_95, Stormageddon\_59, Talos\_126,

### Summary by start number:

Start 5:

- Found in 1 of 210 ( 0.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: E3\_gp136 (singleton),

Start 6:

- Found in 1 of 210 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 1 of 179
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Myrna\_176 (C2),

Start 7:

- Found in 192 of 210 ( 91.4% ) of genes in pham
- Manual Annotations of this start: 165 of 179
- Called 99.0% of time when present
- Phage (with cluster) where this start called: Ablatia\_187 (C1), Ading\_188 (C1), Adlitam\_187 (C1), Amataga\_188 (C1), ArcherS7\_187 (C1), Asterius\_189 (C1), Astraea\_182 (C1), Atlantean\_187 (C1), Audrick\_191 (C1), Ava3\_187 (C1), Babyland\_190 (C1), BackyardAgain\_185 (C1), BadAgartude\_182 (C1), BananaFence\_185 (C1), Bangla1971\_188 (C1), Basquiat\_186 (C1), BeanWater\_179

(C1), Belieber\_182 (C1), BigCity\_196 (C1), Bigswole\_191 (C1), Bipolarisk\_186 (C1), Blackdragon\_182 (C1), Bonray\_190 (C1), Bread\_183 (C1), Breeniome\_187 (C1), Burrough\_190 (C1), Bxz1\_179 (C1), Cactojaque\_184 (C1), Capablanca\_192 (C1), Caravan\_179 (C1), Catera\_183 (C1), Chargie21\_186 (C1), CharlieB\_181 (C1), ChaylaJr\_186 (C1), CherryTomatoes\_133 (DO), ChickenPhender\_185 (C1), Chomp\_187 (C1), CindyLou\_189 (C1), Concombre\_192 (C1), DTDevon\_190 (C1), Daffodil\_192 (C1), Dandelion\_195 (C1), Darko\_187 (C1), DeejaClivia\_176 (C1), Delilah\_186 (C1), Delylah\_189 (C1), Demodog\_193 (C1), Derek\_185 (C1), Dietrick\_178 (C1), DirtMonster\_181 (C1), Domi\_182 (C1), DrPhinkDaddy\_185 (C1), Drazdys\_186 (C1), ET08\_176 (C1), EasyJones\_192 (C1), EggyFarm\_196 (C1), EmToTheThree\_189 (C1), EmmaElysia\_191 (C1), Erdmann\_189 (C1), ErnieJ\_181 (C1), Essence\_185 (C1), Ewok\_187 (C1), Flabslab\_184 (C1), Fludd\_189 (C1), Fongie\_189 (C1), FoxtrotP1\_186 (C1), FrayBell\_191 (C1), FudgeTart\_183 (C1), Gabriel\_191 (C1), Gamgam\_188 (C1), Ghost\_188 (C1), Gizmo\_193 (C1), GlutenPhree\_187 (C1), Grasshills\_195 (C1), Grungle\_173 (C1), Guwapp\_183 (C1), Halldule\_180 (C1), HyRo\_176 (C1), I3\_196 (C1), IkeLoa\_180 (C1), InigoMontoya\_190 (C1), InterFolia\_191 (C1), Iota\_182 (C1), Issimir\_182 (C1), Izajani\_186 (C1), JPickles\_184 (C1), Janiyr\_192 (C1), JayJay\_190 (C1), Jaygup\_184 (C1), Jedediah\_188 (C1), Jemmno\_187 (C1), Jessibeth14\_188 (C1), Jezreel\_185 (C1), JigglyPuff\_194 (C1), JulietS\_181 (C1), JustHall\_183 (C1), Kamryn\_187 (C1), Kboogie\_192 (C1), Khaleesi\_187 (C1), LRRHood\_181 (C1), Latch\_187 (C1), Lee7\_188 (C1), Lethe\_190 (C1), LifeSavor\_187 (C1), LinStu\_186 (C1), Littleton\_191 (C1), Loanshark\_185 (C1), LolaVinca\_186 (C1), LordLeafolot\_190 (C1), Lukilu\_178 (C1), Maby2021\_187 (C1), Mangeria\_188 (C1), Matsumoto\_188 (C1), McGee\_188 (C1), McWolfish\_185 (C1), Megamind\_185 (C1), Melpomini\_182 (C1), MikeLiesIn\_189 (C1), Mikro\_183 (C1), MoMoMixon\_186 (C1), Momo\_188 (C1), Morizzled23\_186 (C1), Naija\_188 (C1), Napoleon13\_186 (C1), Nappy\_188 (C1), Naval22\_193 (C1), NedWong\_187 (C1), Ngannou\_184 (C1), Nidhogg\_189 (C1), NoodleTree\_194 (C1), Norm\_187 (C1), NuevoMundo\_191 (C1), ParkTD\_186 (C1), Patter\_188 (C1), Phlegm\_191 (C1), Phox\_188 (C1), Phusco\_187 (C1), Pier\_189 (C1), Pio\_196 (C1), Pivoine\_188 (C1), Pleione\_192 (C1), Primadonna\_182 (C1), Pupper\_134 (DO), PurduePete\_188 (C1), QBert\_179 (C1), Quasimodo\_191 (C1), Rahel\_189 (C1), Rizal\_182 (C1), RoMag\_183 (C1), Ronan\_183 (C1), Roots515\_190 (C1), SCentae\_133 (DO), SVoro\_185 (C1), Salacia\_188 (C1), Sauce\_184 (C1), ScottMcG\_182 (C1), Sebata\_189 (C1), Shelob\_189 (C1), ShiaLabeouf\_185 (C1), Shifa\_180 (C1), Shnickers\_186 (C1), Shrimp\_189 (C1), SilverDipper\_191 (C1), Skog\_196 (DO), SmallFry\_188 (C1), Spec\_183 (C1), Specks\_192 (C1), Sprinklers\_185 (C1), Spud\_184 (C1), SrishMeg2525\_185 (C1), StephanieG\_185 (C1), StubbySaigey\_192 (C1), Tainan\_189 (C1), Teardrop\_185 (C1), TinyTim\_186 (C1), Tonenili\_206 (C1), Tortoise16\_186 (C1), Trinitium\_185 (C1), Turret\_182 (C1), Tyke\_186 (C1), ValleyTerrace\_188 (C1), Wally\_188 (C1), Willis\_188 (C1), Yassified\_184 (C1), YemiJoy2021\_188 (C1), YoungMoneyMata\_187 (C1), Yucca\_188 (C1), Zalkecks\_187 (C1), Zeenon\_190 (C1), ZygoTaiga\_184 (C1),

#### Start 8:

- Found in 2 of 210 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 2 of 179
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phrappuccino\_95 (AA), Settecandela\_95 (AA),

#### Start 9:

- Found in 4 of 210 ( 1.9% ) of genes in pham

- Manual Annotations of this start: 2 of 179
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Greely\_181 (C2), Phabba\_186 (C2), ScoobyDoobyDoo\_172 (C2),

Start 10:

- Found in 1 of 210 ( 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\_59 (singleton),

Start 11:

- Found in 3 of 210 ( 1.4% ) of genes in pham
- Manual Annotations of this start: 3 of 179
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finch\_61 (singleton), RedWattleHog\_62 (DX), Stormageddon\_59 (DX),

Start 17:

- Found in 187 of 210 ( 89.0% ) of genes in pham
- Manual Annotations of this start: 1 of 179
- Called 0.5% of time when present
- Phage (with cluster) where this start called: Blackbrain\_185 (C1),

Start 25:

- Found in 189 of 210 ( 90.0% ) of genes in pham
- Manual Annotations of this start: 1 of 179
- Called 0.5% of time when present
- Phage (with cluster) where this start called: Cali\_182 (C1),

Start 47:

- Found in 5 of 210 ( 2.4% ) of genes in pham
- Manual Annotations of this start: 3 of 179
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Alone3\_128 (BS), BRock\_117 (BS), Beleetus\_123 (BS), LuckySocke\_124 (BS),

Start 48:

- Found in 2 of 210 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 1 of 179
- Called 50.0% of time when present
- Phage (with cluster) where this start called: GiJojo\_116 (BS),

Start 56:

- Found in 2 of 210 ( 1.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Talos\_126 (BS),

Start 59:

- Found in 7 of 210 ( 3.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 14.3% of time when present

- Phage (with cluster) where this start called: Garnacho\_121 (BS),

### **Summary by clusters:**

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

Info for manual annotations of cluster AA:

- Start number 8 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster BS:

- Start number 47 was manually annotated 3 times for cluster BS.
- Start number 48 was manually annotated 1 time for cluster BS.

Info for manual annotations of cluster C1:

- Start number 7 was manually annotated 161 times for cluster C1.
- Start number 17 was manually annotated 1 time for cluster C1.
- Start number 25 was manually annotated 1 time for cluster C1.

Info for manual annotations of cluster C2:

- Start number 6 was manually annotated 1 time for cluster C2.
- Start number 9 was manually annotated 2 times for cluster C2.

Info for manual annotations of cluster DO:

- Start number 7 was manually annotated 4 times for cluster DO.

Info for manual annotations of cluster DX:

- Start number 11 was manually annotated 2 times for cluster DX.

### **Gene Information:**

Gene: Ablatia\_187 Start: 101460, Stop: 99598, Start Num: 7

Candidate Starts for Ablatia\_187:

(Start: 7 @101460 has 165 MA's), (Start: 17 @101400 has 1 MA's), (Start: 25 @101331 has 1 MA's), (67, 100959), (75, 100917), (78, 100899), (92, 100815), (95, 100791), (97, 100767), (98, 100764), (107, 100719), (111, 100668), (114, 100638), (116, 100626), (129, 100497), (142, 100404), (143, 100398), (153, 100335), (154, 100329), (165, 100233), (166, 100227), (175, 100116), (185, 100044), (189, 100011), (190, 100002), (201, 99882), (203, 99864), (212, 99765), (213, 99762), (217, 99741), (224, 99687), (231, 99651),

Gene: Ading\_188 Start: 101295, Stop: 99433, Start Num: 7

Candidate Starts for Ading\_188:

(Start: 7 @101295 has 165 MA's), (Start: 17 @101235 has 1 MA's), (Start: 25 @101166 has 1 MA's), (67, 100794), (75, 100752), (78, 100734), (92, 100650), (95, 100626), (97, 100602), (98, 100599), (107, 100554), (111, 100503), (114, 100473), (116, 100461), (129, 100332), (142, 100239), (143, 100233), (153, 100170), (154, 100164), (165, 100068), (166, 100062), (175, 99951), (185, 99879), (189, 99846), (190, 99837), (201, 99717), (203, 99699), (212, 99600), (213, 99597), (217, 99576), (224, 99522), (231, 99486),

Gene: Adlitam\_187 Start: 100283, Stop: 98421, Start Num: 7

Candidate Starts for Adlitam\_187:

(Start: 7 @100283 has 165 MA's), (Start: 17 @100223 has 1 MA's), (Start: 25 @100154 has 1 MA's), (67, 99782), (75, 99740), (78, 99722), (92, 99638), (95, 99614), (97, 99590), (98, 99587), (107, 99542), (111, 99491), (114, 99461), (116, 99449), (129, 99320), (142, 99227), (143, 99221), (153, 99158), (154, 99152), (165, 99056), (166, 99050), (175, 98939), (185, 98867), (189, 98834), (190, 98825), (201, 98705), (203, 98687), (212, 98588), (213, 98585), (217, 98564), (224, 98510), (231, 98474),

Gene: Alone3\_128 Start: 69071, Stop: 70642, Start Num: 47

Candidate Starts for Alone3\_128:

(Start: 47 @69071 has 3 MA's), (57, 69152), (59, 69176), (71, 69242), (83, 69323), (88, 69389), (100, 69455), (101, 69464), (110, 69542), (115, 69593), (122, 69695), (125, 69716), (126, 69719), (133, 69770), (134, 69779), (135, 69794), (137, 69806), (144, 69854), (146, 69869), (177, 70139), (180, 70151), (181, 70175), (191, 70262), (202, 70367), (214, 70487), (216, 70499), (225, 70556), (227, 70568), (229, 70574), (238, 70622),

Gene: Amataga\_188 Start: 99711, Stop: 97849, Start Num: 7

Candidate Starts for Amataga\_188:

(Start: 7 @99711 has 165 MA's), (Start: 17 @99651 has 1 MA's), (Start: 25 @99582 has 1 MA's), (67, 99210), (75, 99168), (78, 99150), (92, 99066), (95, 99042), (97, 99018), (98, 99015), (107, 98970), (111, 98919), (114, 98889), (116, 98877), (129, 98748), (142, 98655), (143, 98649), (153, 98586), (154, 98580), (165, 98484), (166, 98478), (175, 98367), (185, 98295), (189, 98262), (190, 98253), (201, 98133), (203, 98115), (212, 98016), (213, 98013), (217, 97992), (224, 97938), (231, 97902),

Gene: ArcherS7\_187 Start: 100741, Stop: 98879, Start Num: 7

Candidate Starts for ArcherS7\_187:

(Start: 7 @100741 has 165 MA's), (Start: 17 @100681 has 1 MA's), (Start: 25 @100612 has 1 MA's), (67, 100240), (75, 100198), (78, 100180), (92, 100096), (95, 100072), (97, 100048), (98, 100045), (107, 100000), (111, 99949), (114, 99919), (116, 99907), (129, 99778), (142, 99685), (143, 99679), (153, 99616), (154, 99610), (165, 99514), (166, 99508), (175, 99397), (185, 99325), (189, 99292), (190, 99283), (201, 99163), (203, 99145), (212, 99046), (213, 99043), (217, 99022), (224, 98968), (231, 98932),

Gene: Asterius\_189 Start: 100428, Stop: 98566, Start Num: 7

Candidate Starts for Asterius\_189:

(Start: 7 @100428 has 165 MA's), (Start: 17 @100368 has 1 MA's), (Start: 25 @100299 has 1 MA's), (67, 99927), (75, 99885), (78, 99867), (92, 99783), (95, 99759), (97, 99735), (98, 99732), (107, 99687), (111, 99636), (114, 99606), (116, 99594), (129, 99465), (142, 99372), (143, 99366), (153, 99303), (154, 99297), (165, 99201), (166, 99195), (175, 99084), (185, 99012), (189, 98979), (190, 98970), (201, 98850), (203, 98832), (212, 98733), (213, 98730), (217, 98709), (224, 98655), (231, 98619),

Gene: Astraea\_182 Start: 99803, Stop: 97941, Start Num: 7

Candidate Starts for Astraea\_182:

(Start: 7 @99803 has 165 MA's), (Start: 17 @99743 has 1 MA's), (Start: 25 @99674 has 1 MA's), (67, 99302), (75, 99260), (78, 99242), (92, 99158), (95, 99134), (97, 99110), (98, 99107), (107, 99062), (111, 99011), (114, 98981), (116, 98969), (129, 98840), (142, 98747), (143, 98741), (153, 98678), (154, 98672), (165, 98576), (166, 98570), (175, 98459), (185, 98387), (189, 98354), (190, 98345), (201, 98225), (203, 98207), (212, 98108), (213, 98105), (217, 98084), (224, 98030), (231, 97994),

Gene: Atlantean\_187 Start: 99711, Stop: 97849, Start Num: 7

Candidate Starts for Atlantean\_187:

(Start: 7 @99711 has 165 MA's), (Start: 17 @99651 has 1 MA's), (Start: 25 @99582 has 1 MA's), (67, 99210), (75, 99168), (78, 99150), (92, 99066), (95, 99042), (97, 99018), (98, 99015), (107, 98970), (111, 98919), (114, 98889), (116, 98877), (129, 98748), (142, 98655), (143, 98649), (153, 98586), (154, 98580), (165, 98484), (166, 98478), (175, 98367), (185, 98295), (189, 98262), (190, 98253),



(201, 98133), (203, 98115), (212, 98016), (213, 98013), (217, 97992), (224, 97938), (231, 97902),

Gene: Audrick\_191 Start: 100393, Stop: 98531, Start Num: 7

Candidate Starts for Audrick\_191:

(Start: 7 @100393 has 165 MA's), (Start: 17 @100333 has 1 MA's), (Start: 25 @100264 has 1 MA's), (67, 99892), (75, 99850), (78, 99832), (92, 99748), (95, 99724), (97, 99700), (98, 99697), (107, 99652), (111, 99601), (114, 99571), (116, 99559), (129, 99430), (142, 99337), (143, 99331), (153, 99268), (154, 99262), (165, 99166), (166, 99160), (175, 99049), (185, 98977), (189, 98944), (190, 98935), (201, 98815), (203, 98797), (212, 98698), (213, 98695), (217, 98674), (224, 98620), (231, 98584),

Gene: Ava3\_187 Start: 100454, Stop: 98592, Start Num: 7

Candidate Starts for Ava3\_187:

(Start: 7 @100454 has 165 MA's), (Start: 17 @100394 has 1 MA's), (Start: 25 @100325 has 1 MA's), (67, 99953), (75, 99911), (78, 99893), (92, 99809), (95, 99785), (97, 99761), (98, 99758), (107, 99713), (111, 99662), (114, 99632), (116, 99620), (129, 99491), (142, 99398), (143, 99392), (153, 99329), (154, 99323), (165, 99227), (166, 99221), (175, 99110), (185, 99038), (189, 99005), (190, 98996), (201, 98876), (203, 98858), (212, 98759), (213, 98756), (217, 98735), (224, 98681), (231, 98645),

Gene: BRock\_117 Start: 63285, Stop: 64868, Start Num: 47

Candidate Starts for BRock\_117:

(Start: 47 @63285 has 3 MA's), (50, 63294), (56, 63360), (57, 63366), (69, 63447), (71, 63456), (80, 63519), (81, 63522), (82, 63525), (83, 63540), (88, 63606), (99, 63669), (100, 63672), (101, 63681), (108, 63735), (110, 63759), (115, 63810), (121, 63891), (124, 63921), (126, 63936), (128, 63948), (133, 63987), (137, 64023), (139, 64044), (144, 64071), (146, 64086), (150, 64107), (155, 64149), (168, 64257), (172, 64305), (175, 64347), (177, 64356), (186, 64428), (190, 64461), (191, 64479), (200, 64572), (202, 64584), (210, 64671), (211, 64683), (214, 64704), (222, 64758), (224, 64770), (236, 64827),

Gene: Babyland\_190 Start: 100488, Stop: 98626, Start Num: 7

Candidate Starts for Babyland\_190:

(Start: 7 @100488 has 165 MA's), (Start: 17 @100428 has 1 MA's), (Start: 25 @100359 has 1 MA's), (67, 99987), (75, 99945), (78, 99927), (92, 99843), (95, 99819), (97, 99795), (98, 99792), (107, 99747), (111, 99696), (114, 99666), (116, 99654), (129, 99525), (142, 99432), (143, 99426), (153, 99363), (154, 99357), (165, 99261), (166, 99255), (175, 99144), (185, 99072), (189, 99039), (190, 99030), (201, 98910), (203, 98892), (212, 98793), (213, 98790), (217, 98769), (224, 98715), (231, 98679),

Gene: BackyardAgain\_185 Start: 99189, Stop: 97327, Start Num: 7

Candidate Starts for BackyardAgain\_185:

(Start: 7 @99189 has 165 MA's), (Start: 17 @99129 has 1 MA's), (Start: 25 @99060 has 1 MA's), (67, 98688), (75, 98646), (78, 98628), (92, 98544), (95, 98520), (97, 98496), (98, 98493), (107, 98448), (111, 98397), (114, 98367), (116, 98355), (129, 98226), (142, 98133), (143, 98127), (153, 98064), (154, 98058), (165, 97962), (166, 97956), (175, 97845), (185, 97773), (189, 97740), (190, 97731), (201, 97611), (203, 97593), (212, 97494), (213, 97491), (217, 97470), (224, 97416), (231, 97380),

Gene: BadAgartude\_182 Start: 100194, Stop: 98332, Start Num: 7

Candidate Starts for BadAgartude\_182:

(Start: 7 @100194 has 165 MA's), (Start: 17 @100134 has 1 MA's), (Start: 25 @100065 has 1 MA's), (67, 99693), (75, 99651), (78, 99633), (92, 99549), (95, 99525), (97, 99501), (98, 99498), (107, 99453), (111, 99402), (114, 99372), (116, 99360), (129, 99231), (142, 99138), (143, 99132), (153, 99069), (154, 99063), (165, 98967), (166, 98961), (175, 98850), (185, 98778), (189, 98745), (190, 98736), (201, 98616), (203, 98598), (212, 98499), (213, 98496), (217, 98475), (224, 98421), (231, 98385),

Gene: BananaFence\_185 Start: 100432, Stop: 98570, Start Num: 7

Candidate Starts for BananaFence\_185:

(Start: 7 @100432 has 165 MA's), (Start: 17 @100372 has 1 MA's), (Start: 25 @100303 has 1 MA's), (67, 99931), (75, 99889), (78, 99871), (92, 99787), (95, 99763), (97, 99739), (98, 99736), (107, 99691), (111, 99640), (114, 99610), (116, 99598), (129, 99469), (142, 99376), (143, 99370), (153, 99307), (154, 99301), (165, 99205), (166, 99199), (175, 99088), (185, 99016), (189, 98983), (190, 98974), (201, 98854), (203, 98836), (212, 98737), (213, 98734), (217, 98713), (224, 98659), (231, 98623),

Gene: Bangla1971\_188 Start: 100101, Stop: 98239, Start Num: 7

Candidate Starts for Bangla1971\_188:

(Start: 7 @100101 has 165 MA's), (Start: 17 @100041 has 1 MA's), (Start: 25 @99972 has 1 MA's), (67, 99600), (75, 99558), (78, 99540), (92, 99456), (95, 99432), (97, 99408), (98, 99405), (107, 99360), (111, 99309), (114, 99279), (116, 99267), (129, 99138), (142, 99045), (143, 99039), (153, 98976), (154, 98970), (165, 98874), (166, 98868), (175, 98757), (185, 98685), (189, 98652), (190, 98643), (201, 98523), (203, 98505), (212, 98406), (213, 98403), (217, 98382), (224, 98328), (231, 98292),

Gene: Basquiat\_186 Start: 100015, Stop: 98153, Start Num: 7

Candidate Starts for Basquiat\_186:

(Start: 7 @100015 has 165 MA's), (Start: 17 @99955 has 1 MA's), (Start: 25 @99886 has 1 MA's), (67, 99514), (75, 99472), (78, 99454), (92, 99370), (95, 99346), (97, 99322), (98, 99319), (107, 99274), (111, 99223), (114, 99193), (116, 99181), (129, 99052), (142, 98959), (143, 98953), (153, 98890), (154, 98884), (165, 98788), (166, 98782), (175, 98671), (185, 98599), (189, 98566), (190, 98557), (201, 98437), (203, 98419), (212, 98320), (213, 98317), (217, 98296), (224, 98242), (231, 98206),

Gene: BeanWater\_179 Start: 99755, Stop: 97893, Start Num: 7

Candidate Starts for BeanWater\_179:

(Start: 7 @99755 has 165 MA's), (Start: 17 @99695 has 1 MA's), (Start: 25 @99626 has 1 MA's), (67, 99254), (75, 99212), (78, 99194), (92, 99110), (97, 99062), (98, 99059), (107, 99014), (111, 98963), (114, 98933), (116, 98921), (129, 98792), (142, 98699), (143, 98693), (153, 98630), (154, 98624), (165, 98528), (166, 98522), (175, 98411), (185, 98339), (189, 98306), (190, 98297), (201, 98177), (203, 98159), (212, 98060), (213, 98057), (217, 98036), (224, 97982), (231, 97946),

Gene: Beleetus\_123 Start: 66657, Stop: 68228, Start Num: 47

Candidate Starts for Beleetus\_123:

(Start: 47 @66657 has 3 MA's), (57, 66738), (58, 66744), (59, 66762), (64, 66807), (70, 66822), (71, 66828), (80, 66891), (83, 66909), (88, 66975), (100, 67041), (101, 67050), (110, 67128), (115, 67179), (122, 67281), (125, 67302), (126, 67305), (133, 67356), (134, 67365), (135, 67380), (137, 67392), (144, 67440), (146, 67455), (177, 67725), (180, 67737), (181, 67761), (183, 67767), (187, 67800), (191, 67848), (202, 67953), (216, 68085), (225, 68142), (227, 68154), (229, 68160), (238, 68208),

Gene: Belieber\_182 Start: 99329, Stop: 97467, Start Num: 7

Candidate Starts for Belieber\_182:

(Start: 7 @99329 has 165 MA's), (Start: 17 @99269 has 1 MA's), (Start: 25 @99200 has 1 MA's), (67, 98828), (75, 98786), (78, 98768), (92, 98684), (95, 98660), (97, 98636), (98, 98633), (107, 98588), (111, 98537), (114, 98507), (116, 98495), (129, 98366), (142, 98273), (143, 98267), (153, 98204), (154, 98198), (165, 98102), (166, 98096), (175, 97985), (185, 97913), (189, 97880), (190, 97871), (201, 97751), (203, 97733), (212, 97634), (213, 97631), (217, 97610), (224, 97556), (231, 97520),

Gene: BigCity\_196 Start: 103320, Stop: 101458, Start Num: 7

Candidate Starts for BigCity\_196:

(Start: 7 @103320 has 165 MA's), (Start: 17 @103260 has 1 MA's), (Start: 25 @103191 has 1 MA's), (67, 102819), (75, 102777), (78, 102759), (92, 102675), (95, 102651), (97, 102627), (98, 102624), (107, 102579), (111, 102528), (114, 102498), (116, 102486), (129, 102357), (142, 102264), (143, 102258), (153, 102195), (154, 102189), (165, 102093), (166, 102087), (175, 101976), (179, 101961),

(185, 101904), (189, 101871), (190, 101862), (201, 101742), (203, 101724), (212, 101625), (213, 101622), (217, 101601), (224, 101547), (231, 101511),

Gene: Bigswole\_191 Start: 102752, Stop: 100890, Start Num: 7

Candidate Starts for Bigswole\_191:

(Start: 7 @102752 has 165 MA's), (Start: 17 @102692 has 1 MA's), (Start: 25 @102623 has 1 MA's), (67, 102251), (75, 102209), (78, 102191), (92, 102107), (95, 102083), (97, 102059), (98, 102056), (107, 102011), (111, 101960), (114, 101930), (116, 101918), (129, 101789), (142, 101696), (143, 101690), (153, 101627), (154, 101621), (165, 101525), (166, 101519), (175, 101408), (185, 101336), (189, 101303), (190, 101294), (201, 101174), (203, 101156), (212, 101057), (213, 101054), (217, 101033), (224, 100979), (231, 100943),

Gene: Bipolarisk\_186 Start: 100722, Stop: 98860, Start Num: 7

Candidate Starts for Bipolarisk\_186:

(Start: 7 @100722 has 165 MA's), (Start: 17 @100662 has 1 MA's), (Start: 25 @100593 has 1 MA's), (67, 100221), (75, 100179), (78, 100161), (92, 100077), (95, 100053), (97, 100029), (98, 100026), (107, 99981), (111, 99930), (114, 99900), (116, 99888), (129, 99759), (142, 99666), (143, 99660), (153, 99597), (154, 99591), (165, 99495), (166, 99489), (175, 99378), (185, 99306), (189, 99273), (190, 99264), (201, 99144), (203, 99126), (212, 99027), (213, 99024), (217, 99003), (224, 98949), (231, 98913),

Gene: Blackbrain\_185 Start: 100557, Stop: 98755, Start Num: 17

Candidate Starts for Blackbrain\_185:

(Start: 7 @100617 has 165 MA's), (Start: 17 @100557 has 1 MA's), (Start: 25 @100488 has 1 MA's), (67, 100116), (75, 100074), (78, 100056), (92, 99972), (95, 99948), (97, 99924), (98, 99921), (107, 99876), (111, 99825), (114, 99795), (116, 99783), (129, 99654), (142, 99561), (143, 99555), (153, 99492), (154, 99486), (165, 99390), (166, 99384), (175, 99273), (185, 99201), (189, 99168), (190, 99159), (201, 99039), (203, 99021), (212, 98922), (213, 98919), (217, 98898), (224, 98844), (231, 98808),

Gene: Blackdragon\_182 Start: 100053, Stop: 98191, Start Num: 7

Candidate Starts for Blackdragon\_182:

(Start: 7 @100053 has 165 MA's), (Start: 17 @99993 has 1 MA's), (Start: 25 @99924 has 1 MA's), (67, 99552), (75, 99510), (78, 99492), (92, 99408), (95, 99384), (97, 99360), (98, 99357), (107, 99312), (111, 99261), (114, 99231), (116, 99219), (129, 99090), (142, 98997), (143, 98991), (153, 98928), (154, 98922), (165, 98826), (166, 98820), (175, 98709), (185, 98637), (189, 98604), (190, 98595), (201, 98475), (203, 98457), (212, 98358), (213, 98355), (217, 98334), (224, 98280), (231, 98244),

Gene: Bonray\_190 Start: 102125, Stop: 100263, Start Num: 7

Candidate Starts for Bonray\_190:

(Start: 7 @102125 has 165 MA's), (Start: 17 @102065 has 1 MA's), (Start: 25 @101996 has 1 MA's), (67, 101624), (75, 101582), (78, 101564), (92, 101480), (95, 101456), (97, 101432), (98, 101429), (107, 101384), (111, 101333), (114, 101303), (116, 101291), (129, 101162), (142, 101069), (143, 101063), (153, 101000), (154, 100994), (165, 100898), (166, 100892), (175, 100781), (185, 100709), (189, 100676), (190, 100667), (201, 100547), (203, 100529), (212, 100430), (213, 100427), (217, 100406), (224, 100352), (231, 100316),

Gene: Bread\_183 Start: 100123, Stop: 98261, Start Num: 7

Candidate Starts for Bread\_183:

(Start: 7 @100123 has 165 MA's), (Start: 17 @100063 has 1 MA's), (Start: 25 @99994 has 1 MA's), (67, 99622), (75, 99580), (78, 99562), (92, 99478), (95, 99454), (97, 99430), (98, 99427), (107, 99382), (110, 99343), (111, 99331), (114, 99301), (116, 99289), (129, 99160), (142, 99067), (143, 99061), (153, 98998), (154, 98992), (165, 98896), (166, 98890), (175, 98779), (185, 98707), (189, 98674),

(190, 98665), (201, 98545), (203, 98527), (212, 98428), (213, 98425), (217, 98404), (224, 98350), (231, 98314),

Gene: Breeniome\_187 Start: 99754, Stop: 97892, Start Num: 7

Candidate Starts for Breeniome\_187:

(Start: 7 @99754 has 165 MA's), (Start: 17 @99694 has 1 MA's), (Start: 25 @99625 has 1 MA's), (67, 99253), (75, 99211), (78, 99193), (92, 99109), (95, 99085), (97, 99061), (98, 99058), (107, 99013), (111, 98962), (114, 98932), (116, 98920), (129, 98791), (142, 98698), (143, 98692), (153, 98629), (154, 98623), (165, 98527), (166, 98521), (175, 98410), (185, 98338), (189, 98305), (190, 98296), (201, 98176), (203, 98158), (212, 98059), (213, 98056), (217, 98035), (224, 97981), (231, 97945),

Gene: Burrough\_190 Start: 101968, Stop: 100106, Start Num: 7

Candidate Starts for Burrough\_190:

(Start: 7 @101968 has 165 MA's), (Start: 17 @101908 has 1 MA's), (Start: 25 @101839 has 1 MA's), (67, 101467), (75, 101425), (78, 101407), (92, 101323), (95, 101299), (97, 101275), (98, 101272), (107, 101227), (111, 101176), (114, 101146), (116, 101134), (129, 101005), (142, 100912), (143, 100906), (153, 100843), (154, 100837), (165, 100741), (166, 100735), (175, 100624), (185, 100552), (189, 100519), (190, 100510), (201, 100390), (203, 100372), (212, 100273), (213, 100270), (217, 100249), (224, 100195), (231, 100159),

Gene: Bxz1\_179 Start: 103167, Stop: 101305, Start Num: 7

Candidate Starts for Bxz1\_179:

(Start: 7 @103167 has 165 MA's), (Start: 17 @103107 has 1 MA's), (Start: 25 @103038 has 1 MA's), (67, 102666), (75, 102624), (78, 102606), (92, 102522), (95, 102498), (97, 102474), (98, 102471), (107, 102426), (111, 102375), (114, 102345), (116, 102333), (129, 102204), (142, 102111), (143, 102105), (153, 102042), (154, 102036), (165, 101940), (166, 101934), (175, 101823), (185, 101751), (189, 101718), (190, 101709), (201, 101589), (203, 101571), (212, 101472), (213, 101469), (217, 101448), (224, 101394), (231, 101358),

Gene: Cactojaque\_184 Start: 100035, Stop: 98173, Start Num: 7

Candidate Starts for Cactojaque\_184:

(Start: 7 @100035 has 165 MA's), (Start: 17 @99975 has 1 MA's), (Start: 25 @99906 has 1 MA's), (67, 99534), (75, 99492), (78, 99474), (92, 99390), (95, 99366), (97, 99342), (98, 99339), (107, 99294), (111, 99243), (114, 99213), (116, 99201), (129, 99072), (142, 98979), (143, 98973), (153, 98910), (154, 98904), (165, 98808), (166, 98802), (175, 98691), (185, 98619), (189, 98586), (190, 98577), (201, 98457), (203, 98439), (212, 98340), (213, 98337), (217, 98316), (224, 98262), (231, 98226),

Gene: Cali\_182 Start: 101379, Stop: 99646, Start Num: 25

Candidate Starts for Cali\_182:

(Start: 7 @101508 has 165 MA's), (Start: 17 @101448 has 1 MA's), (Start: 25 @101379 has 1 MA's), (67, 101007), (75, 100965), (78, 100947), (92, 100863), (95, 100839), (97, 100815), (98, 100812), (107, 100767), (111, 100716), (114, 100686), (116, 100674), (129, 100545), (142, 100452), (143, 100446), (153, 100383), (154, 100377), (165, 100281), (166, 100275), (175, 100164), (185, 100092), (189, 100059), (190, 100050), (201, 99930), (203, 99912), (212, 99813), (213, 99810), (217, 99789), (224, 99735), (231, 99699),

Gene: Capablanca\_192 Start: 102720, Stop: 100858, Start Num: 7

Candidate Starts for Capablanca\_192:

(Start: 7 @102720 has 165 MA's), (Start: 17 @102660 has 1 MA's), (Start: 25 @102591 has 1 MA's), (67, 102219), (75, 102177), (78, 102159), (92, 102075), (95, 102051), (97, 102027), (98, 102024), (107, 101979), (111, 101928), (114, 101898), (116, 101886), (129, 101757), (142, 101664), (143, 101658), (153, 101595), (154, 101589), (165, 101493), (166, 101487), (175, 101376), (185, 101304), (189, 101271), (190, 101262), (201, 101142), (203, 101124), (212, 101025), (213, 101022), (217,

101001), (224, 100947), (231, 100911),

Gene: Caravan\_179 Start: 100429, Stop: 98567, Start Num: 7

Candidate Starts for Caravan\_179:

(Start: 7 @100429 has 165 MA's), (Start: 17 @100369 has 1 MA's), (Start: 25 @100300 has 1 MA's), (67, 99928), (75, 99886), (78, 99868), (92, 99784), (95, 99760), (97, 99736), (98, 99733), (107, 99688), (111, 99637), (114, 99607), (116, 99595), (129, 99466), (142, 99373), (143, 99367), (153, 99304), (154, 99298), (165, 99202), (166, 99196), (175, 99085), (185, 99013), (189, 98980), (190, 98971), (201, 98851), (203, 98833), (212, 98734), (213, 98731), (217, 98710), (224, 98656), (231, 98620),

Gene: Catera\_183 Start: 99715, Stop: 97853, Start Num: 7

Candidate Starts for Catera\_183:

(Start: 7 @99715 has 165 MA's), (Start: 17 @99655 has 1 MA's), (Start: 25 @99586 has 1 MA's), (67, 99214), (75, 99172), (78, 99154), (92, 99070), (95, 99046), (97, 99022), (98, 99019), (107, 98974), (111, 98923), (114, 98893), (116, 98881), (129, 98752), (142, 98659), (143, 98653), (153, 98590), (154, 98584), (165, 98488), (166, 98482), (175, 98371), (185, 98299), (189, 98266), (190, 98257), (201, 98137), (203, 98119), (212, 98020), (213, 98017), (217, 97996), (224, 97942), (231, 97906),

Gene: Chargie21\_186 Start: 100015, Stop: 98153, Start Num: 7

Candidate Starts for Chargie21\_186:

(Start: 7 @100015 has 165 MA's), (Start: 17 @99955 has 1 MA's), (Start: 25 @99886 has 1 MA's), (67, 99514), (75, 99472), (78, 99454), (92, 99370), (95, 99346), (97, 99322), (98, 99319), (107, 99274), (111, 99223), (114, 99193), (116, 99181), (129, 99052), (142, 98959), (143, 98953), (153, 98890), (154, 98884), (165, 98788), (166, 98782), (175, 98671), (185, 98599), (189, 98566), (190, 98557), (201, 98437), (203, 98419), (212, 98320), (213, 98317), (217, 98296), (224, 98242), (231, 98206),

Gene: CharlieB\_181 Start: 99957, Stop: 98095, Start Num: 7

Candidate Starts for CharlieB\_181:

(Start: 7 @99957 has 165 MA's), (Start: 17 @99897 has 1 MA's), (Start: 25 @99828 has 1 MA's), (67, 99456), (75, 99414), (78, 99396), (92, 99312), (95, 99288), (97, 99264), (98, 99261), (107, 99216), (111, 99165), (114, 99135), (116, 99123), (129, 98994), (142, 98901), (143, 98895), (153, 98832), (154, 98826), (165, 98730), (166, 98724), (175, 98613), (185, 98541), (189, 98508), (190, 98499), (201, 98379), (203, 98361), (212, 98262), (213, 98259), (217, 98238), (224, 98184), (231, 98148),

Gene: ChaylaJr\_186 Start: 100443, Stop: 98581, Start Num: 7

Candidate Starts for ChaylaJr\_186:

(Start: 7 @100443 has 165 MA's), (Start: 17 @100383 has 1 MA's), (Start: 25 @100314 has 1 MA's), (67, 99942), (75, 99900), (78, 99882), (92, 99798), (95, 99774), (97, 99750), (98, 99747), (107, 99702), (111, 99651), (114, 99621), (116, 99609), (129, 99480), (142, 99387), (143, 99381), (153, 99318), (154, 99312), (165, 99216), (166, 99210), (175, 99099), (185, 99027), (189, 98994), (190, 98985), (201, 98865), (203, 98847), (212, 98748), (213, 98745), (217, 98724), (224, 98670), (231, 98634),

Gene: CherryTomatoes\_133 Start: 94182, Stop: 92308, Start Num: 7

Candidate Starts for CherryTomatoes\_133:

(Start: 7 @94182 has 165 MA's), (19, 94110), (26, 94053), (62, 93717), (67, 93690), (80, 93615), (87, 93549), (92, 93537), (93, 93534), (101, 93471), (102, 93468), (105, 93450), (111, 93390), (113, 93369), (137, 93153), (143, 93120), (145, 93099), (153, 93057), (165, 92955), (175, 92838), (185, 92766), (187, 92751), (188, 92742), (189, 92733), (190, 92724), (201, 92604), (203, 92586), (204, 92577), (205, 92568), (212, 92487), (213, 92484), (229, 92388), (245, 92316),

Gene: ChickenPhender\_185 Start: 100162, Stop: 98300, Start Num: 7

Candidate Starts for ChickenPhender\_185:

(Start: 7 @100162 has 165 MA's), (Start: 17 @100102 has 1 MA's), (Start: 25 @100033 has 1 MA's), (67, 99661), (75, 99619), (78, 99601), (92, 99517), (95, 99493), (97, 99469), (98, 99466), (107, 99421), (111, 99370), (114, 99340), (116, 99328), (129, 99199), (142, 99106), (143, 99100), (153, 99037), (154, 99031), (165, 98935), (166, 98929), (175, 98818), (185, 98746), (189, 98713), (190, 98704), (201, 98584), (203, 98566), (212, 98467), (213, 98464), (217, 98443), (224, 98389), (231, 98353),

Gene: Chomp\_187 Start: 101000, Stop: 99138, Start Num: 7

Candidate Starts for Chomp\_187:

(Start: 7 @101000 has 165 MA's), (Start: 17 @100940 has 1 MA's), (Start: 25 @100871 has 1 MA's), (67, 100499), (75, 100457), (78, 100439), (92, 100355), (95, 100331), (97, 100307), (98, 100304), (107, 100259), (111, 100208), (114, 100178), (116, 100166), (129, 100037), (142, 99944), (143, 99938), (153, 99875), (154, 99869), (165, 99773), (166, 99767), (175, 99656), (185, 99584), (189, 99551), (190, 99542), (201, 99422), (203, 99404), (212, 99305), (213, 99302), (217, 99281), (224, 99227), (231, 99191),

Gene: CindyLou\_189 Start: 101743, Stop: 99881, Start Num: 7

Candidate Starts for CindyLou\_189:

(Start: 7 @101743 has 165 MA's), (Start: 17 @101683 has 1 MA's), (Start: 25 @101614 has 1 MA's), (67, 101242), (75, 101200), (78, 101182), (92, 101098), (95, 101074), (97, 101050), (98, 101047), (107, 101002), (111, 100951), (114, 100921), (116, 100909), (129, 100780), (142, 100687), (143, 100681), (153, 100618), (154, 100612), (165, 100516), (166, 100510), (175, 100399), (185, 100327), (189, 100294), (190, 100285), (201, 100165), (203, 100147), (212, 100048), (213, 100045), (217, 100024), (224, 99970), (231, 99934),

Gene: Concombres\_192 Start: 102852, Stop: 100990, Start Num: 7

Candidate Starts for Concombres\_192:

(Start: 7 @102852 has 165 MA's), (Start: 17 @102792 has 1 MA's), (Start: 25 @102723 has 1 MA's), (67, 102351), (75, 102309), (78, 102291), (92, 102207), (95, 102183), (97, 102159), (98, 102156), (107, 102111), (111, 102060), (114, 102030), (116, 102018), (129, 101889), (142, 101796), (143, 101790), (153, 101727), (154, 101721), (165, 101625), (166, 101619), (175, 101508), (185, 101436), (189, 101403), (190, 101394), (201, 101274), (203, 101256), (212, 101157), (213, 101154), (217, 101133), (224, 101079), (231, 101043),

Gene: DTDevon\_190 Start: 102235, Stop: 100373, Start Num: 7

Candidate Starts for DTDevon\_190:

(Start: 7 @102235 has 165 MA's), (Start: 17 @102175 has 1 MA's), (Start: 25 @102106 has 1 MA's), (67, 101734), (75, 101692), (78, 101674), (92, 101590), (95, 101566), (97, 101542), (98, 101539), (107, 101494), (111, 101443), (114, 101413), (116, 101401), (129, 101272), (142, 101179), (143, 101173), (153, 101110), (154, 101104), (165, 101008), (166, 101002), (175, 100891), (185, 100819), (189, 100786), (190, 100777), (201, 100657), (203, 100639), (212, 100540), (213, 100537), (217, 100516), (224, 100462), (231, 100426),

Gene: Daffodil\_192 Start: 101022, Stop: 99160, Start Num: 7

Candidate Starts for Daffodil\_192:

(Start: 7 @101022 has 165 MA's), (Start: 17 @100962 has 1 MA's), (Start: 25 @100893 has 1 MA's), (67, 100521), (75, 100479), (78, 100461), (92, 100377), (95, 100353), (97, 100329), (98, 100326), (107, 100281), (111, 100230), (114, 100200), (116, 100188), (129, 100059), (142, 99966), (143, 99960), (153, 99897), (154, 99891), (165, 99795), (166, 99789), (175, 99678), (185, 99606), (189, 99573), (190, 99564), (201, 99444), (203, 99426), (212, 99327), (213, 99324), (217, 99303), (224, 99249), (231, 99213),

Gene: Dandelion\_195 Start: 104557, Stop: 102695, Start Num: 7

Candidate Starts for Dandelion\_195:

(Start: 7 @104557 has 165 MA's), (Start: 17 @104497 has 1 MA's), (Start: 25 @104428 has 1 MA's), (67, 104056), (75, 104014), (78, 103996), (92, 103912), (95, 103888), (97, 103864), (98, 103861), (107, 103816), (111, 103765), (114, 103735), (116, 103723), (129, 103594), (142, 103501), (143, 103495), (153, 103432), (154, 103426), (165, 103330), (166, 103324), (175, 103213), (185, 103141), (189, 103108), (190, 103099), (201, 102979), (203, 102961), (212, 102862), (213, 102859), (217, 102838), (224, 102784), (231, 102748),

Gene: Darko\_187 Start: 100436, Stop: 98574, Start Num: 7

Candidate Starts for Darko\_187:

(Start: 7 @100436 has 165 MA's), (Start: 17 @100376 has 1 MA's), (Start: 25 @100307 has 1 MA's), (67, 99935), (75, 99893), (78, 99875), (92, 99791), (95, 99767), (97, 99743), (98, 99740), (107, 99695), (111, 99644), (114, 99614), (116, 99602), (129, 99473), (142, 99380), (143, 99374), (153, 99311), (154, 99305), (165, 99209), (166, 99203), (175, 99092), (185, 99020), (189, 98987), (190, 98978), (201, 98858), (203, 98840), (212, 98741), (213, 98738), (217, 98717), (224, 98663), (231, 98627),

Gene: DeejaClivia\_176 Start: 99384, Stop: 97522, Start Num: 7

Candidate Starts for DeejaClivia\_176:

(Start: 7 @99384 has 165 MA's), (Start: 17 @99324 has 1 MA's), (Start: 25 @99255 has 1 MA's), (67, 98883), (75, 98841), (78, 98823), (92, 98739), (95, 98715), (97, 98691), (98, 98688), (107, 98643), (111, 98592), (114, 98562), (116, 98550), (129, 98421), (142, 98328), (143, 98322), (153, 98259), (154, 98253), (165, 98157), (166, 98151), (169, 98127), (175, 98040), (185, 97968), (189, 97935), (190, 97926), (201, 97806), (203, 97788), (212, 97689), (213, 97686), (217, 97665), (224, 97611), (231, 97575),

Gene: Delilah\_186 Start: 101140, Stop: 99278, Start Num: 7

Candidate Starts for Delilah\_186:

(Start: 7 @101140 has 165 MA's), (Start: 17 @101080 has 1 MA's), (Start: 25 @101011 has 1 MA's), (67, 100639), (75, 100597), (78, 100579), (92, 100495), (95, 100471), (97, 100447), (98, 100444), (107, 100399), (111, 100348), (114, 100318), (116, 100306), (129, 100177), (142, 100084), (143, 100078), (153, 100015), (154, 100009), (165, 99913), (166, 99907), (175, 99796), (185, 99724), (189, 99691), (190, 99682), (201, 99562), (203, 99544), (212, 99445), (213, 99442), (217, 99421), (224, 99367), (231, 99331),

Gene: Delylah\_189 Start: 101120, Stop: 99258, Start Num: 7

Candidate Starts for Delylah\_189:

(Start: 7 @101120 has 165 MA's), (Start: 17 @101060 has 1 MA's), (Start: 25 @100991 has 1 MA's), (67, 100619), (75, 100577), (78, 100559), (92, 100475), (95, 100451), (97, 100427), (98, 100424), (107, 100379), (111, 100328), (114, 100298), (116, 100286), (129, 100157), (142, 100064), (143, 100058), (153, 99995), (154, 99989), (165, 99893), (166, 99887), (175, 99776), (185, 99704), (189, 99671), (190, 99662), (201, 99542), (203, 99524), (212, 99425), (213, 99422), (217, 99401), (224, 99347), (231, 99311),

Gene: Demodog\_193 Start: 102861, Stop: 100999, Start Num: 7

Candidate Starts for Demodog\_193:

(Start: 7 @102861 has 165 MA's), (Start: 17 @102801 has 1 MA's), (Start: 25 @102732 has 1 MA's), (67, 102360), (75, 102318), (78, 102300), (92, 102216), (95, 102192), (97, 102168), (98, 102165), (107, 102120), (111, 102069), (114, 102039), (116, 102027), (129, 101898), (142, 101805), (143, 101799), (153, 101736), (154, 101730), (165, 101634), (166, 101628), (175, 101517), (185, 101445), (189, 101412), (190, 101403), (201, 101283), (203, 101265), (212, 101166), (213, 101163), (217, 101142), (224, 101088), (231, 101052),

Gene: Derek\_185 Start: 100763, Stop: 98901, Start Num: 7

Candidate Starts for Derek\_185:

(Start: 7 @100763 has 165 MA's), (Start: 17 @100703 has 1 MA's), (Start: 25 @100634 has 1 MA's), (67, 100262), (75, 100220), (78, 100202), (92, 100118), (95, 100094), (97, 100070), (98, 100067), (107, 100022), (111, 99971), (114, 99941), (116, 99929), (129, 99800), (142, 99707), (143, 99701), (153, 99638), (154, 99632), (165, 99536), (166, 99530), (175, 99419), (185, 99347), (189, 99314), (190, 99305), (201, 99185), (203, 99167), (212, 99068), (213, 99065), (217, 99044), (224, 98990), (231, 98954),

Gene: Dietrick\_178 Start: 99745, Stop: 97883, Start Num: 7

Candidate Starts for Dietrick\_178:

(Start: 7 @99745 has 165 MA's), (Start: 17 @99685 has 1 MA's), (Start: 25 @99616 has 1 MA's), (67, 99244), (75, 99202), (78, 99184), (92, 99100), (95, 99076), (97, 99052), (98, 99049), (107, 99004), (111, 98953), (114, 98923), (116, 98911), (129, 98782), (142, 98689), (143, 98683), (153, 98620), (154, 98614), (165, 98518), (166, 98512), (175, 98401), (185, 98329), (189, 98296), (190, 98287), (201, 98167), (203, 98149), (212, 98050), (213, 98047), (217, 98026), (224, 97972), (231, 97936),

Gene: DirtMonster\_181 Start: 100505, Stop: 98643, Start Num: 7

Candidate Starts for DirtMonster\_181:

(Start: 7 @100505 has 165 MA's), (Start: 17 @100445 has 1 MA's), (Start: 25 @100376 has 1 MA's), (67, 100004), (75, 99962), (78, 99944), (92, 99860), (95, 99836), (97, 99812), (98, 99809), (107, 99764), (111, 99713), (114, 99683), (116, 99671), (129, 99542), (142, 99449), (143, 99443), (153, 99380), (154, 99374), (165, 99278), (166, 99272), (175, 99161), (185, 99089), (189, 99056), (190, 99047), (201, 98927), (203, 98909), (212, 98810), (213, 98807), (217, 98786), (224, 98732), (231, 98696),

Gene: Domi\_182 Start: 100787, Stop: 98925, Start Num: 7

Candidate Starts for Domi\_182:

(Start: 7 @100787 has 165 MA's), (Start: 17 @100727 has 1 MA's), (Start: 25 @100658 has 1 MA's), (67, 100286), (75, 100244), (78, 100226), (92, 100142), (95, 100118), (97, 100094), (98, 100091), (107, 100046), (111, 99995), (114, 99965), (116, 99953), (129, 99824), (142, 99731), (143, 99725), (153, 99662), (154, 99656), (165, 99560), (166, 99554), (175, 99443), (185, 99371), (189, 99338), (190, 99329), (201, 99209), (203, 99191), (212, 99092), (213, 99089), (217, 99068), (224, 99014), (231, 98978),

Gene: DrPhinkDaddy\_185 Start: 101801, Stop: 99939, Start Num: 7

Candidate Starts for DrPhinkDaddy\_185:

(Start: 7 @101801 has 165 MA's), (Start: 17 @101741 has 1 MA's), (Start: 25 @101672 has 1 MA's), (37, 101543), (67, 101300), (75, 101258), (78, 101240), (92, 101156), (95, 101132), (97, 101108), (98, 101105), (107, 101060), (111, 101009), (114, 100979), (116, 100967), (129, 100838), (142, 100745), (143, 100739), (153, 100676), (154, 100670), (165, 100574), (166, 100568), (175, 100457), (185, 100385), (189, 100352), (190, 100343), (201, 100223), (203, 100205), (212, 100106), (213, 100103), (217, 100082), (224, 100028), (231, 99992),

Gene: Drazdys\_186 Start: 100778, Stop: 98916, Start Num: 7

Candidate Starts for Drazdys\_186:

(Start: 7 @100778 has 165 MA's), (Start: 17 @100718 has 1 MA's), (Start: 25 @100649 has 1 MA's), (67, 100277), (75, 100235), (78, 100217), (92, 100133), (95, 100109), (97, 100085), (98, 100082), (107, 100037), (111, 99986), (114, 99956), (116, 99944), (129, 99815), (142, 99722), (143, 99716), (153, 99653), (154, 99647), (165, 99551), (166, 99545), (175, 99434), (185, 99362), (189, 99329), (190, 99320), (201, 99200), (203, 99182), (212, 99083), (213, 99080), (217, 99059), (224, 99005), (231, 98969),

Gene: E3\_gp136 Start: 91237, Stop: 89288, Start Num: 5

Candidate Starts for E3\_gp136:



(2, 91276), (5, 91237), (14, 91186), (15, 91177), (23, 91090), (31, 91003), (35, 90979), (40, 90931), (41, 90928), (45, 90877), (46, 90859), (52, 90796), (59, 90739), (63, 90709), (68, 90682), (73, 90658), (79, 90610), (81, 90604), (92, 90544), (103, 90469), (113, 90370), (114, 90361), (118, 90316), (119, 90307), (120, 90304), (127, 90241), (143, 90142), (145, 90121), (148, 90100), (150, 90088), (154, 90073), (160, 90019), (162, 89989), (175, 89854), (176, 89851), (183, 89803), (185, 89782), (188, 89758), (191, 89713), (198, 89653), (219, 89452), (226, 89410), (235, 89368), (243, 89332), (244, 89320),

Gene: ET08\_176 Start: 99991, Stop: 98129, Start Num: 7

Candidate Starts for ET08\_176:

(Start: 7 @99991 has 165 MA's), (Start: 17 @99931 has 1 MA's), (Start: 25 @99862 has 1 MA's), (67, 99490), (75, 99448), (78, 99430), (92, 99346), (95, 99322), (97, 99298), (98, 99295), (107, 99250), (111, 99199), (114, 99169), (116, 99157), (129, 99028), (142, 98935), (143, 98929), (153, 98866), (154, 98860), (165, 98764), (166, 98758), (175, 98647), (185, 98575), (189, 98542), (190, 98533), (201, 98413), (203, 98395), (212, 98296), (213, 98293), (217, 98272), (224, 98218), (231, 98182),

Gene: EasyJones\_192 Start: 101257, Stop: 99395, Start Num: 7

Candidate Starts for EasyJones\_192:

(Start: 7 @101257 has 165 MA's), (Start: 17 @101197 has 1 MA's), (Start: 25 @101128 has 1 MA's), (67, 100756), (75, 100714), (78, 100696), (92, 100612), (95, 100588), (97, 100564), (98, 100561), (107, 100516), (111, 100465), (114, 100435), (116, 100423), (129, 100294), (142, 100201), (143, 100195), (153, 100132), (154, 100126), (165, 100030), (166, 100024), (175, 99913), (185, 99841), (189, 99808), (190, 99799), (201, 99679), (203, 99661), (212, 99562), (213, 99559), (217, 99538), (224, 99484), (231, 99448),

Gene: EggyFarm\_196 Start: 103320, Stop: 101458, Start Num: 7

Candidate Starts for EggyFarm\_196:

(Start: 7 @103320 has 165 MA's), (Start: 17 @103260 has 1 MA's), (Start: 25 @103191 has 1 MA's), (67, 102819), (75, 102777), (78, 102759), (92, 102675), (95, 102651), (97, 102627), (98, 102624), (107, 102579), (111, 102528), (114, 102498), (116, 102486), (129, 102357), (142, 102264), (143, 102258), (153, 102195), (154, 102189), (165, 102093), (166, 102087), (175, 101976), (179, 101961), (185, 101904), (189, 101871), (190, 101862), (201, 101742), (203, 101724), (212, 101625), (213, 101622), (217, 101601), (224, 101547), (231, 101511),

Gene: EmToTheThree\_189 Start: 101657, Stop: 99795, Start Num: 7

Candidate Starts for EmToTheThree\_189:

(Start: 7 @101657 has 165 MA's), (Start: 17 @101597 has 1 MA's), (Start: 25 @101528 has 1 MA's), (67, 101156), (75, 101114), (78, 101096), (92, 101012), (95, 100988), (97, 100964), (98, 100961), (107, 100916), (111, 100865), (114, 100835), (116, 100823), (129, 100694), (142, 100601), (143, 100595), (153, 100532), (154, 100526), (165, 100430), (166, 100424), (175, 100313), (185, 100241), (189, 100208), (190, 100199), (201, 100079), (203, 100061), (212, 99962), (213, 99959), (217, 99938), (224, 99884), (231, 99848),

Gene: EmmaElysia\_191 Start: 101268, Stop: 99406, Start Num: 7

Candidate Starts for EmmaElysia\_191:

(Start: 7 @101268 has 165 MA's), (Start: 17 @101208 has 1 MA's), (Start: 25 @101139 has 1 MA's), (67, 100767), (75, 100725), (78, 100707), (92, 100623), (95, 100599), (97, 100575), (98, 100572), (107, 100527), (111, 100476), (114, 100446), (116, 100434), (129, 100305), (142, 100212), (143, 100206), (153, 100143), (154, 100137), (165, 100041), (166, 100035), (175, 99924), (185, 99852), (189, 99819), (190, 99810), (201, 99690), (203, 99672), (212, 99573), (213, 99570), (217, 99549), (224, 99495), (231, 99459),

Gene: Erdmann\_189 Start: 101132, Stop: 99270, Start Num: 7

Candidate Starts for Erdmann\_189:

(Start: 7 @101132 has 165 MA's), (Start: 17 @101072 has 1 MA's), (Start: 25 @101003 has 1 MA's), (67, 100631), (75, 100589), (78, 100571), (92, 100487), (95, 100463), (97, 100439), (98, 100436), (107, 100391), (111, 100340), (114, 100310), (116, 100298), (129, 100169), (142, 100076), (143, 100070), (153, 100007), (154, 100001), (165, 99905), (166, 99899), (175, 99788), (185, 99716), (189, 99683), (190, 99674), (201, 99554), (203, 99536), (212, 99437), (213, 99434), (217, 99413), (224, 99359), (231, 99323),

Gene: ErnieJ\_181 Start: 99437, Stop: 97575, Start Num: 7

Candidate Starts for ErnieJ\_181:

(Start: 7 @99437 has 165 MA's), (Start: 17 @99377 has 1 MA's), (Start: 25 @99308 has 1 MA's), (67, 98936), (75, 98894), (78, 98876), (92, 98792), (95, 98768), (97, 98744), (98, 98741), (107, 98696), (111, 98645), (114, 98615), (116, 98603), (129, 98474), (142, 98381), (143, 98375), (153, 98312), (154, 98306), (165, 98210), (166, 98204), (175, 98093), (185, 98021), (189, 97988), (190, 97979), (201, 97859), (203, 97841), (212, 97742), (213, 97739), (217, 97718), (224, 97664), (231, 97628),

Gene: Essence\_185 Start: 99990, Stop: 98128, Start Num: 7

Candidate Starts for Essence\_185:

(Start: 7 @99990 has 165 MA's), (Start: 17 @99930 has 1 MA's), (Start: 25 @99861 has 1 MA's), (67, 99489), (75, 99447), (78, 99429), (92, 99345), (95, 99321), (97, 99297), (98, 99294), (107, 99249), (111, 99198), (114, 99168), (116, 99156), (129, 99027), (142, 98934), (143, 98928), (153, 98865), (154, 98859), (165, 98763), (166, 98757), (175, 98646), (185, 98574), (189, 98541), (190, 98532), (201, 98412), (203, 98394), (212, 98295), (213, 98292), (217, 98271), (224, 98217), (231, 98181),

Gene: Ewok\_187 Start: 101051, Stop: 99189, Start Num: 7

Candidate Starts for Ewok\_187:

(Start: 7 @101051 has 165 MA's), (Start: 17 @100991 has 1 MA's), (Start: 25 @100922 has 1 MA's), (67, 100550), (75, 100508), (78, 100490), (92, 100406), (95, 100382), (97, 100358), (98, 100355), (107, 100310), (111, 100259), (114, 100229), (116, 100217), (129, 100088), (142, 99995), (143, 99989), (153, 99926), (154, 99920), (165, 99824), (166, 99818), (175, 99707), (185, 99635), (189, 99602), (190, 99593), (201, 99473), (203, 99455), (212, 99356), (213, 99353), (217, 99332), (224, 99278), (231, 99242),

Gene: Finch\_61 Start: 54692, Stop: 52803, Start Num: 11

Candidate Starts for Finch\_61:

(Start: 11 @54692 has 3 MA's), (12, 54686), (16, 54659), (22, 54584), (24, 54575), (Start: 25 @54572 has 1 MA's), (31, 54497), (34, 54476), (36, 54470), (37, 54449), (39, 54443), (54, 54290), (59, 54245), (60, 54242), (63, 54215), (64, 54197), (67, 54191), (68, 54188), (74, 54152), (75, 54149), (76, 54140), (80, 54113), (85, 54065), (89, 54038), (91, 54035), (93, 54029), (95, 54008), (98, 53981), (101, 53966), (105, 53945), (110, 53894), (111, 53882), (112, 53879), (114, 53849), (116, 53837), (123, 53756), (131, 53708), (132, 53705), (138, 53651), (140, 53642), (145, 53609), (148, 53588), (149, 53579), (153, 53567), (159, 53504), (161, 53474), (164, 53456), (165, 53450), (167, 53441), (170, 53387), (175, 53336), (181, 53291), (182, 53288), (183, 53285), (191, 53192), (196, 53138), (198, 53132), (203, 53075), (206, 53042), (207, 53039), (208, 53036), (217, 52955), (218, 52943), (219, 52934), (223, 52913), (226, 52889), (230, 52871),

Gene: Flabslab\_184 Start: 99579, Stop: 97717, Start Num: 7

Candidate Starts for Flabslab\_184:

(Start: 7 @99579 has 165 MA's), (Start: 17 @99519 has 1 MA's), (Start: 25 @99450 has 1 MA's), (67, 99078), (75, 99036), (78, 99018), (92, 98934), (95, 98910), (97, 98886), (98, 98883), (107, 98838), (111, 98787), (114, 98757), (116, 98745), (129, 98616), (142, 98523), (143, 98517), (153, 98454), (154, 98448), (165, 98352), (166, 98346), (175, 98235), (185, 98163), (189, 98130), (190, 98121), (201, 98001), (203, 97983), (212, 97884), (213, 97881), (217, 97860), (224, 97806), (231, 97770),

Gene: Fludd\_189 Start: 100970, Stop: 99108, Start Num: 7

Candidate Starts for Fludd\_189:

(Start: 7 @100970 has 165 MA's), (Start: 17 @100910 has 1 MA's), (Start: 25 @100841 has 1 MA's), (67, 100469), (75, 100427), (78, 100409), (92, 100325), (95, 100301), (97, 100277), (98, 100274), (107, 100229), (111, 100178), (114, 100148), (116, 100136), (129, 100007), (142, 99914), (143, 99908), (153, 99845), (154, 99839), (165, 99743), (166, 99737), (175, 99626), (185, 99554), (189, 99521), (190, 99512), (201, 99392), (203, 99374), (212, 99275), (213, 99272), (217, 99251), (224, 99197), (231, 99161),

Gene: Fongie\_189 Start: 101149, Stop: 99287, Start Num: 7

Candidate Starts for Fongie\_189:

(Start: 7 @101149 has 165 MA's), (Start: 17 @101089 has 1 MA's), (Start: 25 @101020 has 1 MA's), (67, 100648), (75, 100606), (78, 100588), (92, 100504), (95, 100480), (97, 100456), (98, 100453), (107, 100408), (111, 100357), (114, 100327), (116, 100315), (129, 100186), (142, 100093), (143, 100087), (153, 100024), (154, 100018), (165, 99922), (166, 99916), (175, 99805), (185, 99733), (189, 99700), (190, 99691), (201, 99571), (203, 99553), (212, 99454), (213, 99451), (217, 99430), (224, 99376), (231, 99340),

Gene: FoxtrotP1\_186 Start: 101632, Stop: 99770, Start Num: 7

Candidate Starts for FoxtrotP1\_186:

(Start: 7 @101632 has 165 MA's), (Start: 17 @101572 has 1 MA's), (Start: 25 @101503 has 1 MA's), (67, 101131), (75, 101089), (78, 101071), (92, 100987), (95, 100963), (97, 100939), (98, 100936), (107, 100891), (111, 100840), (114, 100810), (116, 100798), (129, 100669), (142, 100576), (143, 100570), (153, 100507), (154, 100501), (165, 100405), (166, 100399), (175, 100288), (185, 100216), (187, 100201), (189, 100183), (190, 100174), (201, 100054), (203, 100036), (212, 99937), (213, 99934), (217, 99913), (224, 99859), (231, 99823),

Gene: FrayBell\_191 Start: 100755, Stop: 98893, Start Num: 7

Candidate Starts for FrayBell\_191:

(Start: 7 @100755 has 165 MA's), (Start: 17 @100695 has 1 MA's), (Start: 25 @100626 has 1 MA's), (67, 100254), (75, 100212), (78, 100194), (92, 100110), (95, 100086), (97, 100062), (98, 100059), (107, 100014), (111, 99963), (114, 99933), (116, 99921), (129, 99792), (142, 99699), (143, 99693), (153, 99630), (154, 99624), (165, 99528), (166, 99522), (175, 99411), (185, 99339), (189, 99306), (190, 99297), (201, 99177), (203, 99159), (212, 99060), (213, 99057), (217, 99036), (224, 98982), (231, 98946),

Gene: FudgeTart\_183 Start: 100198, Stop: 98336, Start Num: 7

Candidate Starts for FudgeTart\_183:

(Start: 7 @100198 has 165 MA's), (Start: 17 @100138 has 1 MA's), (Start: 25 @100069 has 1 MA's), (67, 99697), (75, 99655), (78, 99637), (92, 99553), (95, 99529), (97, 99505), (98, 99502), (107, 99457), (111, 99406), (114, 99376), (116, 99364), (129, 99235), (142, 99142), (143, 99136), (153, 99073), (154, 99067), (165, 98971), (166, 98965), (175, 98854), (185, 98782), (189, 98749), (190, 98740), (201, 98620), (203, 98602), (212, 98503), (213, 98500), (217, 98479), (224, 98425), (231, 98389),

Gene: Gabriel\_191 Start: 99728, Stop: 97866, Start Num: 7

Candidate Starts for Gabriel\_191:

(Start: 7 @99728 has 165 MA's), (Start: 17 @99668 has 1 MA's), (Start: 25 @99599 has 1 MA's), (67, 99227), (75, 99185), (78, 99167), (92, 99083), (95, 99059), (97, 99035), (98, 99032), (107, 98987), (111, 98936), (114, 98906), (116, 98894), (129, 98765), (142, 98672), (143, 98666), (153, 98603), (154, 98597), (165, 98501), (166, 98495), (175, 98384), (185, 98312), (189, 98279), (190, 98270), (201, 98150), (203, 98132), (212, 98033), (213, 98030), (217, 98009), (224, 97955), (231, 97919),

Gene: Gamgam\_188 Start: 99701, Stop: 97839, Start Num: 7

Candidate Starts for Gamgam\_188:

(Start: 7 @99701 has 165 MA's), (Start: 17 @99641 has 1 MA's), (Start: 25 @99572 has 1 MA's), (67, 99200), (75, 99158), (78, 99140), (92, 99056), (95, 99032), (97, 99008), (98, 99005), (107, 98960), (111, 98909), (114, 98879), (116, 98867), (129, 98738), (142, 98645), (143, 98639), (153, 98576), (154, 98570), (165, 98474), (166, 98468), (175, 98357), (185, 98285), (189, 98252), (190, 98243), (201, 98123), (203, 98105), (212, 98006), (213, 98003), (217, 97982), (224, 97928), (231, 97892),

Gene: Garnacho\_121 Start: 66944, Stop: 68410, Start Num: 59

Candidate Starts for Garnacho\_121:

(Start: 47 @66839 has 3 MA's), (57, 66920), (58, 66926), (59, 66944), (60, 66947), (71, 67010), (88, 67157), (100, 67223), (108, 67286), (115, 67361), (122, 67463), (126, 67487), (133, 67538), (134, 67547), (135, 67562), (136, 67568), (137, 67574), (144, 67622), (146, 67637), (190, 68012), (202, 68135), (203, 68147), (216, 68267), (227, 68336),

Gene: Ghost\_188 Start: 100414, Stop: 98552, Start Num: 7

Candidate Starts for Ghost\_188:

(Start: 7 @100414 has 165 MA's), (Start: 17 @100354 has 1 MA's), (Start: 25 @100285 has 1 MA's), (67, 99913), (75, 99871), (78, 99853), (92, 99769), (95, 99745), (97, 99721), (98, 99718), (107, 99673), (111, 99622), (114, 99592), (116, 99580), (129, 99451), (142, 99358), (143, 99352), (153, 99289), (154, 99283), (165, 99187), (166, 99181), (175, 99070), (185, 98998), (189, 98965), (190, 98956), (201, 98836), (203, 98818), (212, 98719), (213, 98716), (217, 98695), (224, 98641), (231, 98605),

Gene: GiJojo\_116 Start: 68346, Stop: 69914, Start Num: 48

Candidate Starts for GiJojo\_116:

(Start: 48 @68346 has 1 MA's), (57, 68424), (58, 68430), (60, 68451), (61, 68457), (64, 68493), (71, 68514), (80, 68577), (81, 68580), (83, 68595), (88, 68661), (100, 68727), (101, 68736), (115, 68865), (122, 68967), (126, 68991), (128, 69003), (133, 69042), (134, 69051), (137, 69078), (146, 69141), (177, 69411), (191, 69534), (200, 69627), (202, 69639), (216, 69771), (227, 69840), (229, 69846), (238, 69894),

Gene: Gizmo\_193 Start: 103049, Stop: 101187, Start Num: 7

Candidate Starts for Gizmo\_193:

(Start: 7 @103049 has 165 MA's), (Start: 17 @102989 has 1 MA's), (Start: 25 @102920 has 1 MA's), (67, 102548), (75, 102506), (78, 102488), (92, 102404), (95, 102380), (97, 102356), (98, 102353), (107, 102308), (111, 102257), (114, 102227), (116, 102215), (129, 102086), (142, 101993), (143, 101987), (153, 101924), (154, 101918), (165, 101822), (166, 101816), (175, 101705), (185, 101633), (189, 101600), (190, 101591), (201, 101471), (203, 101453), (212, 101354), (213, 101351), (217, 101330), (224, 101276), (231, 101240),

Gene: GlutenPhree\_187 Start: 99712, Stop: 97850, Start Num: 7

Candidate Starts for GlutenPhree\_187:

(Start: 7 @99712 has 165 MA's), (Start: 17 @99652 has 1 MA's), (Start: 25 @99583 has 1 MA's), (67, 99211), (75, 99169), (78, 99151), (92, 99067), (95, 99043), (97, 99019), (98, 99016), (107, 98971), (111, 98920), (114, 98890), (116, 98878), (129, 98749), (142, 98656), (143, 98650), (153, 98587), (154, 98581), (165, 98485), (166, 98479), (175, 98368), (185, 98296), (189, 98263), (190, 98254), (201, 98134), (203, 98116), (212, 98017), (213, 98014), (217, 97993), (224, 97939), (231, 97903),

Gene: Grasshills\_195 Start: 103320, Stop: 101458, Start Num: 7

Candidate Starts for Grasshills\_195:

(Start: 7 @103320 has 165 MA's), (Start: 17 @103260 has 1 MA's), (Start: 25 @103191 has 1 MA's), (67, 102819), (75, 102777), (78, 102759), (92, 102675), (95, 102651), (97, 102627), (98, 102624), (107, 102579), (111, 102528), (114, 102498), (116, 102486), (129, 102357), (142, 102264), (143,

102258), (153, 102195), (154, 102189), (165, 102093), (166, 102087), (175, 101976), (179, 101961), (185, 101904), (189, 101871), (190, 101862), (201, 101742), (203, 101724), (212, 101625), (213, 101622), (217, 101601), (224, 101547), (231, 101511),

Gene: Greely\_181 Start: 99229, Stop: 97382, Start Num: 9

Candidate Starts for Greely\_181:

(Start: 9 @99229 has 2 MA's), (13, 99208), (20, 99151), (24, 99106), (28, 99055), (30, 99028), (44, 98911), (65, 98728), (66, 98722), (68, 98713), (92, 98578), (93, 98575), (113, 98410), (114, 98401), (116, 98389), (123, 98299), (126, 98278), (128, 98266), (138, 98182), (142, 98167), (143, 98161), (147, 98143), (151, 98128), (156, 98086), (163, 98026), (166, 98011), (167, 98008), (171, 97951), (178, 97891), (189, 97798), (190, 97789), (192, 97756), (193, 97741), (203, 97651), (213, 97549), (217, 97531), (222, 97495), (226, 97465), (234, 97426), (237, 97414),

Gene: Grungle\_173 Start: 98451, Stop: 96589, Start Num: 7

Candidate Starts for Grungle\_173:

(Start: 7 @98451 has 165 MA's), (Start: 17 @98391 has 1 MA's), (Start: 25 @98322 has 1 MA's), (67, 97950), (75, 97908), (78, 97890), (92, 97806), (95, 97782), (97, 97758), (98, 97755), (107, 97710), (111, 97659), (114, 97629), (116, 97617), (129, 97488), (142, 97395), (143, 97389), (153, 97326), (154, 97320), (165, 97224), (166, 97218), (175, 97107), (185, 97035), (189, 97002), (190, 96993), (201, 96873), (203, 96855), (212, 96756), (213, 96753), (217, 96732), (224, 96678), (231, 96642),

Gene: Guwapp\_183 Start: 98942, Stop: 97080, Start Num: 7

Candidate Starts for Guwapp\_183:

(Start: 7 @98942 has 165 MA's), (Start: 17 @98882 has 1 MA's), (Start: 25 @98813 has 1 MA's), (67, 98441), (75, 98399), (78, 98381), (92, 98297), (95, 98273), (97, 98249), (98, 98246), (107, 98201), (111, 98150), (114, 98120), (116, 98108), (129, 97979), (142, 97886), (143, 97880), (153, 97817), (154, 97811), (165, 97715), (166, 97709), (175, 97598), (185, 97526), (189, 97493), (190, 97484), (201, 97364), (203, 97346), (212, 97247), (213, 97244), (217, 97223), (224, 97169), (231, 97133),

Gene: Halldule\_180 Start: 98847, Stop: 96985, Start Num: 7

Candidate Starts for Halldule\_180:

(Start: 7 @98847 has 165 MA's), (Start: 17 @98787 has 1 MA's), (Start: 25 @98718 has 1 MA's), (67, 98346), (75, 98304), (78, 98286), (92, 98202), (95, 98178), (97, 98154), (98, 98151), (107, 98106), (111, 98055), (114, 98025), (116, 98013), (129, 97884), (142, 97791), (143, 97785), (153, 97722), (154, 97716), (165, 97620), (166, 97614), (175, 97503), (185, 97431), (189, 97398), (190, 97389), (201, 97269), (203, 97251), (212, 97152), (213, 97149), (217, 97128), (224, 97074), (231, 97038),

Gene: HyRo\_176 Start: 100448, Stop: 98586, Start Num: 7

Candidate Starts for HyRo\_176:

(Start: 7 @100448 has 165 MA's), (Start: 17 @100388 has 1 MA's), (Start: 25 @100319 has 1 MA's), (67, 99947), (75, 99905), (78, 99887), (92, 99803), (95, 99779), (97, 99755), (98, 99752), (107, 99707), (111, 99656), (114, 99626), (116, 99614), (129, 99485), (142, 99392), (143, 99386), (153, 99323), (154, 99317), (165, 99221), (166, 99215), (175, 99104), (185, 99032), (189, 98999), (190, 98990), (201, 98870), (203, 98852), (212, 98753), (213, 98750), (217, 98729), (224, 98675), (231, 98639),

Gene: I3\_196 Start: 102395, Stop: 100533, Start Num: 7

Candidate Starts for I3\_196:

(Start: 7 @102395 has 165 MA's), (Start: 17 @102335 has 1 MA's), (Start: 25 @102266 has 1 MA's), (67, 101894), (75, 101852), (78, 101834), (92, 101750), (95, 101726), (97, 101702), (98, 101699), (107, 101654), (111, 101603), (114, 101573), (116, 101561), (129, 101432), (142, 101339), (143, 101333), (153, 101270), (154, 101264), (165, 101168), (166, 101162), (175, 101051), (185, 100979), (189, 100946), (190, 100937), (201, 100817), (203, 100799), (212, 100700), (213, 100697), (217, 100676), (224, 100622), (231, 100586),

Gene: IkeLoa\_180 Start: 99747, Stop: 97885, Start Num: 7

Candidate Starts for IkeLoa\_180:

(Start: 7 @99747 has 165 MA's), (Start: 17 @99687 has 1 MA's), (Start: 25 @99618 has 1 MA's), (67, 99246), (75, 99204), (78, 99186), (92, 99102), (95, 99078), (97, 99054), (98, 99051), (107, 99006), (111, 98955), (114, 98925), (116, 98913), (129, 98784), (142, 98691), (143, 98685), (153, 98622), (154, 98616), (165, 98520), (166, 98514), (175, 98403), (185, 98331), (189, 98298), (190, 98289), (201, 98169), (203, 98151), (212, 98052), (213, 98049), (217, 98028), (224, 97974), (231, 97938),

Gene: InigoMontoya\_190 Start: 100375, Stop: 98513, Start Num: 7

Candidate Starts for InigoMontoya\_190:

(Start: 7 @100375 has 165 MA's), (Start: 17 @100315 has 1 MA's), (Start: 25 @100246 has 1 MA's), (67, 99874), (75, 99832), (78, 99814), (92, 99730), (95, 99706), (97, 99682), (98, 99679), (107, 99634), (111, 99583), (114, 99553), (116, 99541), (129, 99412), (142, 99319), (143, 99313), (153, 99250), (154, 99244), (165, 99148), (166, 99142), (175, 99031), (185, 98959), (189, 98926), (190, 98917), (201, 98797), (203, 98779), (212, 98680), (213, 98677), (217, 98656), (224, 98602), (231, 98566),

Gene: InterFolia\_191 Start: 102459, Stop: 100597, Start Num: 7

Candidate Starts for InterFolia\_191:

(Start: 7 @102459 has 165 MA's), (Start: 17 @102399 has 1 MA's), (Start: 25 @102330 has 1 MA's), (67, 101958), (75, 101916), (78, 101898), (92, 101814), (95, 101790), (97, 101766), (98, 101763), (107, 101718), (111, 101667), (114, 101637), (116, 101625), (129, 101496), (142, 101403), (143, 101397), (153, 101334), (154, 101328), (165, 101232), (166, 101226), (175, 101115), (185, 101043), (189, 101010), (190, 101001), (201, 100881), (203, 100863), (212, 100764), (213, 100761), (217, 100740), (224, 100686), (231, 100650),

Gene: Iota\_182 Start: 100048, Stop: 98186, Start Num: 7

Candidate Starts for Iota\_182:

(Start: 7 @100048 has 165 MA's), (Start: 17 @99988 has 1 MA's), (Start: 25 @99919 has 1 MA's), (67, 99547), (75, 99505), (78, 99487), (92, 99403), (95, 99379), (97, 99355), (98, 99352), (107, 99307), (111, 99256), (114, 99226), (116, 99214), (129, 99085), (142, 98992), (143, 98986), (153, 98923), (154, 98917), (165, 98821), (166, 98815), (175, 98704), (185, 98632), (189, 98599), (190, 98590), (201, 98470), (203, 98452), (212, 98353), (213, 98350), (217, 98329), (224, 98275), (231, 98239),

Gene: Issimir\_182 Start: 100322, Stop: 98460, Start Num: 7

Candidate Starts for Issimir\_182:

(Start: 7 @100322 has 165 MA's), (Start: 17 @100262 has 1 MA's), (Start: 25 @100193 has 1 MA's), (67, 99821), (75, 99779), (78, 99761), (92, 99677), (95, 99653), (97, 99629), (98, 99626), (107, 99581), (111, 99530), (114, 99500), (116, 99488), (129, 99359), (142, 99266), (143, 99260), (153, 99197), (154, 99191), (165, 99095), (166, 99089), (175, 98978), (185, 98906), (189, 98873), (190, 98864), (201, 98744), (203, 98726), (212, 98627), (213, 98624), (217, 98603), (224, 98549), (231, 98513),

Gene: Izajani\_186 Start: 101191, Stop: 99329, Start Num: 7

Candidate Starts for Izajani\_186:

(Start: 7 @101191 has 165 MA's), (Start: 17 @101131 has 1 MA's), (Start: 25 @101062 has 1 MA's), (67, 100690), (75, 100648), (78, 100630), (92, 100546), (95, 100522), (97, 100498), (98, 100495), (107, 100450), (111, 100399), (114, 100369), (116, 100357), (129, 100228), (142, 100135), (143, 100129), (153, 100066), (154, 100060), (165, 99964), (166, 99958), (175, 99847), (185, 99775), (189, 99742), (190, 99733), (201, 99613), (203, 99595), (212, 99496), (213, 99493), (217, 99472), (224, 99418), (231, 99382),

Gene: JPickles\_184 Start: 98843, Stop: 96981, Start Num: 7

Candidate Starts for JPickles\_184:

(Start: 7 @98843 has 165 MA's), (Start: 17 @98783 has 1 MA's), (Start: 25 @98714 has 1 MA's), (67, 98342), (75, 98300), (78, 98282), (92, 98198), (95, 98174), (97, 98150), (98, 98147), (107, 98102), (111, 98051), (114, 98021), (116, 98009), (129, 97880), (142, 97787), (143, 97781), (153, 97718), (154, 97712), (165, 97616), (166, 97610), (175, 97499), (185, 97427), (189, 97394), (190, 97385), (201, 97265), (203, 97247), (212, 97148), (213, 97145), (217, 97124), (224, 97070), (231, 97034),

Gene: Janiyra\_192 Start: 101392, Stop: 99530, Start Num: 7

Candidate Starts for Janiyra\_192:

(Start: 7 @101392 has 165 MA's), (Start: 17 @101332 has 1 MA's), (Start: 25 @101263 has 1 MA's), (67, 100891), (75, 100849), (78, 100831), (92, 100747), (95, 100723), (97, 100699), (98, 100696), (107, 100651), (111, 100600), (114, 100570), (116, 100558), (129, 100429), (142, 100336), (143, 100330), (153, 100267), (154, 100261), (165, 100165), (166, 100159), (175, 100048), (185, 99976), (189, 99943), (190, 99934), (201, 99814), (203, 99796), (212, 99697), (213, 99694), (217, 99673), (224, 99619), (231, 99583),

Gene: JayJay\_190 Start: 101600, Stop: 99738, Start Num: 7

Candidate Starts for JayJay\_190:

(Start: 7 @101600 has 165 MA's), (Start: 17 @101540 has 1 MA's), (Start: 25 @101471 has 1 MA's), (67, 101099), (75, 101057), (78, 101039), (92, 100955), (95, 100931), (97, 100907), (98, 100904), (107, 100859), (111, 100808), (114, 100778), (116, 100766), (129, 100637), (142, 100544), (143, 100538), (153, 100475), (154, 100469), (165, 100373), (166, 100367), (175, 100256), (185, 100184), (189, 100151), (190, 100142), (201, 100022), (203, 100004), (212, 99905), (213, 99902), (217, 99881), (224, 99827), (231, 99791),

Gene: Jaygup\_184 Start: 99805, Stop: 97943, Start Num: 7

Candidate Starts for Jaygup\_184:

(Start: 7 @99805 has 165 MA's), (Start: 17 @99745 has 1 MA's), (Start: 25 @99676 has 1 MA's), (67, 99304), (75, 99262), (78, 99244), (92, 99160), (95, 99136), (97, 99112), (98, 99109), (107, 99064), (111, 99013), (114, 98983), (116, 98971), (129, 98842), (142, 98749), (143, 98743), (153, 98680), (154, 98674), (165, 98578), (166, 98572), (175, 98461), (185, 98389), (189, 98356), (190, 98347), (201, 98227), (203, 98209), (212, 98110), (213, 98107), (217, 98086), (224, 98032), (231, 97996),

Gene: JeanGrey\_59 Start: 48575, Stop: 46650, Start Num: 10

Candidate Starts for JeanGrey\_59:

(3, 48629), (4, 48611), (10, 48575), (31, 48383), (35, 48359), (42, 48293), (51, 48215), (72, 48044), (96, 47879), (104, 47840), (114, 47732), (154, 47423), (158, 47381), (165, 47327), (174, 47216), (185, 47138), (191, 47066), (208, 46910), (214, 46844), (217, 46829),

Gene: Jedediah\_188 Start: 100960, Stop: 99098, Start Num: 7

Candidate Starts for Jedediah\_188:

(Start: 7 @100960 has 165 MA's), (Start: 17 @100900 has 1 MA's), (Start: 25 @100831 has 1 MA's), (67, 100459), (75, 100417), (78, 100399), (92, 100315), (95, 100291), (97, 100267), (98, 100264), (107, 100219), (111, 100168), (114, 100138), (116, 100126), (129, 99997), (142, 99904), (143, 99898), (153, 99835), (154, 99829), (165, 99733), (166, 99727), (175, 99616), (185, 99544), (189, 99511), (190, 99502), (201, 99382), (203, 99364), (212, 99265), (213, 99262), (217, 99241), (224, 99187), (231, 99151),

Gene: Jemmno\_187 Start: 99786, Stop: 97924, Start Num: 7

Candidate Starts for Jemmno\_187:

(Start: 7 @99786 has 165 MA's), (Start: 17 @99726 has 1 MA's), (Start: 25 @99657 has 1 MA's), (67, 99285), (75, 99243), (78, 99225), (92, 99141), (95, 99117), (97, 99093), (98, 99090), (107, 99045), (111, 98994), (114, 98964), (116, 98952), (129, 98823), (142, 98730), (143, 98724), (153, 98661), (154, 98655), (165, 98559), (166, 98553), (175, 98442), (185, 98370), (189, 98337), (190, 98328),

(201, 98208), (203, 98190), (212, 98091), (213, 98088), (217, 98067), (224, 98013), (231, 97977),

Gene: Jessibeth14\_188 Start: 101800, Stop: 99938, Start Num: 7

Candidate Starts for Jessibeth14\_188:

(Start: 7 @101800 has 165 MA's), (Start: 17 @101740 has 1 MA's), (Start: 25 @101671 has 1 MA's), (67, 101299), (75, 101257), (78, 101239), (92, 101155), (95, 101131), (97, 101107), (98, 101104), (107, 101059), (111, 101008), (114, 100978), (116, 100966), (129, 100837), (142, 100744), (143, 100738), (153, 100675), (154, 100669), (157, 100633), (165, 100573), (166, 100567), (175, 100456), (185, 100384), (189, 100351), (190, 100342), (201, 100222), (203, 100204), (212, 100105), (213, 100102), (217, 100081), (224, 100027), (231, 99991),

Gene: Jezreel\_185 Start: 100869, Stop: 99007, Start Num: 7

Candidate Starts for Jezreel\_185:

(Start: 7 @100869 has 165 MA's), (Start: 17 @100809 has 1 MA's), (Start: 25 @100740 has 1 MA's), (67, 100368), (75, 100326), (78, 100308), (92, 100224), (95, 100200), (97, 100176), (98, 100173), (107, 100128), (111, 100077), (114, 100047), (116, 100035), (129, 99906), (142, 99813), (143, 99807), (153, 99744), (154, 99738), (165, 99642), (166, 99636), (175, 99525), (185, 99453), (189, 99420), (190, 99411), (201, 99291), (203, 99273), (212, 99174), (213, 99171), (217, 99150), (224, 99096), (231, 99060),

Gene: JigglyPuff\_194 Start: 102729, Stop: 100867, Start Num: 7

Candidate Starts for JigglyPuff\_194:

(Start: 7 @102729 has 165 MA's), (Start: 17 @102669 has 1 MA's), (Start: 25 @102600 has 1 MA's), (67, 102228), (75, 102186), (78, 102168), (92, 102084), (95, 102060), (97, 102036), (98, 102033), (107, 101988), (111, 101937), (114, 101907), (116, 101895), (129, 101766), (142, 101673), (143, 101667), (153, 101604), (154, 101598), (165, 101502), (166, 101496), (175, 101385), (185, 101313), (189, 101280), (190, 101271), (201, 101151), (203, 101133), (212, 101034), (213, 101031), (217, 101010), (224, 100956), (231, 100920),

Gene: JulietS\_181 Start: 98075, Stop: 96213, Start Num: 7

Candidate Starts for JulietS\_181:

(Start: 7 @98075 has 165 MA's), (Start: 17 @98015 has 1 MA's), (Start: 25 @97946 has 1 MA's), (67, 97574), (75, 97532), (78, 97514), (92, 97430), (95, 97406), (97, 97382), (98, 97379), (107, 97334), (111, 97283), (114, 97253), (116, 97241), (129, 97112), (142, 97019), (143, 97013), (153, 96950), (154, 96944), (165, 96848), (166, 96842), (175, 96731), (185, 96659), (189, 96626), (190, 96617), (201, 96497), (203, 96479), (212, 96380), (213, 96377), (217, 96356), (224, 96302), (231, 96266),

Gene: JustHall\_183 Start: 100299, Stop: 98437, Start Num: 7

Candidate Starts for JustHall\_183:

(Start: 7 @100299 has 165 MA's), (Start: 17 @100239 has 1 MA's), (Start: 25 @100170 has 1 MA's), (67, 99798), (75, 99756), (78, 99738), (92, 99654), (95, 99630), (97, 99606), (98, 99603), (107, 99558), (111, 99507), (114, 99477), (116, 99465), (129, 99336), (142, 99243), (143, 99237), (153, 99174), (154, 99168), (165, 99072), (166, 99066), (169, 99042), (175, 98955), (185, 98883), (189, 98850), (190, 98841), (201, 98721), (203, 98703), (212, 98604), (213, 98601), (217, 98580), (224, 98526), (231, 98490),

Gene: Kamryn\_187 Start: 101521, Stop: 99659, Start Num: 7

Candidate Starts for Kamryn\_187:

(Start: 7 @101521 has 165 MA's), (Start: 17 @101461 has 1 MA's), (Start: 25 @101392 has 1 MA's), (67, 101020), (75, 100978), (78, 100960), (92, 100876), (95, 100852), (97, 100828), (98, 100825), (107, 100780), (111, 100729), (114, 100699), (116, 100687), (129, 100558), (142, 100465), (143, 100459), (153, 100396), (154, 100390), (165, 100294), (166, 100288), (175, 100177), (185, 100105), (189, 100072), (190, 100063), (201, 99943), (203, 99925), (212, 99826), (213, 99823), (217, 99802),



(224, 99748), (231, 99712),

Gene: Kboogie\_192 Start: 100957, Stop: 99095, Start Num: 7

Candidate Starts for Kboogie\_192:

(Start: 7 @100957 has 165 MA's), (Start: 17 @100897 has 1 MA's), (Start: 25 @100828 has 1 MA's), (67, 100456), (75, 100414), (78, 100396), (92, 100312), (95, 100288), (97, 100264), (98, 100261), (107, 100216), (111, 100165), (114, 100135), (116, 100123), (129, 99994), (142, 99901), (143, 99895), (153, 99832), (154, 99826), (165, 99730), (166, 99724), (175, 99613), (185, 99541), (189, 99508), (190, 99499), (201, 99379), (203, 99361), (212, 99262), (213, 99259), (217, 99238), (224, 99184), (231, 99148),

Gene: Khaleesi\_187 Start: 101267, Stop: 99405, Start Num: 7

Candidate Starts for Khaleesi\_187:

(Start: 7 @101267 has 165 MA's), (Start: 17 @101207 has 1 MA's), (Start: 25 @101138 has 1 MA's), (67, 100766), (75, 100724), (78, 100706), (92, 100622), (95, 100598), (97, 100574), (98, 100571), (107, 100526), (111, 100475), (114, 100445), (116, 100433), (129, 100304), (142, 100211), (143, 100205), (153, 100142), (154, 100136), (165, 100040), (166, 100034), (175, 99923), (185, 99851), (189, 99818), (190, 99809), (201, 99689), (203, 99671), (212, 99572), (213, 99569), (217, 99548), (224, 99494), (231, 99458),

Gene: LRRHood\_181 Start: 100169, Stop: 98307, Start Num: 7

Candidate Starts for LRRHood\_181:

(Start: 7 @100169 has 165 MA's), (Start: 17 @100109 has 1 MA's), (Start: 25 @100040 has 1 MA's), (67, 99668), (75, 99626), (78, 99608), (92, 99524), (95, 99500), (97, 99476), (98, 99473), (107, 99428), (111, 99377), (114, 99347), (116, 99335), (129, 99206), (142, 99113), (143, 99107), (153, 99044), (154, 99038), (165, 98942), (166, 98936), (175, 98825), (185, 98753), (189, 98720), (190, 98711), (201, 98591), (203, 98573), (212, 98474), (213, 98471), (217, 98450), (224, 98396), (231, 98360),

Gene: Latch\_187 Start: 99711, Stop: 97849, Start Num: 7

Candidate Starts for Latch\_187:

(Start: 7 @99711 has 165 MA's), (Start: 17 @99651 has 1 MA's), (Start: 25 @99582 has 1 MA's), (67, 99210), (75, 99168), (78, 99150), (92, 99066), (95, 99042), (97, 99018), (98, 99015), (107, 98970), (111, 98919), (114, 98889), (116, 98877), (129, 98748), (142, 98655), (143, 98649), (153, 98586), (154, 98580), (165, 98484), (166, 98478), (175, 98367), (185, 98295), (189, 98262), (190, 98253), (201, 98133), (203, 98115), (212, 98016), (213, 98013), (217, 97992), (224, 97938), (231, 97902),

Gene: Lee7\_188 Start: 102647, Stop: 100785, Start Num: 7

Candidate Starts for Lee7\_188:

(Start: 7 @102647 has 165 MA's), (Start: 17 @102587 has 1 MA's), (Start: 25 @102518 has 1 MA's), (67, 102146), (75, 102104), (78, 102086), (92, 102002), (95, 101978), (97, 101954), (98, 101951), (107, 101906), (111, 101855), (114, 101825), (116, 101813), (129, 101684), (142, 101591), (143, 101585), (153, 101522), (154, 101516), (165, 101420), (166, 101414), (175, 101303), (185, 101231), (189, 101198), (190, 101189), (201, 101069), (203, 101051), (212, 100952), (213, 100949), (217, 100928), (224, 100874), (231, 100838),

Gene: Lethe\_190 Start: 101910, Stop: 100048, Start Num: 7

Candidate Starts for Lethe\_190:

(Start: 7 @101910 has 165 MA's), (Start: 17 @101850 has 1 MA's), (Start: 25 @101781 has 1 MA's), (67, 101409), (75, 101367), (78, 101349), (92, 101265), (95, 101241), (97, 101217), (98, 101214), (107, 101169), (111, 101118), (114, 101088), (116, 101076), (129, 100947), (142, 100854), (143, 100848), (153, 100785), (154, 100779), (165, 100683), (166, 100677), (175, 100566), (185, 100494), (189, 100461), (190, 100452), (201, 100332), (203, 100314), (212, 100215), (213, 100212), (217, 100191), (224, 100137), (231, 100101),

Gene: LifeSavor\_187 Start: 100620, Stop: 98758, Start Num: 7

Candidate Starts for LifeSavor\_187:

(Start: 7 @100620 has 165 MA's), (Start: 17 @100560 has 1 MA's), (Start: 25 @100491 has 1 MA's), (67, 100119), (75, 100077), (78, 100059), (92, 99975), (95, 99951), (97, 99927), (98, 99924), (107, 99879), (111, 99828), (114, 99798), (116, 99786), (129, 99657), (142, 99564), (143, 99558), (153, 99495), (154, 99489), (165, 99393), (166, 99387), (175, 99276), (185, 99204), (189, 99171), (190, 99162), (201, 99042), (203, 99024), (212, 98925), (213, 98922), (217, 98901), (224, 98847), (231, 98811),

Gene: LinStu\_186 Start: 100765, Stop: 98903, Start Num: 7

Candidate Starts for LinStu\_186:

(Start: 7 @100765 has 165 MA's), (Start: 17 @100705 has 1 MA's), (Start: 25 @100636 has 1 MA's), (67, 100264), (75, 100222), (78, 100204), (92, 100120), (95, 100096), (97, 100072), (98, 100069), (107, 100024), (111, 99973), (114, 99943), (116, 99931), (129, 99802), (142, 99709), (143, 99703), (153, 99640), (154, 99634), (165, 99538), (166, 99532), (175, 99421), (185, 99349), (189, 99316), (190, 99307), (201, 99187), (203, 99169), (212, 99070), (213, 99067), (217, 99046), (224, 98992), (231, 98956),

Gene: Littleton\_191 Start: 101431, Stop: 99569, Start Num: 7

Candidate Starts for Littleton\_191:

(Start: 7 @101431 has 165 MA's), (Start: 17 @101371 has 1 MA's), (Start: 25 @101302 has 1 MA's), (67, 100930), (75, 100888), (78, 100870), (92, 100786), (95, 100762), (97, 100738), (98, 100735), (107, 100690), (111, 100639), (114, 100609), (116, 100597), (129, 100468), (142, 100375), (143, 100369), (153, 100306), (154, 100300), (165, 100204), (166, 100198), (175, 100087), (185, 100015), (189, 99982), (190, 99973), (201, 99853), (203, 99835), (212, 99736), (213, 99733), (217, 99712), (224, 99658), (231, 99622),

Gene: Loanshark\_185 Start: 100581, Stop: 98719, Start Num: 7

Candidate Starts for Loanshark\_185:

(Start: 7 @100581 has 165 MA's), (Start: 17 @100521 has 1 MA's), (Start: 25 @100452 has 1 MA's), (67, 100080), (75, 100038), (78, 100020), (92, 99936), (95, 99912), (97, 99888), (98, 99885), (107, 99840), (111, 99789), (114, 99759), (116, 99747), (129, 99618), (142, 99525), (143, 99519), (153, 99456), (154, 99450), (165, 99354), (166, 99348), (175, 99237), (185, 99165), (189, 99132), (190, 99123), (201, 99003), (203, 98985), (212, 98886), (213, 98883), (217, 98862), (224, 98808), (231, 98772),

Gene: LolaVinca\_186 Start: 101991, Stop: 100129, Start Num: 7

Candidate Starts for LolaVinca\_186:

(Start: 7 @101991 has 165 MA's), (Start: 17 @101931 has 1 MA's), (Start: 25 @101862 has 1 MA's), (67, 101490), (75, 101448), (78, 101430), (92, 101346), (95, 101322), (97, 101298), (98, 101295), (107, 101250), (111, 101199), (114, 101169), (116, 101157), (129, 101028), (142, 100935), (143, 100929), (153, 100866), (154, 100860), (165, 100764), (166, 100758), (175, 100647), (185, 100575), (189, 100542), (190, 100533), (201, 100413), (203, 100395), (212, 100296), (213, 100293), (217, 100272), (224, 100218), (231, 100182),

Gene: LordLeafolot\_190 Start: 101603, Stop: 99741, Start Num: 7

Candidate Starts for LordLeafolot\_190:

(Start: 7 @101603 has 165 MA's), (Start: 17 @101543 has 1 MA's), (Start: 25 @101474 has 1 MA's), (67, 101102), (75, 101060), (78, 101042), (92, 100958), (95, 100934), (97, 100910), (98, 100907), (107, 100862), (111, 100811), (114, 100781), (116, 100769), (129, 100640), (142, 100547), (143, 100541), (153, 100478), (154, 100472), (165, 100376), (166, 100370), (175, 100259), (185, 100187), (189, 100154), (190, 100145), (201, 100025), (203, 100007), (212, 99908), (213, 99905), (217, 99884),

(224, 99830), (231, 99794),

Gene: LuckySocke\_124 Start: 67230, Stop: 68801, Start Num: 47

Candidate Starts for LuckySocke\_124:

(Start: 47 @67230 has 3 MA's), (57, 67311), (59, 67335), (71, 67401), (83, 67482), (88, 67548), (100, 67614), (101, 67623), (110, 67701), (115, 67752), (122, 67854), (125, 67875), (126, 67878), (133, 67929), (134, 67938), (135, 67953), (137, 67965), (144, 68013), (146, 68028), (177, 68298), (180, 68310), (181, 68334), (191, 68421), (200, 68514), (202, 68526), (203, 68538), (214, 68646), (216, 68658), (225, 68715), (227, 68727), (229, 68733), (238, 68781),

Gene: Lukilu\_178 Start: 101179, Stop: 99317, Start Num: 7

Candidate Starts for Lukilu\_178:

(Start: 7 @101179 has 165 MA's), (Start: 17 @101119 has 1 MA's), (Start: 25 @101050 has 1 MA's), (67, 100678), (75, 100636), (78, 100618), (92, 100534), (95, 100510), (97, 100486), (98, 100483), (107, 100438), (111, 100387), (114, 100357), (116, 100345), (129, 100216), (142, 100123), (143, 100117), (153, 100054), (154, 100048), (165, 99952), (166, 99946), (175, 99835), (185, 99763), (189, 99730), (190, 99721), (201, 99601), (203, 99583), (212, 99484), (213, 99481), (217, 99460), (224, 99406), (231, 99370),

Gene: Maby2021\_187 Start: 101711, Stop: 99849, Start Num: 7

Candidate Starts for Maby2021\_187:

(Start: 7 @101711 has 165 MA's), (Start: 17 @101651 has 1 MA's), (Start: 25 @101582 has 1 MA's), (67, 101210), (75, 101168), (78, 101150), (92, 101066), (95, 101042), (97, 101018), (98, 101015), (107, 100970), (111, 100919), (114, 100889), (116, 100877), (129, 100748), (142, 100655), (143, 100649), (153, 100586), (154, 100580), (165, 100484), (166, 100478), (175, 100367), (185, 100295), (189, 100262), (190, 100253), (201, 100133), (203, 100115), (212, 100016), (213, 100013), (217, 99992), (224, 99938), (231, 99902),

Gene: Mangeria\_188 Start: 101504, Stop: 99642, Start Num: 7

Candidate Starts for Mangeria\_188:

(Start: 7 @101504 has 165 MA's), (Start: 17 @101444 has 1 MA's), (Start: 25 @101375 has 1 MA's), (67, 101003), (75, 100961), (78, 100943), (92, 100859), (95, 100835), (97, 100811), (98, 100808), (107, 100763), (111, 100712), (114, 100682), (116, 100670), (129, 100541), (142, 100448), (143, 100442), (153, 100379), (154, 100373), (165, 100277), (166, 100271), (175, 100160), (185, 100088), (189, 100055), (190, 100046), (201, 99926), (203, 99908), (212, 99809), (213, 99806), (217, 99785), (224, 99731), (231, 99695),

Gene: Matsumoto\_188 Start: 100945, Stop: 99083, Start Num: 7

Candidate Starts for Matsumoto\_188:

(Start: 7 @100945 has 165 MA's), (Start: 17 @100885 has 1 MA's), (Start: 25 @100816 has 1 MA's), (67, 100444), (75, 100402), (78, 100384), (92, 100300), (95, 100276), (97, 100252), (98, 100249), (107, 100204), (111, 100153), (114, 100123), (116, 100111), (129, 99982), (142, 99889), (143, 99883), (153, 99820), (154, 99814), (165, 99718), (166, 99712), (175, 99601), (185, 99529), (189, 99496), (190, 99487), (201, 99367), (203, 99349), (212, 99250), (213, 99247), (217, 99226), (224, 99172), (231, 99136),

Gene: McGee\_188 Start: 100139, Stop: 98277, Start Num: 7

Candidate Starts for McGee\_188:

(Start: 7 @100139 has 165 MA's), (Start: 17 @100079 has 1 MA's), (Start: 25 @100010 has 1 MA's), (67, 99638), (75, 99596), (78, 99578), (92, 99494), (95, 99470), (97, 99446), (98, 99443), (107, 99398), (111, 99347), (114, 99317), (116, 99305), (129, 99176), (142, 99083), (143, 99077), (153, 99014), (154, 99008), (165, 98912), (166, 98906), (175, 98795), (185, 98723), (189, 98690), (190, 98681), (201, 98561), (203, 98543), (212, 98444), (213, 98441), (217, 98420), (224, 98366), (231, 98330),

Gene: McWolfish\_185 Start: 100478, Stop: 98616, Start Num: 7

Candidate Starts for McWolfish\_185:

(Start: 7 @100478 has 165 MA's), (Start: 17 @100418 has 1 MA's), (Start: 25 @100349 has 1 MA's), (67, 99977), (75, 99935), (78, 99917), (92, 99833), (95, 99809), (97, 99785), (98, 99782), (107, 99737), (111, 99686), (114, 99656), (116, 99644), (129, 99515), (142, 99422), (143, 99416), (153, 99353), (154, 99347), (165, 99251), (166, 99245), (175, 99134), (185, 99062), (189, 99029), (190, 99020), (201, 98900), (203, 98882), (212, 98783), (213, 98780), (217, 98759), (224, 98705), (231, 98669),

Gene: Megamind\_185 Start: 100769, Stop: 98907, Start Num: 7

Candidate Starts for Megamind\_185:

(Start: 7 @100769 has 165 MA's), (Start: 17 @100709 has 1 MA's), (Start: 25 @100640 has 1 MA's), (67, 100268), (75, 100226), (78, 100208), (92, 100124), (95, 100100), (97, 100076), (98, 100073), (107, 100028), (111, 99977), (114, 99947), (116, 99935), (129, 99806), (142, 99713), (143, 99707), (153, 99644), (154, 99638), (165, 99542), (166, 99536), (175, 99425), (185, 99353), (189, 99320), (190, 99311), (201, 99191), (203, 99173), (212, 99074), (213, 99071), (217, 99050), (224, 98996), (231, 98960),

Gene: Melpomini\_182 Start: 99245, Stop: 97383, Start Num: 7

Candidate Starts for Melpomini\_182:

(Start: 7 @99245 has 165 MA's), (Start: 17 @99185 has 1 MA's), (Start: 25 @99116 has 1 MA's), (67, 98744), (75, 98702), (78, 98684), (92, 98600), (95, 98576), (97, 98552), (98, 98549), (107, 98504), (111, 98453), (114, 98423), (116, 98411), (129, 98282), (142, 98189), (143, 98183), (153, 98120), (154, 98114), (165, 98018), (166, 98012), (175, 97901), (185, 97829), (189, 97796), (190, 97787), (201, 97667), (203, 97649), (212, 97550), (213, 97547), (217, 97526), (224, 97472), (231, 97436),

Gene: MikeLiesIn\_189 Start: 101905, Stop: 100043, Start Num: 7

Candidate Starts for MikeLiesIn\_189:

(Start: 7 @101905 has 165 MA's), (Start: 17 @101845 has 1 MA's), (Start: 25 @101776 has 1 MA's), (67, 101404), (75, 101362), (78, 101344), (92, 101260), (95, 101236), (97, 101212), (98, 101209), (107, 101164), (111, 101113), (114, 101083), (116, 101071), (129, 100942), (142, 100849), (143, 100843), (153, 100780), (154, 100774), (165, 100678), (166, 100672), (175, 100561), (185, 100489), (189, 100456), (190, 100447), (201, 100327), (203, 100309), (212, 100210), (213, 100207), (217, 100186), (224, 100132), (231, 100096),

Gene: Mikro\_183 Start: 102145, Stop: 100283, Start Num: 7

Candidate Starts for Mikro\_183:

(Start: 7 @102145 has 165 MA's), (Start: 17 @102085 has 1 MA's), (Start: 25 @102016 has 1 MA's), (67, 101644), (75, 101602), (78, 101584), (92, 101500), (95, 101476), (97, 101452), (98, 101449), (107, 101404), (111, 101353), (114, 101323), (116, 101311), (129, 101182), (142, 101089), (143, 101083), (153, 101020), (154, 101014), (165, 100918), (166, 100912), (175, 100801), (185, 100729), (189, 100696), (190, 100687), (201, 100567), (203, 100549), (212, 100450), (213, 100447), (217, 100426), (224, 100372), (231, 100336),

Gene: MoMoMixon\_186 Start: 100533, Stop: 98671, Start Num: 7

Candidate Starts for MoMoMixon\_186:

(Start: 7 @100533 has 165 MA's), (Start: 17 @100473 has 1 MA's), (Start: 25 @100404 has 1 MA's), (67, 100032), (75, 99990), (78, 99972), (92, 99888), (95, 99864), (97, 99840), (98, 99837), (107, 99792), (111, 99741), (114, 99711), (116, 99699), (129, 99570), (142, 99477), (143, 99471), (153, 99408), (154, 99402), (165, 99306), (166, 99300), (175, 99189), (185, 99117), (189, 99084), (190, 99075), (201, 98955), (203, 98937), (212, 98838), (213, 98835), (217, 98814), (224, 98760), (231, 98724),

Gene: Momo\_188 Start: 99711, Stop: 97849, Start Num: 7

Candidate Starts for Momo\_188:

(Start: 7 @99711 has 165 MA's), (Start: 17 @99651 has 1 MA's), (Start: 25 @99582 has 1 MA's), (67, 99210), (75, 99168), (78, 99150), (92, 99066), (95, 99042), (97, 99018), (98, 99015), (107, 98970), (111, 98919), (114, 98889), (116, 98877), (129, 98748), (142, 98655), (143, 98649), (153, 98586), (154, 98580), (165, 98484), (166, 98478), (175, 98367), (185, 98295), (189, 98262), (190, 98253), (201, 98133), (203, 98115), (212, 98016), (213, 98013), (217, 97992), (224, 97938), (231, 97902),

Gene: Morizzled23\_186 Start: 99869, Stop: 98007, Start Num: 7

Candidate Starts for Morizzled23\_186:

(Start: 7 @99869 has 165 MA's), (Start: 17 @99809 has 1 MA's), (Start: 25 @99740 has 1 MA's), (67, 99368), (75, 99326), (78, 99308), (92, 99224), (95, 99200), (97, 99176), (98, 99173), (107, 99128), (111, 99077), (114, 99047), (116, 99035), (129, 98906), (142, 98813), (143, 98807), (153, 98744), (154, 98738), (165, 98642), (166, 98636), (175, 98525), (185, 98453), (189, 98420), (190, 98411), (201, 98291), (203, 98273), (212, 98174), (213, 98171), (217, 98150), (224, 98096), (231, 98060),

Gene: Myrna\_176 Start: 98838, Stop: 96982, Start Num: 6

Candidate Starts for Myrna\_176:

(Start: 6 @98838 has 1 MA's), (Start: 9 @98829 has 2 MA's), (13, 98808), (20, 98751), (21, 98748), (24, 98706), (28, 98655), (49, 98481), (65, 98328), (66, 98322), (80, 98241), (87, 98184), (92, 98178), (93, 98175), (113, 98010), (114, 98001), (116, 97989), (123, 97899), (126, 97878), (128, 97866), (142, 97767), (143, 97761), (147, 97743), (152, 97725), (153, 97722), (156, 97686), (163, 97626), (166, 97611), (167, 97608), (171, 97551), (178, 97491), (184, 97446), (189, 97398), (190, 97389), (193, 97341), (196, 97314), (197, 97311), (203, 97251), (212, 97152), (213, 97149), (217, 97131), (222, 97095), (229, 97056), (234, 97026), (237, 97014),

Gene: Naija\_188 Start: 100414, Stop: 98552, Start Num: 7

Candidate Starts for Naija\_188:

(Start: 7 @100414 has 165 MA's), (Start: 17 @100354 has 1 MA's), (Start: 25 @100285 has 1 MA's), (67, 99913), (75, 99871), (78, 99853), (92, 99769), (95, 99745), (97, 99721), (98, 99718), (107, 99673), (111, 99622), (114, 99592), (116, 99580), (129, 99451), (142, 99358), (143, 99352), (153, 99289), (154, 99283), (165, 99187), (166, 99181), (175, 99070), (185, 98998), (189, 98965), (190, 98956), (201, 98836), (203, 98818), (212, 98719), (213, 98716), (217, 98695), (224, 98641), (231, 98605),

Gene: Napoleon13\_186 Start: 100234, Stop: 98372, Start Num: 7

Candidate Starts for Napoleon13\_186:

(Start: 7 @100234 has 165 MA's), (Start: 17 @100174 has 1 MA's), (Start: 25 @100105 has 1 MA's), (67, 99733), (75, 99691), (78, 99673), (92, 99589), (95, 99565), (97, 99541), (98, 99538), (107, 99493), (111, 99442), (114, 99412), (116, 99400), (129, 99271), (142, 99178), (143, 99172), (153, 99109), (154, 99103), (165, 99007), (166, 99001), (175, 98890), (185, 98818), (189, 98785), (190, 98776), (201, 98656), (203, 98638), (212, 98539), (213, 98536), (217, 98515), (224, 98461), (231, 98425),

Gene: Nappy\_188 Start: 102116, Stop: 100254, Start Num: 7

Candidate Starts for Nappy\_188:

(Start: 7 @102116 has 165 MA's), (Start: 17 @102056 has 1 MA's), (Start: 25 @101987 has 1 MA's), (67, 101615), (75, 101573), (78, 101555), (92, 101471), (95, 101447), (97, 101423), (98, 101420), (107, 101375), (111, 101324), (114, 101294), (116, 101282), (129, 101153), (142, 101060), (143, 101054), (153, 100991), (154, 100985), (165, 100889), (166, 100883), (175, 100772), (185, 100700), (189, 100667), (190, 100658), (201, 100538), (203, 100520), (212, 100421), (213, 100418), (217, 100397), (224, 100343), (231, 100307),

Gene: Naval22\_193 Start: 102500, Stop: 100638, Start Num: 7

Candidate Starts for Naval22\_193:

(Start: 7 @102500 has 165 MA's), (Start: 17 @102440 has 1 MA's), (Start: 25 @102371 has 1 MA's), (67, 101999), (75, 101957), (78, 101939), (92, 101855), (95, 101831), (97, 101807), (98, 101804), (107, 101759), (111, 101708), (114, 101678), (116, 101666), (129, 101537), (142, 101444), (143, 101438), (153, 101375), (154, 101369), (165, 101273), (166, 101267), (175, 101156), (185, 101084), (189, 101051), (190, 101042), (201, 100922), (203, 100904), (212, 100805), (213, 100802), (217, 100781), (224, 100727), (231, 100691),

Gene: NedWong\_187 Start: 101156, Stop: 99294, Start Num: 7

Candidate Starts for NedWong\_187:

(Start: 7 @101156 has 165 MA's), (Start: 17 @101096 has 1 MA's), (Start: 25 @101027 has 1 MA's), (67, 100655), (75, 100613), (78, 100595), (92, 100511), (95, 100487), (97, 100463), (98, 100460), (107, 100415), (111, 100364), (114, 100334), (116, 100322), (129, 100193), (142, 100100), (143, 100094), (153, 100031), (154, 100025), (165, 99929), (166, 99923), (175, 99812), (185, 99740), (189, 99707), (190, 99698), (201, 99578), (203, 99560), (212, 99461), (213, 99458), (217, 99437), (224, 99383), (231, 99347),

Gene: Ngannou\_184 Start: 98693, Stop: 96831, Start Num: 7

Candidate Starts for Ngannou\_184:

(Start: 7 @98693 has 165 MA's), (Start: 17 @98633 has 1 MA's), (Start: 25 @98564 has 1 MA's), (67, 98192), (75, 98150), (78, 98132), (92, 98048), (95, 98024), (97, 98000), (98, 97997), (107, 97952), (111, 97901), (114, 97871), (116, 97859), (129, 97730), (142, 97637), (143, 97631), (153, 97568), (154, 97562), (165, 97466), (166, 97460), (175, 97349), (185, 97277), (189, 97244), (190, 97235), (201, 97115), (203, 97097), (212, 96998), (213, 96995), (217, 96974), (224, 96920), (231, 96884),

Gene: Nidhogg\_189 Start: 101549, Stop: 99687, Start Num: 7

Candidate Starts for Nidhogg\_189:

(Start: 7 @101549 has 165 MA's), (Start: 17 @101489 has 1 MA's), (Start: 25 @101420 has 1 MA's), (67, 101048), (75, 101006), (78, 100988), (92, 100904), (95, 100880), (97, 100856), (98, 100853), (107, 100808), (111, 100757), (114, 100727), (116, 100715), (129, 100586), (142, 100493), (143, 100487), (153, 100424), (154, 100418), (165, 100322), (166, 100316), (175, 100205), (185, 100133), (189, 100100), (190, 100091), (201, 99971), (203, 99953), (212, 99854), (213, 99851), (217, 99830), (224, 99776), (231, 99740),

Gene: NoodleTree\_194 Start: 101456, Stop: 99594, Start Num: 7

Candidate Starts for NoodleTree\_194:

(Start: 7 @101456 has 165 MA's), (Start: 17 @101396 has 1 MA's), (Start: 25 @101327 has 1 MA's), (67, 100955), (75, 100913), (78, 100895), (92, 100811), (95, 100787), (97, 100763), (98, 100760), (107, 100715), (111, 100664), (114, 100634), (116, 100622), (129, 100493), (142, 100400), (143, 100394), (153, 100331), (154, 100325), (165, 100229), (166, 100223), (175, 100112), (185, 100040), (189, 100007), (190, 99998), (201, 99878), (203, 99860), (212, 99761), (213, 99758), (217, 99737), (224, 99683), (231, 99647),

Gene: Norm\_187 Start: 101155, Stop: 99293, Start Num: 7

Candidate Starts for Norm\_187:

(Start: 7 @101155 has 165 MA's), (Start: 17 @101095 has 1 MA's), (Start: 25 @101026 has 1 MA's), (67, 100654), (75, 100612), (78, 100594), (92, 100510), (97, 100462), (98, 100459), (107, 100414), (111, 100363), (114, 100333), (116, 100321), (129, 100192), (142, 100099), (143, 100093), (153, 100030), (154, 100024), (165, 99928), (166, 99922), (175, 99811), (185, 99739), (189, 99706), (190, 99697), (201, 99577), (203, 99559), (212, 99460), (213, 99457), (217, 99436), (224, 99382), (231, 99346),

Gene: NuevoMundo\_191 Start: 103085, Stop: 101223, Start Num: 7

Candidate Starts for NuevoMundo\_191:

(Start: 7 @103085 has 165 MA's), (Start: 17 @103025 has 1 MA's), (Start: 25 @102956 has 1 MA's), (67, 102584), (75, 102542), (78, 102524), (92, 102440), (95, 102416), (97, 102392), (98, 102389), (107, 102344), (111, 102293), (114, 102263), (116, 102251), (129, 102122), (142, 102029), (143, 102023), (153, 101960), (154, 101954), (165, 101858), (166, 101852), (175, 101741), (185, 101669), (189, 101636), (190, 101627), (201, 101507), (203, 101489), (212, 101390), (213, 101387), (217, 101366), (224, 101312), (231, 101276),

Gene: ParkTD\_186 Start: 101019, Stop: 99157, Start Num: 7

Candidate Starts for ParkTD\_186:

(Start: 7 @101019 has 165 MA's), (Start: 17 @100959 has 1 MA's), (Start: 25 @100890 has 1 MA's), (67, 100518), (75, 100476), (78, 100458), (92, 100374), (95, 100350), (97, 100326), (98, 100323), (107, 100278), (111, 100227), (114, 100197), (116, 100185), (129, 100056), (142, 99963), (143, 99957), (153, 99894), (154, 99888), (165, 99792), (166, 99786), (175, 99675), (185, 99603), (189, 99570), (190, 99561), (201, 99441), (203, 99423), (212, 99324), (213, 99321), (217, 99300), (224, 99246), (231, 99210),

Gene: Patter\_188 Start: 99728, Stop: 97866, Start Num: 7

Candidate Starts for Patter\_188:

(Start: 7 @99728 has 165 MA's), (Start: 17 @99668 has 1 MA's), (Start: 25 @99599 has 1 MA's), (67, 99227), (75, 99185), (78, 99167), (92, 99083), (95, 99059), (97, 99035), (98, 99032), (107, 98987), (111, 98936), (114, 98906), (116, 98894), (129, 98765), (142, 98672), (143, 98666), (153, 98603), (154, 98597), (165, 98501), (166, 98495), (175, 98384), (185, 98312), (189, 98279), (190, 98270), (201, 98150), (203, 98132), (212, 98033), (213, 98030), (217, 98009), (224, 97955), (231, 97919),

Gene: Phabba\_186 Start: 98843, Stop: 96996, Start Num: 9

Candidate Starts for Phabba\_186:

(Start: 9 @98843 has 2 MA's), (13, 98822), (20, 98765), (28, 98669), (30, 98642), (32, 98633), (44, 98525), (65, 98342), (66, 98336), (68, 98327), (77, 98276), (92, 98192), (93, 98189), (113, 98024), (114, 98015), (116, 98003), (123, 97913), (126, 97892), (128, 97880), (138, 97796), (142, 97781), (143, 97775), (147, 97757), (151, 97742), (153, 97736), (163, 97640), (166, 97625), (167, 97622), (178, 97505), (182, 97469), (184, 97460), (190, 97403), (192, 97370), (195, 97337), (203, 97265), (213, 97163), (217, 97145), (222, 97109), (226, 97079), (234, 97040), (237, 97028),

Gene: Phlegm\_191 Start: 100414, Stop: 98552, Start Num: 7

Candidate Starts for Phlegm\_191:

(Start: 7 @100414 has 165 MA's), (Start: 17 @100354 has 1 MA's), (Start: 25 @100285 has 1 MA's), (67, 99913), (75, 99871), (78, 99853), (92, 99769), (95, 99745), (97, 99721), (98, 99718), (107, 99673), (111, 99622), (114, 99592), (116, 99580), (129, 99451), (142, 99358), (143, 99352), (153, 99289), (154, 99283), (165, 99187), (166, 99181), (175, 99070), (185, 98998), (189, 98965), (190, 98956), (201, 98836), (203, 98818), (212, 98719), (213, 98716), (217, 98695), (224, 98641), (231, 98605),

Gene: Phox\_188 Start: 101375, Stop: 99513, Start Num: 7

Candidate Starts for Phox\_188:

(Start: 7 @101375 has 165 MA's), (Start: 17 @101315 has 1 MA's), (Start: 25 @101246 has 1 MA's), (67, 100874), (75, 100832), (78, 100814), (92, 100730), (95, 100706), (97, 100682), (98, 100679), (107, 100634), (111, 100583), (114, 100553), (116, 100541), (129, 100412), (142, 100319), (143, 100313), (153, 100250), (154, 100244), (165, 100148), (166, 100142), (175, 100031), (185, 99959), (189, 99926), (190, 99917), (201, 99797), (203, 99779), (212, 99680), (213, 99677), (217, 99656), (224, 99602), (231, 99566),

Gene: Phrappuccino\_95 Start: 73805, Stop: 71901, Start Num: 8

Candidate Starts for Phrappuccino\_95:

(Start: 8 @73805 has 2 MA's), (18, 73739), (20, 73724), (21, 73721), (Start: 25 @73676 has 1 MA's), (27, 73661), (31, 73601), (33, 73586), (43, 73505), (55, 73367), (70, 73271), (74, 73241), (80, 73202), (84, 73181), (94, 73118), (103, 73061), (106, 73043), (109, 73013), (111, 72989), (113, 72968), (114, 72959), (116, 72947), (127, 72821), (137, 72746), (145, 72692), (153, 72650), (154, 72644), (157, 72608), (175, 72431), (179, 72416), (185, 72359), (191, 72287), (194, 72257), (201, 72188), (202, 72182), (208, 72131), (217, 72050), (220, 72026), (221, 72023), (228, 71978),

Gene: Phusco\_187 Start: 100038, Stop: 98176, Start Num: 7

Candidate Starts for Phusco\_187:

(Start: 7 @100038 has 165 MA's), (Start: 17 @99978 has 1 MA's), (Start: 25 @99909 has 1 MA's), (67, 99537), (75, 99495), (78, 99477), (92, 99393), (95, 99369), (97, 99345), (98, 99342), (107, 99297), (111, 99246), (114, 99216), (116, 99204), (129, 99075), (142, 98982), (143, 98976), (153, 98913), (154, 98907), (165, 98811), (166, 98805), (175, 98694), (185, 98622), (189, 98589), (190, 98580), (201, 98460), (203, 98442), (212, 98343), (213, 98340), (217, 98319), (224, 98265), (231, 98229),

Gene: Pier\_189 Start: 102627, Stop: 100765, Start Num: 7

Candidate Starts for Pier\_189:

(Start: 7 @102627 has 165 MA's), (Start: 17 @102567 has 1 MA's), (Start: 25 @102498 has 1 MA's), (67, 102126), (75, 102084), (78, 102066), (92, 101982), (95, 101958), (97, 101934), (98, 101931), (107, 101886), (111, 101835), (114, 101805), (116, 101793), (129, 101664), (142, 101571), (143, 101565), (153, 101502), (154, 101496), (165, 101400), (166, 101394), (175, 101283), (185, 101211), (189, 101178), (190, 101169), (201, 101049), (203, 101031), (212, 100932), (213, 100929), (217, 100908), (224, 100854), (231, 100818),

Gene: Pio\_196 Start: 103822, Stop: 101960, Start Num: 7

Candidate Starts for Pio\_196:

(Start: 7 @103822 has 165 MA's), (Start: 17 @103762 has 1 MA's), (Start: 25 @103693 has 1 MA's), (67, 103321), (75, 103279), (78, 103261), (92, 103177), (95, 103153), (97, 103129), (98, 103126), (107, 103081), (111, 103030), (114, 103000), (116, 102988), (129, 102859), (142, 102766), (143, 102760), (153, 102697), (154, 102691), (165, 102595), (166, 102589), (175, 102478), (185, 102406), (189, 102373), (190, 102364), (201, 102244), (203, 102226), (212, 102127), (213, 102124), (217, 102103), (224, 102049), (231, 102013),

Gene: Pivoine\_188 Start: 100414, Stop: 98552, Start Num: 7

Candidate Starts for Pivoine\_188:

(Start: 7 @100414 has 165 MA's), (Start: 17 @100354 has 1 MA's), (Start: 25 @100285 has 1 MA's), (67, 99913), (75, 99871), (78, 99853), (92, 99769), (95, 99745), (97, 99721), (98, 99718), (107, 99673), (111, 99622), (114, 99592), (116, 99580), (129, 99451), (142, 99358), (143, 99352), (153, 99289), (154, 99283), (165, 99187), (166, 99181), (175, 99070), (185, 98998), (189, 98965), (190, 98956), (201, 98836), (203, 98818), (212, 98719), (213, 98716), (217, 98695), (224, 98641), (231, 98605),

Gene: Pleione\_192 Start: 101498, Stop: 99636, Start Num: 7

Candidate Starts for Pleione\_192:

(Start: 7 @101498 has 165 MA's), (Start: 17 @101438 has 1 MA's), (Start: 25 @101369 has 1 MA's), (67, 100997), (75, 100955), (78, 100937), (92, 100853), (95, 100829), (97, 100805), (98, 100802), (107, 100757), (111, 100706), (114, 100676), (116, 100664), (129, 100535), (142, 100442), (143, 100436), (153, 100373), (154, 100367), (165, 100271), (166, 100265), (175, 100154), (185, 100082), (189, 100049), (190, 100040), (201, 99920), (203, 99902), (212, 99803), (213, 99800), (217, 99779), (224, 99725), (231, 99689),

Gene: Primadonna\_182 Start: 100063, Stop: 98201, Start Num: 7

Candidate Starts for Primadonna\_182:



(Start: 7 @100063 has 165 MA's), (Start: 17 @100003 has 1 MA's), (Start: 25 @99934 has 1 MA's), (67, 99562), (75, 99520), (78, 99502), (92, 99418), (95, 99394), (97, 99370), (98, 99367), (107, 99322), (111, 99271), (114, 99241), (116, 99229), (129, 99100), (142, 99007), (143, 99001), (153, 98938), (154, 98932), (165, 98836), (166, 98830), (175, 98719), (185, 98647), (189, 98614), (190, 98605), (201, 98485), (203, 98467), (212, 98368), (213, 98365), (217, 98344), (224, 98290), (231, 98254),

Gene: Pupper\_134 Start: 95000, Stop: 93126, Start Num: 7

Candidate Starts for Pupper\_134:

(Start: 7 @95000 has 165 MA's), (19, 94928), (26, 94871), (62, 94535), (67, 94508), (80, 94433), (87, 94367), (92, 94355), (93, 94352), (101, 94289), (102, 94286), (105, 94268), (111, 94208), (113, 94187), (137, 93971), (143, 93938), (145, 93917), (153, 93875), (165, 93773), (175, 93656), (185, 93584), (187, 93569), (188, 93560), (189, 93551), (190, 93542), (201, 93422), (203, 93404), (204, 93395), (205, 93386), (212, 93305), (213, 93302), (245, 93134),

Gene: PurduePete\_188 Start: 101725, Stop: 99863, Start Num: 7

Candidate Starts for PurduePete\_188:

(Start: 7 @101725 has 165 MA's), (Start: 17 @101665 has 1 MA's), (Start: 25 @101596 has 1 MA's), (67, 101224), (75, 101182), (78, 101164), (92, 101080), (95, 101056), (97, 101032), (98, 101029), (107, 100984), (111, 100933), (114, 100903), (116, 100891), (129, 100762), (142, 100669), (143, 100663), (153, 100600), (154, 100594), (165, 100498), (166, 100492), (175, 100381), (185, 100309), (189, 100276), (190, 100267), (201, 100147), (203, 100129), (212, 100030), (213, 100027), (217, 100006), (224, 99952), (231, 99916),

Gene: QBert\_179 Start: 99677, Stop: 97815, Start Num: 7

Candidate Starts for QBert\_179:

(Start: 7 @99677 has 165 MA's), (Start: 17 @99617 has 1 MA's), (Start: 25 @99548 has 1 MA's), (67, 99176), (75, 99134), (78, 99116), (92, 99032), (95, 99008), (97, 98984), (98, 98981), (107, 98936), (111, 98885), (114, 98855), (116, 98843), (129, 98714), (142, 98621), (143, 98615), (153, 98552), (154, 98546), (165, 98450), (166, 98444), (175, 98333), (185, 98261), (189, 98228), (190, 98219), (201, 98099), (203, 98081), (212, 97982), (213, 97979), (217, 97958), (224, 97904), (231, 97868),

Gene: Quasimodo\_191 Start: 101832, Stop: 99970, Start Num: 7

Candidate Starts for Quasimodo\_191:

(Start: 7 @101832 has 165 MA's), (Start: 17 @101772 has 1 MA's), (Start: 25 @101703 has 1 MA's), (67, 101331), (75, 101289), (78, 101271), (92, 101187), (95, 101163), (97, 101139), (98, 101136), (107, 101091), (111, 101040), (114, 101010), (116, 100998), (129, 100869), (142, 100776), (143, 100770), (153, 100707), (154, 100701), (165, 100605), (166, 100599), (175, 100488), (185, 100416), (189, 100383), (190, 100374), (201, 100254), (203, 100236), (212, 100137), (213, 100134), (217, 100113), (224, 100059), (231, 100023),

Gene: Rahel\_189 Start: 100632, Stop: 98770, Start Num: 7

Candidate Starts for Rahel\_189:

(Start: 7 @100632 has 165 MA's), (Start: 17 @100572 has 1 MA's), (Start: 25 @100503 has 1 MA's), (67, 100131), (75, 100089), (78, 100071), (92, 99987), (95, 99963), (97, 99939), (98, 99936), (107, 99891), (111, 99840), (114, 99810), (116, 99798), (129, 99669), (142, 99576), (143, 99570), (153, 99507), (154, 99501), (165, 99405), (166, 99399), (175, 99288), (185, 99216), (189, 99183), (190, 99174), (201, 99054), (203, 99036), (212, 98937), (213, 98934), (217, 98913), (224, 98859), (231, 98823),

Gene: RedWattleHog\_62 Start: 61087, Stop: 59231, Start Num: 11

Candidate Starts for RedWattleHog\_62:

(Start: 11 @61087 has 3 MA's), (31, 60898), (38, 60847), (63, 60619), (81, 60514), (92, 60451), (99, 60397), (101, 60385), (107, 60355), (114, 60268), (117, 60253), (130, 60136), (131, 60124), (137,

60079), (138, 60067), (142, 60052), (145, 60025), (148, 60004), (170, 59827), (173, 59800), (175, 59773), (191, 59629), (198, 59569), (203, 59512), (208, 59473), (215, 59404), (226, 59326), (233, 59287), (239, 59269), (241, 59260),

Gene: Rizal\_182 Start: 99459, Stop: 97597, Start Num: 7

Candidate Starts for Rizal\_182:

(Start: 7 @99459 has 165 MA's), (Start: 17 @99399 has 1 MA's), (Start: 25 @99330 has 1 MA's), (67, 98958), (75, 98916), (78, 98898), (92, 98814), (95, 98790), (97, 98766), (98, 98763), (107, 98718), (111, 98667), (114, 98637), (116, 98625), (129, 98496), (142, 98403), (143, 98397), (153, 98334), (154, 98328), (165, 98232), (166, 98226), (175, 98115), (185, 98043), (189, 98010), (190, 98001), (201, 97881), (203, 97863), (212, 97764), (213, 97761), (217, 97740), (224, 97686), (231, 97650),

Gene: RoMag\_183 Start: 100943, Stop: 99081, Start Num: 7

Candidate Starts for RoMag\_183:

(Start: 7 @100943 has 165 MA's), (Start: 17 @100883 has 1 MA's), (Start: 25 @100814 has 1 MA's), (67, 100442), (75, 100400), (78, 100382), (92, 100298), (95, 100274), (97, 100250), (98, 100247), (107, 100202), (111, 100151), (114, 100121), (116, 100109), (129, 99980), (142, 99887), (143, 99881), (153, 99818), (154, 99812), (165, 99716), (166, 99710), (175, 99599), (185, 99527), (189, 99494), (190, 99485), (201, 99365), (203, 99347), (212, 99248), (213, 99245), (217, 99224), (224, 99170), (231, 99134),

Gene: Ronan\_183 Start: 98861, Stop: 96999, Start Num: 7

Candidate Starts for Ronan\_183:

(Start: 7 @98861 has 165 MA's), (Start: 17 @98801 has 1 MA's), (Start: 25 @98732 has 1 MA's), (67, 98360), (75, 98318), (78, 98300), (92, 98216), (95, 98192), (97, 98168), (98, 98165), (107, 98120), (111, 98069), (114, 98039), (116, 98027), (129, 97898), (142, 97805), (143, 97799), (153, 97736), (154, 97730), (165, 97634), (166, 97628), (175, 97517), (185, 97445), (189, 97412), (190, 97403), (201, 97283), (203, 97265), (212, 97166), (213, 97163), (217, 97142), (224, 97088), (231, 97052),

Gene: Roots515\_190 Start: 102277, Stop: 100415, Start Num: 7

Candidate Starts for Roots515\_190:

(Start: 7 @102277 has 165 MA's), (Start: 17 @102217 has 1 MA's), (Start: 25 @102148 has 1 MA's), (67, 101776), (75, 101734), (78, 101716), (92, 101632), (95, 101608), (97, 101584), (98, 101581), (107, 101536), (111, 101485), (114, 101455), (116, 101443), (129, 101314), (142, 101221), (143, 101215), (153, 101152), (154, 101146), (165, 101050), (166, 101044), (175, 100933), (185, 100861), (189, 100828), (190, 100819), (201, 100699), (203, 100681), (212, 100582), (213, 100579), (217, 100558), (224, 100504), (231, 100468),

Gene: SCentae\_133 Start: 95151, Stop: 93277, Start Num: 7

Candidate Starts for SCentae\_133:

(Start: 7 @95151 has 165 MA's), (19, 95079), (26, 95022), (62, 94686), (67, 94659), (80, 94584), (87, 94518), (92, 94506), (93, 94503), (101, 94440), (102, 94437), (105, 94419), (111, 94359), (113, 94338), (137, 94122), (143, 94089), (145, 94068), (153, 94026), (165, 93924), (175, 93807), (185, 93735), (187, 93720), (188, 93711), (189, 93702), (190, 93693), (201, 93573), (203, 93555), (204, 93546), (205, 93537), (212, 93456), (213, 93453), (224, 93378), (245, 93285),

Gene: SVoro\_185 Start: 101244, Stop: 99382, Start Num: 7

Candidate Starts for SVoro\_185:

(Start: 7 @101244 has 165 MA's), (Start: 17 @101184 has 1 MA's), (Start: 25 @101115 has 1 MA's), (67, 100743), (75, 100701), (78, 100683), (92, 100599), (95, 100575), (97, 100551), (98, 100548), (107, 100503), (111, 100452), (114, 100422), (116, 100410), (129, 100281), (142, 100188), (143, 100182), (153, 100119), (154, 100113), (165, 100017), (166, 100011), (175, 99900), (185, 99828), (189, 99795), (190, 99786), (201, 99666), (203, 99648), (212, 99549), (213, 99546), (217, 99525),

(224, 99471), (231, 99435),

Gene: Salacia\_188 Start: 101038, Stop: 99176, Start Num: 7

Candidate Starts for Salacia\_188:

(Start: 7 @101038 has 165 MA's), (Start: 17 @100978 has 1 MA's), (Start: 25 @100909 has 1 MA's), (67, 100537), (75, 100495), (78, 100477), (92, 100393), (95, 100369), (97, 100345), (98, 100342), (107, 100297), (111, 100246), (114, 100216), (116, 100204), (129, 100075), (142, 99982), (143, 99976), (153, 99913), (154, 99907), (165, 99811), (166, 99805), (175, 99694), (185, 99622), (189, 99589), (190, 99580), (201, 99460), (203, 99442), (212, 99343), (213, 99340), (217, 99319), (224, 99265), (231, 99229),

Gene: Sauce\_184 Start: 99852, Stop: 97990, Start Num: 7

Candidate Starts for Sauce\_184:

(Start: 7 @99852 has 165 MA's), (Start: 17 @99792 has 1 MA's), (Start: 25 @99723 has 1 MA's), (67, 99351), (75, 99309), (78, 99291), (92, 99207), (95, 99183), (97, 99159), (98, 99156), (107, 99111), (111, 99060), (114, 99030), (116, 99018), (129, 98889), (142, 98796), (143, 98790), (153, 98727), (154, 98721), (165, 98625), (166, 98619), (175, 98508), (185, 98436), (189, 98403), (190, 98394), (201, 98274), (203, 98256), (212, 98157), (213, 98154), (217, 98133), (224, 98079), (231, 98043),

Gene: ScoobyDoobyDoo\_172 Start: 95837, Stop: 93951, Start Num: 9

Candidate Starts for ScoobyDoobyDoo\_172:

(1, 95951), (Start: 9 @95837 has 2 MA's), (24, 95714), (28, 95663), (29, 95648), (62, 95366), (65, 95339), (66, 95333), (68, 95324), (80, 95252), (90, 95150), (92, 95147), (93, 95144), (94, 95129), (97, 95099), (102, 95078), (114, 94967), (117, 94952), (138, 94748), (141, 94736), (142, 94733), (147, 94709), (152, 94691), (166, 94577), (174, 94475), (178, 94457), (184, 94412), (192, 94322), (193, 94307), (199, 94268), (203, 94217), (205, 94199), (212, 94118), (217, 94097), (232, 94001), (240, 93974), (242, 93965),

Gene: ScottMcG\_182 Start: 99475, Stop: 97613, Start Num: 7

Candidate Starts for ScottMcG\_182:

(Start: 7 @99475 has 165 MA's), (Start: 17 @99415 has 1 MA's), (Start: 25 @99346 has 1 MA's), (67, 98974), (75, 98932), (78, 98914), (92, 98830), (95, 98806), (97, 98782), (98, 98779), (107, 98734), (111, 98683), (114, 98653), (116, 98641), (129, 98512), (142, 98419), (143, 98413), (153, 98350), (154, 98344), (165, 98248), (166, 98242), (169, 98218), (175, 98131), (185, 98059), (189, 98026), (190, 98017), (201, 97897), (203, 97879), (212, 97780), (213, 97777), (217, 97756), (224, 97702), (231, 97666),

Gene: Sebata\_189 Start: 101942, Stop: 100080, Start Num: 7

Candidate Starts for Sebata\_189:

(Start: 7 @101942 has 165 MA's), (Start: 17 @101882 has 1 MA's), (Start: 25 @101813 has 1 MA's), (67, 101441), (75, 101399), (78, 101381), (92, 101297), (95, 101273), (97, 101249), (98, 101246), (107, 101201), (111, 101150), (114, 101120), (116, 101108), (129, 100979), (142, 100886), (143, 100880), (153, 100817), (154, 100811), (165, 100715), (166, 100709), (175, 100598), (185, 100526), (189, 100493), (190, 100484), (201, 100364), (203, 100346), (212, 100247), (213, 100244), (217, 100223), (224, 100169), (231, 100133),

Gene: Settecandela\_95 Start: 73805, Stop: 71901, Start Num: 8

Candidate Starts for Settecandela\_95:

(Start: 8 @73805 has 2 MA's), (18, 73739), (20, 73724), (21, 73721), (Start: 25 @73676 has 1 MA's), (27, 73661), (31, 73601), (33, 73586), (43, 73505), (55, 73367), (70, 73271), (74, 73241), (80, 73202), (84, 73181), (94, 73118), (103, 73061), (106, 73043), (109, 73013), (111, 72989), (113, 72968), (114, 72959), (116, 72947), (127, 72821), (137, 72746), (145, 72692), (153, 72650), (154, 72644), (157, 72608), (175, 72431), (179, 72416), (185, 72359), (191, 72287), (194, 72257), (201, 72188), (202,

72182), (208, 72131), (217, 72050), (220, 72026), (221, 72023), (228, 71978),

Gene: Shelob\_189 Start: 102532, Stop: 100670, Start Num: 7

Candidate Starts for Shelob\_189:

(Start: 7 @102532 has 165 MA's), (Start: 17 @102472 has 1 MA's), (Start: 25 @102403 has 1 MA's), (67, 102031), (75, 101989), (78, 101971), (92, 101887), (95, 101863), (97, 101839), (98, 101836), (107, 101791), (111, 101740), (114, 101710), (116, 101698), (129, 101569), (142, 101476), (143, 101470), (153, 101407), (154, 101401), (165, 101305), (166, 101299), (175, 101188), (185, 101116), (189, 101083), (190, 101074), (201, 100954), (203, 100936), (212, 100837), (213, 100834), (217, 100813), (224, 100759), (231, 100723),

Gene: ShiaLabeouf\_185 Start: 99843, Stop: 97981, Start Num: 7

Candidate Starts for ShiaLabeouf\_185:

(Start: 7 @99843 has 165 MA's), (Start: 17 @99783 has 1 MA's), (Start: 25 @99714 has 1 MA's), (67, 99342), (75, 99300), (78, 99282), (92, 99198), (95, 99174), (97, 99150), (98, 99147), (107, 99102), (111, 99051), (114, 99021), (116, 99009), (129, 98880), (142, 98787), (143, 98781), (153, 98718), (154, 98712), (165, 98616), (166, 98610), (175, 98499), (185, 98427), (189, 98394), (190, 98385), (201, 98265), (203, 98247), (212, 98148), (213, 98145), (217, 98124), (224, 98070), (231, 98034),

Gene: Shifa\_180 Start: 100417, Stop: 98555, Start Num: 7

Candidate Starts for Shifa\_180:

(Start: 7 @100417 has 165 MA's), (Start: 17 @100357 has 1 MA's), (Start: 25 @100288 has 1 MA's), (67, 99916), (75, 99874), (78, 99856), (92, 99772), (95, 99748), (97, 99724), (98, 99721), (107, 99676), (111, 99625), (114, 99595), (116, 99583), (129, 99454), (142, 99361), (143, 99355), (153, 99292), (154, 99286), (165, 99190), (166, 99184), (175, 99073), (185, 99001), (189, 98968), (190, 98959), (201, 98839), (203, 98821), (212, 98722), (213, 98719), (217, 98698), (224, 98644), (231, 98608),

Gene: Shnickers\_186 Start: 99805, Stop: 97943, Start Num: 7

Candidate Starts for Shnickers\_186:

(Start: 7 @99805 has 165 MA's), (Start: 17 @99745 has 1 MA's), (Start: 25 @99676 has 1 MA's), (67, 99304), (75, 99262), (78, 99244), (92, 99160), (95, 99136), (97, 99112), (98, 99109), (107, 99064), (111, 99013), (114, 98983), (116, 98971), (129, 98842), (142, 98749), (143, 98743), (153, 98680), (154, 98674), (165, 98578), (166, 98572), (175, 98461), (185, 98389), (189, 98356), (190, 98347), (201, 98227), (203, 98209), (212, 98110), (213, 98107), (217, 98086), (224, 98032), (231, 97996),

Gene: Shrimp\_189 Start: 101475, Stop: 99613, Start Num: 7

Candidate Starts for Shrimp\_189:

(Start: 7 @101475 has 165 MA's), (Start: 17 @101415 has 1 MA's), (67, 100974), (75, 100932), (78, 100914), (92, 100830), (95, 100806), (97, 100782), (98, 100779), (107, 100734), (111, 100683), (114, 100653), (116, 100641), (129, 100512), (142, 100419), (143, 100413), (153, 100350), (154, 100344), (165, 100248), (166, 100242), (175, 100131), (185, 100059), (189, 100026), (190, 100017), (201, 99897), (203, 99879), (212, 99780), (213, 99777), (217, 99756), (224, 99702), (231, 99666),

Gene: SilverDipper\_191 Start: 100970, Stop: 99108, Start Num: 7

Candidate Starts for SilverDipper\_191:

(Start: 7 @100970 has 165 MA's), (Start: 17 @100910 has 1 MA's), (Start: 25 @100841 has 1 MA's), (67, 100469), (75, 100427), (78, 100409), (92, 100325), (95, 100301), (97, 100277), (98, 100274), (107, 100229), (111, 100178), (114, 100148), (116, 100136), (129, 100007), (142, 99914), (143, 99908), (153, 99845), (154, 99839), (165, 99743), (166, 99737), (175, 99626), (185, 99554), (189, 99521), (190, 99512), (201, 99392), (203, 99374), (212, 99275), (213, 99272), (217, 99251), (224, 99197), (231, 99161),

Gene: Skog\_196 Start: 124937, Stop: 123042, Start Num: 7

Candidate Starts for Skog\_196:

(Start: 7 @124937 has 165 MA's), (26, 124808), (28, 124769), (37, 124688), (62, 124472), (67, 124445), (70, 124436), (80, 124370), (92, 124292), (93, 124289), (101, 124226), (105, 124205), (111, 124145), (113, 124124), (137, 123908), (142, 123881), (143, 123875), (145, 123854), (163, 123719), (165, 123710), (175, 123593), (185, 123521), (188, 123497), (190, 123479), (201, 123359), (203, 123341), (204, 123332), (209, 123275), (213, 123239), (214, 123236),

Gene: SmallFry\_188 Start: 100001, Stop: 98139, Start Num: 7

Candidate Starts for SmallFry\_188:

(Start: 7 @100001 has 165 MA's), (Start: 17 @99941 has 1 MA's), (Start: 25 @99872 has 1 MA's), (67, 99500), (75, 99458), (78, 99440), (92, 99356), (95, 99332), (97, 99308), (98, 99305), (107, 99260), (111, 99209), (114, 99179), (116, 99167), (129, 99038), (142, 98945), (143, 98939), (153, 98876), (154, 98870), (165, 98774), (166, 98768), (175, 98657), (185, 98585), (187, 98570), (189, 98552), (190, 98543), (201, 98423), (203, 98405), (212, 98306), (213, 98303), (217, 98282), (224, 98228), (231, 98192),

Gene: Spec\_183 Start: 100192, Stop: 98330, Start Num: 7

Candidate Starts for Spec\_183:

(Start: 7 @100192 has 165 MA's), (Start: 17 @100132 has 1 MA's), (Start: 25 @100063 has 1 MA's), (67, 99691), (75, 99649), (78, 99631), (92, 99547), (95, 99523), (97, 99499), (98, 99496), (107, 99451), (111, 99400), (114, 99370), (116, 99358), (129, 99229), (142, 99136), (143, 99130), (153, 99067), (154, 99061), (165, 98965), (166, 98959), (175, 98848), (185, 98776), (189, 98743), (190, 98734), (201, 98614), (203, 98596), (212, 98497), (213, 98494), (217, 98473), (224, 98419), (231, 98383),

Gene: Specks\_192 Start: 102208, Stop: 100346, Start Num: 7

Candidate Starts for Specks\_192:

(Start: 7 @102208 has 165 MA's), (Start: 17 @102148 has 1 MA's), (Start: 25 @102079 has 1 MA's), (67, 101707), (75, 101665), (78, 101647), (92, 101563), (95, 101539), (97, 101515), (98, 101512), (107, 101467), (111, 101416), (114, 101386), (116, 101374), (129, 101245), (142, 101152), (143, 101146), (153, 101083), (154, 101077), (165, 100981), (166, 100975), (175, 100864), (185, 100792), (187, 100777), (189, 100759), (190, 100750), (201, 100630), (203, 100612), (212, 100513), (213, 100510), (217, 100489), (224, 100435), (231, 100399),

Gene: Sprinklers\_185 Start: 100079, Stop: 98217, Start Num: 7

Candidate Starts for Sprinklers\_185:

(Start: 7 @100079 has 165 MA's), (Start: 17 @100019 has 1 MA's), (Start: 25 @99950 has 1 MA's), (67, 99578), (75, 99536), (78, 99518), (92, 99434), (95, 99410), (97, 99386), (98, 99383), (107, 99338), (111, 99287), (114, 99257), (116, 99245), (129, 99116), (142, 99023), (143, 99017), (153, 98954), (154, 98948), (165, 98852), (166, 98846), (175, 98735), (185, 98663), (189, 98630), (190, 98621), (201, 98501), (203, 98483), (212, 98384), (213, 98381), (217, 98360), (224, 98306), (231, 98270),

Gene: Spud\_184 Start: 100577, Stop: 98715, Start Num: 7

Candidate Starts for Spud\_184:

(Start: 7 @100577 has 165 MA's), (Start: 17 @100517 has 1 MA's), (Start: 25 @100448 has 1 MA's), (67, 100076), (75, 100034), (78, 100016), (92, 99932), (95, 99908), (97, 99884), (98, 99881), (107, 99836), (111, 99785), (114, 99755), (116, 99743), (129, 99614), (142, 99521), (143, 99515), (153, 99452), (154, 99446), (165, 99350), (166, 99344), (175, 99233), (185, 99161), (189, 99128), (190, 99119), (201, 98999), (203, 98981), (212, 98882), (213, 98879), (217, 98858), (224, 98804), (231, 98768),

Gene: SrishMeg2525\_185 Start: 101258, Stop: 99396, Start Num: 7

Candidate Starts for SrishMeg2525\_185:

(Start: 7 @101258 has 165 MA's), (Start: 17 @101198 has 1 MA's), (Start: 25 @101129 has 1 MA's), (67, 100757), (75, 100715), (78, 100697), (92, 100613), (95, 100589), (97, 100565), (98, 100562), (107, 100517), (111, 100466), (114, 100436), (116, 100424), (129, 100295), (142, 100202), (143, 100196), (153, 100133), (154, 100127), (165, 100031), (166, 100025), (175, 99914), (185, 99842), (189, 99809), (190, 99800), (201, 99680), (203, 99662), (212, 99563), (213, 99560), (217, 99539), (224, 99485), (231, 99449),

Gene: StephanieG\_185 Start: 101772, Stop: 99910, Start Num: 7

Candidate Starts for StephanieG\_185:

(Start: 7 @101772 has 165 MA's), (Start: 17 @101712 has 1 MA's), (Start: 25 @101643 has 1 MA's), (67, 101271), (75, 101229), (78, 101211), (92, 101127), (95, 101103), (97, 101079), (98, 101076), (107, 101031), (111, 100980), (114, 100950), (116, 100938), (129, 100809), (142, 100716), (143, 100710), (153, 100647), (154, 100641), (165, 100545), (166, 100539), (175, 100428), (185, 100356), (189, 100323), (190, 100314), (201, 100194), (203, 100176), (212, 100077), (213, 100074), (217, 100053), (224, 99999), (231, 99963),

Gene: Stormageddon\_59 Start: 61068, Stop: 59212, Start Num: 11

Candidate Starts for Stormageddon\_59:

(Start: 11 @61068 has 3 MA's), (31, 60879), (38, 60828), (63, 60600), (81, 60495), (92, 60432), (99, 60378), (101, 60366), (107, 60336), (114, 60249), (117, 60234), (130, 60117), (131, 60105), (137, 60060), (138, 60048), (142, 60033), (145, 60006), (148, 59985), (170, 59808), (173, 59781), (175, 59754), (191, 59610), (198, 59550), (203, 59493), (208, 59454), (215, 59385), (226, 59307), (233, 59268), (239, 59250), (241, 59241),

Gene: StubbySaigey\_192 Start: 100504, Stop: 98642, Start Num: 7

Candidate Starts for StubbySaigey\_192:

(Start: 7 @100504 has 165 MA's), (Start: 17 @100444 has 1 MA's), (Start: 25 @100375 has 1 MA's), (67, 100003), (75, 99961), (78, 99943), (92, 99859), (95, 99835), (97, 99811), (98, 99808), (107, 99763), (111, 99712), (114, 99682), (116, 99670), (129, 99541), (142, 99448), (143, 99442), (153, 99379), (154, 99373), (165, 99277), (166, 99271), (175, 99160), (185, 99088), (189, 99055), (190, 99046), (201, 98926), (203, 98908), (212, 98809), (213, 98806), (217, 98785), (224, 98731), (231, 98695),

Gene: Tainan\_189 Start: 101329, Stop: 99467, Start Num: 7

Candidate Starts for Tainan\_189:

(Start: 7 @101329 has 165 MA's), (Start: 17 @101269 has 1 MA's), (Start: 25 @101200 has 1 MA's), (67, 100828), (75, 100786), (78, 100768), (92, 100684), (95, 100660), (97, 100636), (98, 100633), (107, 100588), (111, 100537), (114, 100507), (116, 100495), (129, 100366), (142, 100273), (143, 100267), (153, 100204), (154, 100198), (165, 100102), (166, 100096), (175, 99985), (185, 99913), (189, 99880), (190, 99871), (201, 99751), (203, 99733), (212, 99634), (213, 99631), (217, 99610), (224, 99556), (231, 99520),

Gene: Talos\_126 Start: 67581, Stop: 69077, Start Num: 56

Candidate Starts for Talos\_126:

(Start: 48 @67509 has 1 MA's), (53, 67554), (56, 67581), (57, 67587), (59, 67611), (71, 67677), (83, 67758), (88, 67824), (97, 67881), (100, 67890), (101, 67899), (108, 67953), (115, 68028), (122, 68130), (125, 68151), (126, 68154), (133, 68205), (134, 68214), (135, 68229), (137, 68241), (144, 68289), (146, 68304), (150, 68325), (177, 68574), (180, 68586), (181, 68610), (186, 68646), (190, 68679), (191, 68697), (202, 68802), (214, 68922), (216, 68934), (225, 68991), (227, 69003), (229, 69009), (238, 69057),

Gene: Teardrop\_185 Start: 99403, Stop: 97541, Start Num: 7

Candidate Starts for Teardrop\_185:

(Start: 7 @99403 has 165 MA's), (Start: 17 @99343 has 1 MA's), (Start: 25 @99274 has 1 MA's), (67, 98902), (75, 98860), (78, 98842), (92, 98758), (95, 98734), (97, 98710), (98, 98707), (107, 98662), (111, 98611), (114, 98581), (116, 98569), (129, 98440), (142, 98347), (143, 98341), (153, 98278), (154, 98272), (165, 98176), (166, 98170), (175, 98059), (185, 97987), (189, 97954), (190, 97945), (201, 97825), (203, 97807), (212, 97708), (213, 97705), (217, 97684), (224, 97630), (231, 97594),

Gene: TinyTim\_186 Start: 100107, Stop: 98245, Start Num: 7

Candidate Starts for TinyTim\_186:

(Start: 7 @100107 has 165 MA's), (Start: 17 @100047 has 1 MA's), (Start: 25 @99978 has 1 MA's), (67, 99606), (75, 99564), (78, 99546), (92, 99462), (95, 99438), (97, 99414), (98, 99411), (107, 99366), (111, 99315), (114, 99285), (116, 99273), (129, 99144), (142, 99051), (143, 99045), (153, 98982), (154, 98976), (165, 98880), (166, 98874), (175, 98763), (185, 98691), (189, 98658), (190, 98649), (201, 98529), (203, 98511), (212, 98412), (213, 98409), (217, 98388), (224, 98334), (231, 98298),

Gene: Tonenili\_206 Start: 105613, Stop: 103745, Start Num: 7

Candidate Starts for Tonenili\_206:

(Start: 7 @105613 has 165 MA's), (37, 105355), (68, 105109), (75, 105070), (86, 104989), (92, 104962), (93, 104959), (95, 104938), (97, 104914), (98, 104911), (107, 104866), (111, 104815), (114, 104785), (116, 104773), (129, 104644), (142, 104551), (143, 104545), (153, 104482), (154, 104476), (165, 104380), (166, 104374), (175, 104263), (185, 104191), (189, 104158), (190, 104149), (201, 104029), (203, 104011), (212, 103912), (213, 103909), (217, 103888), (231, 103798),

Gene: Tortoise16\_186 Start: 100644, Stop: 98782, Start Num: 7

Candidate Starts for Tortoise16\_186:

(Start: 7 @100644 has 165 MA's), (Start: 17 @100584 has 1 MA's), (Start: 25 @100515 has 1 MA's), (67, 100143), (75, 100101), (78, 100083), (92, 99999), (95, 99975), (97, 99951), (98, 99948), (107, 99903), (111, 99852), (114, 99822), (116, 99810), (129, 99681), (142, 99588), (143, 99582), (153, 99519), (154, 99513), (165, 99417), (166, 99411), (175, 99300), (185, 99228), (189, 99195), (190, 99186), (201, 99066), (203, 99048), (212, 98949), (213, 98946), (217, 98925), (224, 98871), (231, 98835),

Gene: Trinitium\_185 Start: 100337, Stop: 98475, Start Num: 7

Candidate Starts for Trinitium\_185:

(Start: 7 @100337 has 165 MA's), (Start: 17 @100277 has 1 MA's), (Start: 25 @100208 has 1 MA's), (67, 99836), (75, 99794), (78, 99776), (92, 99692), (95, 99668), (97, 99644), (98, 99641), (107, 99596), (111, 99545), (114, 99515), (116, 99503), (129, 99374), (142, 99281), (143, 99275), (153, 99212), (154, 99206), (165, 99110), (166, 99104), (175, 98993), (185, 98921), (189, 98888), (190, 98879), (201, 98759), (203, 98741), (212, 98642), (213, 98639), (217, 98618), (224, 98564), (231, 98528),

Gene: Turret\_182 Start: 99919, Stop: 98057, Start Num: 7

Candidate Starts for Turret\_182:

(Start: 7 @99919 has 165 MA's), (Start: 17 @99859 has 1 MA's), (Start: 25 @99790 has 1 MA's), (67, 99418), (75, 99376), (78, 99358), (92, 99274), (95, 99250), (97, 99226), (98, 99223), (107, 99178), (111, 99127), (114, 99097), (116, 99085), (129, 98956), (142, 98863), (143, 98857), (153, 98794), (154, 98788), (165, 98692), (166, 98686), (175, 98575), (185, 98503), (189, 98470), (190, 98461), (201, 98341), (203, 98323), (212, 98224), (213, 98221), (217, 98200), (224, 98146), (231, 98110),

Gene: Tyke\_186 Start: 102011, Stop: 100149, Start Num: 7

Candidate Starts for Tyke\_186:

(Start: 7 @102011 has 165 MA's), (Start: 17 @101951 has 1 MA's), (Start: 25 @101882 has 1 MA's), (67, 101510), (75, 101468), (78, 101450), (92, 101366), (95, 101342), (97, 101318), (98, 101315), (107, 101270), (111, 101219), (114, 101189), (116, 101177), (129, 101048), (142, 100955), (143, 100949), (153, 100886), (154, 100880), (165, 100784), (166, 100778), (175, 100667), (185, 100595),

(189, 100562), (190, 100553), (201, 100433), (203, 100415), (212, 100316), (213, 100313), (217, 100292), (224, 100238), (231, 100202),

Gene: ValleyTerrace\_188 Start: 99711, Stop: 97849, Start Num: 7

Candidate Starts for ValleyTerrace\_188:

(Start: 7 @99711 has 165 MA's), (Start: 17 @99651 has 1 MA's), (Start: 25 @99582 has 1 MA's), (67, 99210), (75, 99168), (78, 99150), (92, 99066), (95, 99042), (97, 99018), (98, 99015), (107, 98970), (111, 98919), (114, 98889), (116, 98877), (129, 98748), (142, 98655), (143, 98649), (153, 98586), (154, 98580), (165, 98484), (166, 98478), (175, 98367), (185, 98295), (189, 98262), (190, 98253), (201, 98133), (203, 98115), (212, 98016), (213, 98013), (217, 97992), (224, 97938), (231, 97902),

Gene: Wally\_188 Start: 100487, Stop: 98625, Start Num: 7

Candidate Starts for Wally\_188:

(Start: 7 @100487 has 165 MA's), (Start: 17 @100427 has 1 MA's), (Start: 25 @100358 has 1 MA's), (67, 99986), (75, 99944), (78, 99926), (92, 99842), (95, 99818), (97, 99794), (98, 99791), (107, 99746), (111, 99695), (114, 99665), (116, 99653), (129, 99524), (142, 99431), (143, 99425), (153, 99362), (154, 99356), (165, 99260), (166, 99254), (175, 99143), (185, 99071), (189, 99038), (190, 99029), (201, 98909), (203, 98891), (212, 98792), (213, 98789), (217, 98768), (224, 98714), (231, 98678),

Gene: Willis\_188 Start: 100918, Stop: 99056, Start Num: 7

Candidate Starts for Willis\_188:

(Start: 7 @100918 has 165 MA's), (Start: 17 @100858 has 1 MA's), (Start: 25 @100789 has 1 MA's), (67, 100417), (75, 100375), (78, 100357), (92, 100273), (95, 100249), (97, 100225), (98, 100222), (107, 100177), (111, 100126), (114, 100096), (116, 100084), (129, 99955), (142, 99862), (143, 99856), (153, 99793), (154, 99787), (165, 99691), (166, 99685), (175, 99574), (185, 99502), (189, 99469), (190, 99460), (201, 99340), (203, 99322), (212, 99223), (213, 99220), (217, 99199), (224, 99145), (231, 99109),

Gene: Yassified\_184 Start: 100059, Stop: 98197, Start Num: 7

Candidate Starts for Yassified\_184:

(Start: 7 @100059 has 165 MA's), (Start: 17 @99999 has 1 MA's), (Start: 25 @99930 has 1 MA's), (67, 99558), (75, 99516), (78, 99498), (92, 99414), (95, 99390), (97, 99366), (98, 99363), (107, 99318), (111, 99267), (114, 99237), (116, 99225), (129, 99096), (142, 99003), (143, 98997), (153, 98934), (154, 98928), (165, 98832), (166, 98826), (175, 98715), (185, 98643), (189, 98610), (190, 98601), (201, 98481), (203, 98463), (212, 98364), (213, 98361), (217, 98340), (224, 98286), (231, 98250),

Gene: YemiJoy2021\_188 Start: 101674, Stop: 99812, Start Num: 7

Candidate Starts for YemiJoy2021\_188:

(Start: 7 @101674 has 165 MA's), (Start: 17 @101614 has 1 MA's), (Start: 25 @101545 has 1 MA's), (67, 101173), (75, 101131), (78, 101113), (92, 101029), (95, 101005), (97, 100981), (98, 100978), (107, 100933), (111, 100882), (114, 100852), (116, 100840), (129, 100711), (142, 100618), (143, 100612), (153, 100549), (154, 100543), (165, 100447), (166, 100441), (175, 100330), (185, 100258), (189, 100225), (190, 100216), (201, 100096), (203, 100078), (212, 99979), (213, 99976), (217, 99955), (224, 99901), (231, 99865),

Gene: YoungMoneyMata\_187 Start: 100702, Stop: 98840, Start Num: 7

Candidate Starts for YoungMoneyMata\_187:

(Start: 7 @100702 has 165 MA's), (Start: 17 @100642 has 1 MA's), (Start: 25 @100573 has 1 MA's), (67, 100201), (75, 100159), (78, 100141), (92, 100057), (95, 100033), (97, 100009), (98, 100006), (107, 99961), (111, 99910), (114, 99880), (116, 99868), (129, 99739), (142, 99646), (143, 99640), (153, 99577), (154, 99571), (165, 99475), (166, 99469), (175, 99358), (185, 99286), (189, 99253), (190, 99244), (201, 99124), (203, 99106), (212, 99007), (213, 99004), (217, 98983), (224, 98929), (231, 98893),



Gene: Yucca\_188 Start: 101665, Stop: 99803, Start Num: 7

Candidate Starts for Yucca\_188:

(Start: 7 @101665 has 165 MA's), (Start: 17 @101605 has 1 MA's), (Start: 25 @101536 has 1 MA's), (67, 101164), (75, 101122), (78, 101104), (92, 101020), (95, 100996), (97, 100972), (98, 100969), (107, 100924), (111, 100873), (114, 100843), (116, 100831), (129, 100702), (142, 100609), (143, 100603), (153, 100540), (154, 100534), (165, 100438), (166, 100432), (175, 100321), (185, 100249), (189, 100216), (190, 100207), (201, 100087), (203, 100069), (212, 99970), (213, 99967), (217, 99946), (224, 99892), (231, 99856),

Gene: Zalkecks\_187 Start: 100747, Stop: 98885, Start Num: 7

Candidate Starts for Zalkecks\_187:

(Start: 7 @100747 has 165 MA's), (Start: 17 @100687 has 1 MA's), (Start: 25 @100618 has 1 MA's), (67, 100246), (75, 100204), (78, 100186), (92, 100102), (95, 100078), (97, 100054), (98, 100051), (107, 100006), (111, 99955), (114, 99925), (116, 99913), (129, 99784), (142, 99691), (143, 99685), (153, 99622), (154, 99616), (165, 99520), (166, 99514), (175, 99403), (185, 99331), (189, 99298), (190, 99289), (201, 99169), (203, 99151), (212, 99052), (213, 99049), (217, 99028), (224, 98974), (231, 98938),

Gene: Zeenon\_190 Start: 101317, Stop: 99455, Start Num: 7

Candidate Starts for Zeenon\_190:

(Start: 7 @101317 has 165 MA's), (Start: 17 @101257 has 1 MA's), (Start: 25 @101188 has 1 MA's), (67, 100816), (75, 100774), (78, 100756), (92, 100672), (95, 100648), (97, 100624), (98, 100621), (107, 100576), (111, 100525), (114, 100495), (116, 100483), (129, 100354), (142, 100261), (143, 100255), (153, 100192), (154, 100186), (165, 100090), (166, 100084), (175, 99973), (185, 99901), (189, 99868), (190, 99859), (201, 99739), (203, 99721), (212, 99622), (213, 99619), (217, 99598), (224, 99544), (231, 99508),

Gene: ZygoTaiga\_184 Start: 101938, Stop: 100076, Start Num: 7

Candidate Starts for ZygoTaiga\_184:

(Start: 7 @101938 has 165 MA's), (Start: 17 @101878 has 1 MA's), (Start: 25 @101809 has 1 MA's), (67, 101437), (75, 101395), (78, 101377), (92, 101293), (95, 101269), (97, 101245), (98, 101242), (107, 101197), (111, 101146), (114, 101116), (116, 101104), (129, 100975), (142, 100882), (143, 100876), (153, 100813), (154, 100807), (165, 100711), (166, 100705), (175, 100594), (185, 100522), (189, 100489), (190, 100480), (201, 100360), (203, 100342), (212, 100243), (213, 100240), (217, 100219), (224, 100165), (231, 100129),