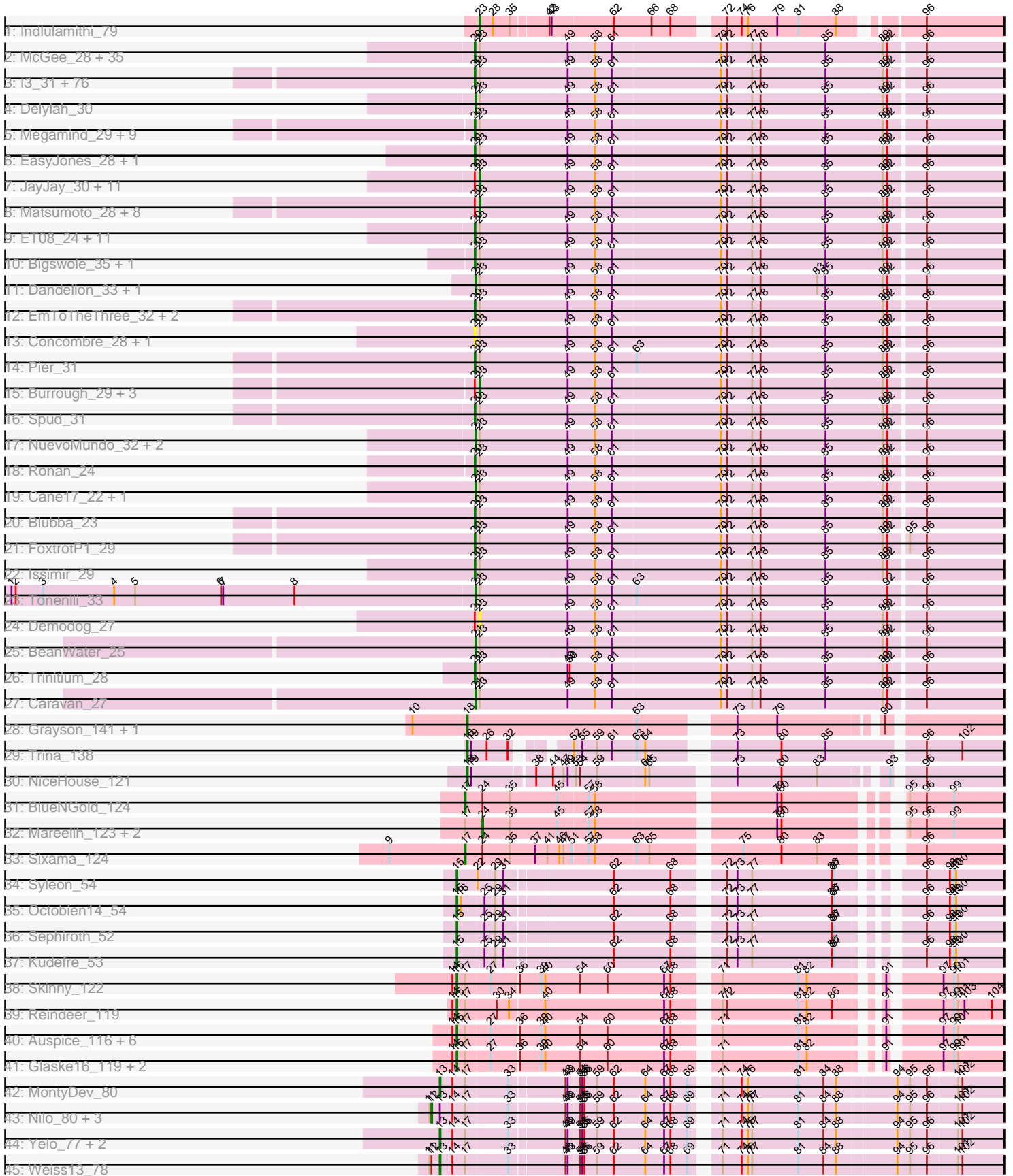


# Zoomed Pham 193724



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 193724 Report

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

Pham number 193724 has 223 members, 19 are drafts.

Phages represented in each track:

- Track 1 : Indlulamithi\_79
- Track 2 : McGee\_28, Kboogie\_29, MoMoMixon\_30, Babyland\_28, Asterius\_27, Astraea\_30, IkeLoa\_25, Grungle\_22, ChaylaJr\_28, Turret\_27, LinStu\_29, Blackbrain\_27, Koguma\_25, FrayBell\_35, Phox\_28, Dietrick\_24, Khaleesi\_28, Sprinklers\_29, Tainan\_34, Halldule\_25, ErnieJ\_30, Shaqnato\_25, BananaFence\_30, Chargie21\_28, StubbySaigey\_28, EmmaElysia\_27, Cali\_29, StephanieG\_29, BadAgartude\_30, Domi\_24, LRRHood\_26, Bonray\_29, Lukilu\_22, JPickles\_27, Basquiat\_28, McWolfish\_28
- Track 3 : I3\_31, Pleione\_31, Adlitam\_29, LifeSavor\_30, Pio\_32, Maby2021\_30, Grasshills\_33, Shrimp\_29, DTDevon\_30, Phlegm\_31, Amataga\_29, YemiJoy2021\_30, Shnickers\_29, Teardrop\_28, CharlieB\_29, InigoMontoya\_30, Gizmo\_31, Patter\_29, Ghost\_29, Drazdys\_29, Ava3\_30, Izajani\_30, InterFolia\_36, Derek\_30, Jedediah\_29, Lee7\_28, Jemmno\_29, Bangla1971\_28, SmallFry\_29, NedWong\_30, Atlantean\_29, Yucca\_29, Zalkecks\_31, Janiyra\_29, Norm\_29, Daffodil\_31, ParkTD\_28, Bread\_30, Latch\_29, EggyFarm\_33, JustHall\_28, Pivoine\_29, Chomp\_29, Bxz1\_29, Gabriel\_29, Audrick\_31, LolaVinca\_32, TinyTim\_29, Delilah\_29, BigCity\_33, Melpomini\_28, Capablanca\_31, CindyLou\_29, Guwapp\_29, DrPhinkDaddy\_29, Salacia\_31, Willis\_29, Quasimodo\_29, Erdmann\_30, ShiaLabeouf\_29, Littleton\_29, Rahel\_29, ValleyTerrace\_29, SilverDipper\_30, Mikro\_27, YoungMoneyMata\_29, Ngannou\_27, Naval22\_31, Roots515\_29, Spec\_27, Jaygup\_29, Tortoise16\_28, MikeLiesIn\_29, Catera\_27, Tyke\_31, Ewok\_29, Momo\_28
- Track 4 : Delylah\_30
- Track 5 : Megamind\_29, DirtMonster\_28, ArcherS7\_28, PurduePete\_28, SrishMeg2525\_28, Morizzled23\_28, Kamryn\_29, Nidhogg\_30, BackyardAgain\_26, Wally\_28
- Track 6 : EasyJones\_28, Rizal\_27
- Track 7 : JayJay\_30, Mangeria\_32, Jessibeth14\_28, LordLeafolot\_34, ScottMcG\_29, Darko\_28, JulietS\_24, Sebata\_29, Blackdragon\_24, ChickenPhender\_28, Fludd\_28, Yassified\_26
- Track 8 : Matsumoto\_28, Specks\_34, Phusco\_29, Breeniome\_29, ZygoTaiga\_29, Gamgam\_29, FudgeTart\_30, Ading\_29, Naija\_29
- Track 9 : ET08\_24, Rabinovish\_28, Flabslab\_30, Stubby\_27, Sauce\_30, HyRo\_28, Shelob\_31, Pinkcreek\_21, RoMag\_24, QBert\_27, Alice\_24, Shifa\_26
- Track 10 : Bigswole\_35, NoodleTree\_28
- Track 11 : Dandelion\_33, Nappy\_30
- Track 12 : EmToTheThree\_32, Iota\_26, Loanshark\_29

- Track 13 : Concombre\_28, JigglyPuff\_29
- Track 14 : Pier\_31
- Track 15 : Burrough\_29, Zeenon\_31, Bipolarisk\_28, Napoleon13\_28
- Track 16 : Spud\_31
- Track 17 : NuevoMundo\_32, Cactojaque\_26, Essence\_28
- Track 18 : Ronan\_24
- Track 19 : Cane17\_22, Colt\_22
- Track 20 : Blubba\_23
- Track 21 : FoxtrotP1\_29
- Track 22 : Issimir\_29
- Track 23 : Tonenili\_33
- Track 24 : Demodog\_27
- Track 25 : BeanWater\_25
- Track 26 : Trinitium\_28
- Track 27 : Caravan\_27
- Track 28 : Grayson\_141, Peregrin\_142
- Track 29 : Trina\_138
- Track 30 : NiceHouse\_121
- Track 31 : BlueNGold\_124
- Track 32 : Mareelih\_123, Forza\_125, Boopy\_125
- Track 33 : Sixama\_124
- Track 34 : Syleon\_54
- Track 35 : Octobien14\_54
- Track 36 : Sephiroth\_52
- Track 37 : Kudfre\_53
- Track 38 : Skinny\_122
- Track 39 : Reindeer\_119
- Track 40 : Auspice\_116, IPhane7\_114, Bricole\_118, Diminimus\_117, Dulcita\_117, TyDawg\_111, Bongo\_116
- Track 41 : Glaske16\_119, LilhomieP\_116, PegLeg\_120
- Track 42 : MontyDev\_80
- Track 43 : Nilo\_80, Riparian\_80, Rope\_78, Zenon\_80
- Track 44 : Yelo\_77, Send513\_78, Candle\_76
- Track 45 : Weiss13\_78

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

The start number called the most often in the published annotations is 20, it was called in 139 of the 204 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adlitam\_29, Alice\_24, Amataga\_29, ArcherS7\_28, Asterius\_27, Astraea\_30, Atlantean\_29, Audrick\_31, Ava3\_30, Babyland\_28, BackyardAgain\_26, BadAgartude\_30, BananaFence\_30, Bangla1971\_28, Basquiat\_28, BigCity\_33, Bigswole\_35, Blackbrain\_27, Blubba\_23, Bonray\_29, Bread\_30, Bxz1\_29, Cali\_29, Capablanca\_31, Catera\_27, Chargie21\_28, CharlieB\_29, ChaylaJr\_28, Chomp\_29, CindyLou\_29, Concombre\_28, DTDevon\_30, Daffodil\_31, Delilah\_29, Derek\_30, Dietrick\_24, DirtMonster\_28, Domi\_24, DrPhinkDaddy\_29, Drazdys\_29, ET08\_24, EasyJones\_28, EggyFarm\_33, EmToTheThree\_32, EmmaElysia\_27, Erdmann\_30, ErnieJ\_30, Ewok\_29, Flabslab\_30, FoxtrotP1\_29, FrayBell\_35, Gabriel\_29,

Ghost\_29, Gizmo\_31, Grasshills\_33, Grungle\_22, Guwapp\_29, Halldule\_25, HyRo\_28, I3\_31, IkeLoa\_25, InigoMontoya\_30, InterFolia\_36, Iota\_26, Issimir\_29, Izajani\_30, JPickles\_27, Janiyra\_29, Jaygup\_29, Jedediah\_29, Jemmno\_29, JigglyPuff\_29, JustHall\_28, Kamryn\_29, Kboogie\_29, Khaleesi\_28, Koguma\_25, LRRHood\_26, Latch\_29, Lee7\_28, LifeSavor\_30, LinStu\_29, Littleton\_29, Loanshark\_29, LolaVinca\_32, Lukilu\_22, Maby2021\_30, McGee\_28, McWolfish\_28, Megamind\_29, Melpomini\_28, MikeLiesIn\_29, Mikro\_27, MoMoMixon\_30, Momo\_28, Morizzled23\_28, Naval22\_31, NedWong\_30, Ngannou\_27, Nidhogg\_30, NoodleTree\_28, Norm\_29, ParkTD\_28, Patter\_29, Phlegm\_31, Phox\_28, Pier\_31, Pinkcreek\_21, Pio\_32, Pivoine\_29, Pleione\_31, PurduePete\_28, QBert\_27, Quasimodo\_29, Rabinovich\_28, Rahel\_29, Rizal\_27, RoMag\_24, Ronan\_24, Roots515\_29, Salacia\_31, Sauce\_30, Shaq nato\_25, Shelob\_31, ShiaLabeouf\_29, Shifa\_26, Shnickers\_29, Shrimp\_29, SilverDipper\_30, SmallFry\_29, Spec\_27, Sprinklers\_29, Spud\_31, SrishMeg2525\_28, StephanieG\_29, StubbySaigey\_28, Stubby\_27, Tainan\_34, Teardrop\_28, TinyTim\_29, Tortoise16\_28, Trinitium\_28, Turret\_27, Tyke\_31, ValleyTerrace\_29, Wally\_28, Willis\_29, YemiJoy2021\_30, YoungMoneyMata\_29, Yucca\_29, Zalkecks\_31,

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

- Ading\_29, Bipolarisk\_28, Blackdragon\_24, Breeniome\_29, Burrough\_29, ChickenPhender\_28, Darko\_28, Demodog\_27, Fludd\_28, FudgeTart\_30, Gamgam\_29, JayJay\_30, Jessibeth14\_28, JulietS\_24, LordLeafolot\_34, Mangeria\_32, Matsumoto\_28, Naija\_29, Napoleon13\_28, Phusco\_29, ScottMcG\_29, Sebata\_29, Specks\_34, Yassified\_26, Zeenon\_31, ZygoTaiga\_29,

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

- Auspice\_116, BeanWater\_25, BlueNGold\_124, Bongo\_116, Boopy\_125, Bricole\_118, Cactojaque\_26, Candle\_76, Cane17\_22, Caravan\_27, Colt\_22, Dandelion\_33, Delylah\_30, Diminimus\_117, Dulcita\_117, Essence\_28, Forza\_125, Glaske16\_119, Grayson\_141, IPhone7\_114, Indlulamithi\_79, Kudrefre\_53, LilhomieP\_116, Mareelih\_123, MontyDev\_80, Nappy\_30, NiceHouse\_121, Nilo\_80, NuevoMundo\_32, Octobien14\_54, PegLeg\_120, Peregrin\_142, Reindeer\_119, Riparian\_80, Rope\_78, Send513\_78, Sephiroth\_52, Sixama\_124, Skinny\_122, Syleon\_54, Tonenili\_33, Trina\_138, TyDawg\_111, Weiss13\_78, Yelo\_77, Zenon\_80,

### Summary by start number:

Start 12:

- Found in 5 of 223 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 4 of 204
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Nilo\_80 (R), Riparian\_80 (R), Rope\_78 (R), Zenon\_80 (R),

Start 13:

- Found in 9 of 223 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 4 of 204
- Called 55.6% of time when present
- Phage (with cluster) where this start called: Candle\_76 (R), MontyDev\_80 (R), Send513\_78 (R), Weiss13\_78 (R), Yelo\_77 (R),

Start 15:

- Found in 16 of 223 ( 7.2% ) of genes in pham

- Manual Annotations of this start: 16 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Auspice\_116 (M1), Bongo\_116 (M1), Bricole\_118 (M1), Diminimus\_117 (M1), Dulcita\_117 (M1), Glaske16\_119 (M1), IPhane7\_114 (M1), Kudrefre\_53 (DU1), LilhomieP\_116 (M1), Octobien14\_54 (DU1), PegLeg\_120 (M1), Reindeer\_119 (M1), Sephiroth\_52 (DU1), Skinny\_122 (M1), Syleon\_54 (DU1), TyDawg\_111 (M1),

#### Start 17:

- Found in 26 of 223 ( 11.7% ) of genes in pham
- Manual Annotations of this start: 2 of 204
- Called 7.7% of time when present
- Phage (with cluster) where this start called: BlueNGold\_124 (DS), Sixama\_124 (DS),

#### Start 18:

- Found in 4 of 223 ( 1.8% ) of genes in pham
- Manual Annotations of this start: 4 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Grayson\_141 (CB), NiceHouse\_121 (CE), Peregrin\_142 (CB), Trina\_138 (CE),

#### Start 20:

- Found in 177 of 223 ( 79.4% ) of genes in pham
- Manual Annotations of this start: 139 of 204
- Called 85.3% of time when present
- Phage (with cluster) where this start called: Adlitam\_29 (C1), Alice\_24 (C1), Amataga\_29 (C1), ArcherS7\_28 (C1), Asterius\_27 (C1), Astraea\_30 (C1), Atlantean\_29 (C1), Audrick\_31 (C1), Ava3\_30 (C1), Babyland\_28 (C1), BackyardAgain\_26 (C1), BadAgartude\_30 (C1), BananaFence\_30 (C1), Bangla1971\_28 (C1), Basquiat\_28 (C1), BigCity\_33 (C1), Bigswole\_35 (C1), Blackbrain\_27 (C1), Blubba\_23 (C1), Bonray\_29 (C1), Bread\_30 (C1), Bxz1\_29 (C1), Cali\_29 (C1), Capablanca\_31 (C1), Catera\_27 (C1), Chargie21\_28 (C1), CharlieB\_29 (C1), ChaylaJr\_28 (C1), Chomp\_29 (C1), CindyLou\_29 (C1), Concombre\_28 (C1), DTDevon\_30 (C1), Daffodil\_31 (C1), Delilah\_29 (C1), Derek\_30 (C1), Dietrick\_24 (C1), DirtMonster\_28 (C1), Domi\_24 (C1), DrPhinkDaddy\_29 (C1), Drazdys\_29 (C1), ET08\_24 (C1), EasyJones\_28 (C1), EggyFarm\_33 (C1), EmToTheThree\_32 (C1), EmmaElysia\_27 (C1), Erdmann\_30 (C1), ErnieJ\_30 (C1), Ewok\_29 (C1), Flabslab\_30 (C1), FoxtrotP1\_29 (C1), FrayBell\_35 (C1), Gabriel\_29 (C1), Ghost\_29 (C1), Gizmo\_31 (C1), Grasshills\_33 (C1), Grungle\_22 (C1), Guwapp\_29 (C1), Halldule\_25 (C1), HyRo\_28 (C1), I3\_31 (C1), IkeLoa\_25 (C1), InigoMontoya\_30 (C1), InterFolia\_36 (C1), Iota\_26 (C1), Issimir\_29 (C1), Izajani\_30 (C1), JPickles\_27 (C1), Janiyra\_29 (C1), Jaygup\_29 (C1), Jedediah\_29 (C1), Jemmno\_29 (C1), JigglyPuff\_29 (C1), JustHall\_28 (C1), Kamryn\_29 (C1), Kboogie\_29 (C1), Khaleesi\_28 (C1), Koguma\_25 (C1), LRRHood\_26 (C1), Latch\_29 (C1), Lee7\_28 (C1), LifeSavor\_30 (C1), LinStu\_29 (C1), Littleton\_29 (C1), Loanshark\_29 (C1), LolaVince\_32 (C1), Lukilu\_22 (C1), Maby2021\_30 (C1), McGee\_28 (C1), McWolfish\_28 (C1), Megamind\_29 (C1), Melpomini\_28 (C1), MikeLiesIn\_29 (C1), Mikro\_27 (C1), MoMoMixon\_30 (C1), Momo\_28 (C1), Morizzled23\_28 (C1), Naval22\_31 (C1), NedWong\_30 (C1), Ngannou\_27 (C1), Nidhogg\_30 (C1), NoodleTree\_28 (C1), Norm\_29 (C1), ParkTD\_28 (C1), Patter\_29 (C1), Phlegm\_31 (C1), Phox\_28 (C1), Pier\_31 (C1), Pinkcreek\_21 (C1), Pio\_32 (C1), Pivoine\_29 (C1), Pleione\_31 (C1), PurduePete\_28 (C1), QBert\_27 (C1), Quasimodo\_29 (C1),

Rabinovish\_28 (C1), Rahel\_29 (C1), Rizal\_27 (C1), RoMag\_24 (C1), Ronan\_24 (C1), Roots515\_29 (C1), Salacia\_31 (C1), Sauce\_30 (C1), Shaqnato\_25 (C1), Shelob\_31 (C1), ShiaLabeouf\_29 (C1), Shifa\_26 (C1), Shnickers\_29 (C1), Shrimp\_29 (C1), SilverDipper\_30 (C1), SmallFry\_29 (C1), Spec\_27 (C1), Sprinklers\_29 (C1), Spud\_31 (C1), SrishMeg2525\_28 (C1), StephanieG\_29 (C1), StubbySaigey\_28 (C1), Stubby\_27 (C1), Tainan\_34 (C1), Teardrop\_28 (C1), TinyTim\_29 (C1), Tortoise16\_28 (C1), Trinitium\_28 (C1), Turret\_27 (C1), Tyke\_31 (C1), ValleyTerrace\_29 (C1), Wally\_28 (C1), Willis\_29 (C1), YemiJoy2021\_30 (C1), YoungMoneyMata\_29 (C1), Yucca\_29 (C1), Zalkecks\_31 (C1),

Start 21:

- Found in 11 of 223 ( 4.9% ) of genes in pham
- Manual Annotations of this start: 11 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BeanWater\_25 (C1), Cactojaque\_26 (C1), Cane17\_22 (C1), Caravan\_27 (C1), Colt\_22 (C1), Dandelion\_33 (C1), Delylah\_30 (C1), Essence\_28 (C1), Nappy\_30 (C1), NuevoMundo\_32 (C1), Tonenili\_33 (C1),

Start 23:

- Found in 189 of 223 ( 84.8% ) of genes in pham
- Manual Annotations of this start: 21 of 204
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Ading\_29 (C1), Bipolarisk\_28 (C1), Blackdragon\_24 (C1), Breeniome\_29 (C1), Burrough\_29 (C1), ChickenPhender\_28 (C1), Darko\_28 (C1), Demodog\_27 (C1), Fludd\_28 (C1), FudgeTart\_30 (C1), Gamgam\_29 (C1), Indlulamithi\_79 (AC), JayJay\_30 (C1), Jessibeth14\_28 (C1), JulietS\_24 (C1), LordLeafolot\_34 (C1), Mangeria\_32 (C1), Matsumoto\_28 (C1), Naija\_29 (C1), Napoleon13\_28 (C1), Phusco\_29 (C1), ScottMcG\_29 (C1), Sebata\_29 (C1), Specks\_34 (C1), Yassified\_26 (C1), Zeenon\_31 (C1), ZygoTaiga\_29 (C1),

Start 24:

- Found in 5 of 223 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 3 of 204
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Boopy\_125 (DS), Forza\_125 (DS), Mareelih\_123 (DS),

### Summary by clusters:

There are 8 clusters represented in this pham: AC, CB, CE, R, M1, DU1, C1, DS,

Info for manual annotations of cluster AC:

- Start number 23 was manually annotated 1 time for cluster AC.

Info for manual annotations of cluster C1:

- Start number 20 was manually annotated 139 times for cluster C1.
- Start number 21 was manually annotated 11 times for cluster C1.
- Start number 23 was manually annotated 20 times for cluster C1.

Info for manual annotations of cluster CB:

- Start number 18 was manually annotated 2 times for cluster CB.

Info for manual annotations of cluster CE:

- Start number 18 was manually annotated 2 times for cluster CE.

Info for manual annotations of cluster DS:

- Start number 17 was manually annotated 2 times for cluster DS.
- Start number 24 was manually annotated 3 times for cluster DS.

Info for manual annotations of cluster DU1:

- Start number 15 was manually annotated 4 times for cluster DU1.

Info for manual annotations of cluster M1:

- Start number 15 was manually annotated 12 times for cluster M1.

Info for manual annotations of cluster R:

- Start number 12 was manually annotated 4 times for cluster R.
- Start number 13 was manually annotated 4 times for cluster R.

### **Gene Information:**

Gene: Ading\_29 Start: 8846, Stop: 9784, Start Num: 23

Candidate Starts for Ading\_29:

(Start: 20 @8840 has 139 MA's), (Start: 23 @8846 has 21 MA's), (49, 8969), (58, 9008), (61, 9032), (70, 9185), (72, 9194), (77, 9230), (78, 9242), (85, 9335), (89, 9416), (92, 9422), (96, 9470), (105, 9590), (113, 9701), (116, 9722), (120, 9752),

Gene: Adlitam\_29 Start: 8857, Stop: 9801, Start Num: 20

Candidate Starts for Adlitam\_29:

(Start: 20 @8857 has 139 MA's), (Start: 23 @8863 has 21 MA's), (49, 8986), (58, 9025), (61, 9049), (70, 9202), (72, 9211), (77, 9247), (78, 9259), (85, 9352), (89, 9433), (92, 9439), (96, 9487), (105, 9607), (113, 9718), (116, 9739), (120, 9769),

Gene: Alice\_24 Start: 7935, Stop: 8879, Start Num: 20

Candidate Starts for Alice\_24:

(Start: 20 @7935 has 139 MA's), (Start: 23 @7941 has 21 MA's), (49, 8064), (58, 8103), (61, 8127), (70, 8280), (72, 8289), (77, 8325), (78, 8337), (85, 8430), (89, 8511), (92, 8517), (96, 8565), (105, 8685), (110, 8769), (113, 8796), (116, 8817), (120, 8847),

Gene: Amataga\_29 Start: 8861, Stop: 9805, Start Num: 20

Candidate Starts for Amataga\_29:

(Start: 20 @8861 has 139 MA's), (Start: 23 @8867 has 21 MA's), (49, 8990), (58, 9029), (61, 9053), (70, 9206), (72, 9215), (77, 9251), (78, 9263), (85, 9356), (89, 9437), (92, 9443), (96, 9491), (105, 9611), (113, 9722), (116, 9743), (120, 9773),

Gene: ArcherS7\_28 Start: 8851, Stop: 9795, Start Num: 20

Candidate Starts for ArcherS7\_28:

(Start: 20 @8851 has 139 MA's), (Start: 23 @8857 has 21 MA's), (49, 8980), (58, 9019), (61, 9043), (70, 9196), (72, 9205), (77, 9241), (78, 9253), (85, 9346), (89, 9427), (92, 9433), (96, 9481), (105, 9601), (113, 9712), (116, 9733), (120, 9763),

Gene: Asterius\_27 Start: 9126, Stop: 10070, Start Num: 20

Candidate Starts for Asterius\_27:

(Start: 20 @9126 has 139 MA's), (Start: 23 @9132 has 21 MA's), (49, 9255), (58, 9294), (61, 9318), (70, 9471), (72, 9480), (77, 9516), (78, 9528), (85, 9621), (89, 9702), (92, 9708), (96, 9756), (105, 9876), (113, 9987), (116, 10008), (120, 10038),

Gene: Astraea\_30 Start: 9031, Stop: 9975, Start Num: 20

Candidate Starts for Astraea\_30:

(Start: 20 @9031 has 139 MA's), (Start: 23 @9037 has 21 MA's), (49, 9160), (58, 9199), (61, 9223), (70, 9376), (72, 9385), (77, 9421), (78, 9433), (85, 9526), (89, 9607), (92, 9613), (96, 9661), (105, 9781), (113, 9892), (116, 9913), (120, 9943),

Gene: Atlantean\_29 Start: 8861, Stop: 9805, Start Num: 20

Candidate Starts for Atlantean\_29:

(Start: 20 @8861 has 139 MA's), (Start: 23 @8867 has 21 MA's), (49, 8990), (58, 9029), (61, 9053), (70, 9206), (72, 9215), (77, 9251), (78, 9263), (85, 9356), (89, 9437), (92, 9443), (96, 9491), (105, 9611), (113, 9722), (116, 9743), (120, 9773),

Gene: Audrick\_31 Start: 8840, Stop: 9784, Start Num: 20

Candidate Starts for Audrick\_31:

(Start: 20 @8840 has 139 MA's), (Start: 23 @8846 has 21 MA's), (49, 8969), (58, 9008), (61, 9032), (70, 9185), (72, 9194), (77, 9230), (78, 9242), (85, 9335), (89, 9416), (92, 9422), (96, 9470), (105, 9590), (113, 9701), (116, 9722), (120, 9752),

Gene: Auspice\_116 Start: 62097, Stop: 62996, Start Num: 15

Candidate Starts for Auspice\_116:

(14, 62091), (Start: 15 @62097 has 16 MA's), (Start: 17 @62109 has 2 MA's), (27, 62142), (36, 62178), (39, 62208), (40, 62214), (54, 62262), (60, 62301), (67, 62382), (68, 62391), (71, 62442), (81, 62550), (82, 62562), (91, 62643), (97, 62706), (99, 62721), (101, 62727), (105, 62802), (108, 62856), (109, 62868), (111, 62892), (114, 62916), (115, 62928), (119, 62964),

Gene: Ava3\_30 Start: 9406, Stop: 10350, Start Num: 20

Candidate Starts for Ava3\_30:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),

Gene: Babyland\_28 Start: 8299, Stop: 9243, Start Num: 20

Candidate Starts for Babyland\_28:

(Start: 20 @8299 has 139 MA's), (Start: 23 @8305 has 21 MA's), (49, 8428), (58, 8467), (61, 8491), (70, 8644), (72, 8653), (77, 8689), (78, 8701), (85, 8794), (89, 8875), (92, 8881), (96, 8929), (105, 9049), (113, 9160), (116, 9181), (120, 9211),

Gene: BackyardAgain\_26 Start: 8280, Stop: 9224, Start Num: 20

Candidate Starts for BackyardAgain\_26:

(Start: 20 @8280 has 139 MA's), (Start: 23 @8286 has 21 MA's), (49, 8409), (58, 8448), (61, 8472), (70, 8625), (72, 8634), (77, 8670), (78, 8682), (85, 8775), (89, 8856), (92, 8862), (96, 8910), (105, 9030), (113, 9141), (116, 9162), (120, 9192),

Gene: BadAgartude\_30 Start: 9493, Stop: 10437, Start Num: 20

Candidate Starts for BadAgartude\_30:

(Start: 20 @9493 has 139 MA's), (Start: 23 @9499 has 21 MA's), (49, 9622), (58, 9661), (61, 9685), (70, 9838), (72, 9847), (77, 9883), (78, 9895), (85, 9988), (89, 10069), (92, 10075), (96, 10123), (105, 10243), (113, 10354), (116, 10375), (120, 10405),



Gene: BananaFence\_30 Start: 9290, Stop: 10234, Start Num: 20

Candidate Starts for BananaFence\_30:

(Start: 20 @9290 has 139 MA's), (Start: 23 @9296 has 21 MA's), (49, 9419), (58, 9458), (61, 9482), (70, 9635), (72, 9644), (77, 9680), (78, 9692), (85, 9785), (89, 9866), (92, 9872), (96, 9920), (105, 10040), (113, 10151), (116, 10172), (120, 10202),

Gene: Bangla1971\_28 Start: 8857, Stop: 9801, Start Num: 20

Candidate Starts for Bangla1971\_28:

(Start: 20 @8857 has 139 MA's), (Start: 23 @8863 has 21 MA's), (49, 8986), (58, 9025), (61, 9049), (70, 9202), (72, 9211), (77, 9247), (78, 9259), (85, 9352), (89, 9433), (92, 9439), (96, 9487), (105, 9607), (113, 9718), (116, 9739), (120, 9769),

Gene: Basquiat\_28 Start: 8280, Stop: 9224, Start Num: 20

Candidate Starts for Basquiat\_28:

(Start: 20 @8280 has 139 MA's), (Start: 23 @8286 has 21 MA's), (49, 8409), (58, 8448), (61, 8472), (70, 8625), (72, 8634), (77, 8670), (78, 8682), (85, 8775), (89, 8856), (92, 8862), (96, 8910), (105, 9030), (113, 9141), (116, 9162), (120, 9192),

Gene: BeanWater\_25 Start: 9250, Stop: 10194, Start Num: 21

Candidate Starts for BeanWater\_25:

(Start: 21 @9250 has 11 MA's), (Start: 23 @9256 has 21 MA's), (49, 9379), (58, 9418), (61, 9442), (70, 9595), (72, 9604), (77, 9640), (78, 9652), (85, 9745), (89, 9826), (92, 9832), (96, 9880), (105, 10000), (110, 10084), (113, 10111), (116, 10132), (120, 10162),

Gene: BigCity\_33 Start: 10386, Stop: 11330, Start Num: 20

Candidate Starts for BigCity\_33:

(Start: 20 @10386 has 139 MA's), (Start: 23 @10392 has 21 MA's), (49, 10515), (58, 10554), (61, 10578), (70, 10731), (72, 10740), (77, 10776), (78, 10788), (85, 10881), (89, 10962), (92, 10968), (96, 11016), (105, 11136), (113, 11247), (116, 11268), (120, 11298),

Gene: Bigswole\_35 Start: 11196, Stop: 12140, Start Num: 20

Candidate Starts for Bigswole\_35:

(Start: 20 @11196 has 139 MA's), (Start: 23 @11202 has 21 MA's), (49, 11325), (58, 11364), (61, 11388), (70, 11541), (72, 11550), (77, 11586), (78, 11598), (85, 11691), (89, 11772), (92, 11778), (96, 11826), (105, 11946), (113, 12057), (116, 12078), (120, 12108),

Gene: Bipolarisk\_28 Start: 9123, Stop: 10061, Start Num: 23

Candidate Starts for Bipolarisk\_28:

(Start: 20 @9117 has 139 MA's), (Start: 23 @9123 has 21 MA's), (49, 9246), (58, 9285), (61, 9309), (70, 9462), (72, 9471), (77, 9507), (78, 9519), (85, 9612), (89, 9693), (92, 9699), (96, 9747), (105, 9867), (113, 9978), (116, 9999), (120, 10029),

Gene: Blackbrain\_27 Start: 8096, Stop: 9040, Start Num: 20

Candidate Starts for Blackbrain\_27:

(Start: 20 @8096 has 139 MA's), (Start: 23 @8102 has 21 MA's), (49, 8225), (58, 8264), (61, 8288), (70, 8441), (72, 8450), (77, 8486), (78, 8498), (85, 8591), (89, 8672), (92, 8678), (96, 8726), (105, 8846), (113, 8957), (116, 8978), (120, 9008),

Gene: Blackdragon\_24 Start: 7900, Stop: 8838, Start Num: 23

Candidate Starts for Blackdragon\_24:

(Start: 20 @7894 has 139 MA's), (Start: 23 @7900 has 21 MA's), (49, 8023), (58, 8062), (61, 8086), (70, 8239), (72, 8248), (77, 8284), (78, 8296), (85, 8389), (89, 8470), (92, 8476), (96, 8524), (105,

8644), (113, 8755), (116, 8776), (120, 8806),

Gene: Blubba\_23 Start: 7587, Stop: 8531, Start Num: 20

Candidate Starts for Blubba\_23:

(Start: 20 @7587 has 139 MA's), (Start: 23 @7593 has 21 MA's), (49, 7716), (58, 7755), (61, 7779), (70, 7932), (72, 7941), (77, 7977), (78, 7989), (85, 8082), (89, 8163), (92, 8169), (96, 8217), (110, 8421), (113, 8448), (116, 8469), (120, 8499),

Gene: BlueNGold\_124 Start: 79970, Stop: 79086, Start Num: 17

Candidate Starts for BlueNGold\_124:

(Start: 17 @79970 has 2 MA's), (Start: 24 @79946 has 3 MA's), (35, 79907), (45, 79841), (57, 79799), (58, 79790), (79, 79556), (80, 79550), (95, 79415), (96, 79391), (99, 79352), (109, 79205), (117, 79139),

Gene: Bongo\_116 Start: 61713, Stop: 62612, Start Num: 15

Candidate Starts for Bongo\_116:

(14, 61707), (Start: 15 @61713 has 16 MA's), (Start: 17 @61725 has 2 MA's), (27, 61758), (36, 61794), (39, 61824), (40, 61830), (54, 61878), (60, 61917), (67, 61998), (68, 62007), (71, 62058), (81, 62166), (82, 62178), (91, 62259), (97, 62322), (99, 62337), (101, 62343), (105, 62418), (108, 62472), (109, 62484), (111, 62508), (114, 62532), (115, 62544), (119, 62580),

Gene: Bonray\_29 Start: 9394, Stop: 10338, Start Num: 20

Candidate Starts for Bonray\_29:

(Start: 20 @9394 has 139 MA's), (Start: 23 @9400 has 21 MA's), (49, 9523), (58, 9562), (61, 9586), (70, 9739), (72, 9748), (77, 9784), (78, 9796), (85, 9889), (89, 9970), (92, 9976), (96, 10024), (105, 10144), (113, 10255), (116, 10276), (120, 10306),

Gene: Boopy\_125 Start: 79958, Stop: 79098, Start Num: 24

Candidate Starts for Boopy\_125:

(Start: 17 @79982 has 2 MA's), (Start: 24 @79958 has 3 MA's), (35, 79919), (45, 79853), (57, 79811), (58, 79802), (79, 79568), (80, 79562), (95, 79427), (96, 79403), (99, 79364), (109, 79217), (117, 79151),

Gene: Bread\_30 Start: 9406, Stop: 10350, Start Num: 20

Candidate Starts for Bread\_30:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),

Gene: Breeniome\_29 Start: 8286, Stop: 9233, Start Num: 23

Candidate Starts for Breeniome\_29:

(Start: 20 @8280 has 139 MA's), (Start: 23 @8286 has 21 MA's), (49, 8409), (58, 8448), (61, 8472), (70, 8625), (72, 8634), (77, 8670), (78, 8682), (85, 8775), (89, 8856), (92, 8862), (96, 8919), (105, 9039), (113, 9150), (116, 9171), (120, 9201),

Gene: Bricole\_118 Start: 61861, Stop: 62760, Start Num: 15

Candidate Starts for Bricole\_118:

(14, 61855), (Start: 15 @61861 has 16 MA's), (Start: 17 @61873 has 2 MA's), (27, 61906), (36, 61942), (39, 61972), (40, 61978), (54, 62026), (60, 62065), (67, 62146), (68, 62155), (71, 62206), (81, 62314), (82, 62326), (91, 62407), (97, 62470), (99, 62485), (101, 62491), (105, 62566), (108, 62620), (109, 62632), (111, 62656), (114, 62680), (115, 62692), (119, 62728),

Gene: Burrough\_29 Start: 9123, Stop: 10061, Start Num: 23

Candidate Starts for Burrough\_29:

(Start: 20 @9117 has 139 MA's), (Start: 23 @9123 has 21 MA's), (49, 9246), (58, 9285), (61, 9309), (70, 9462), (72, 9471), (77, 9507), (78, 9519), (85, 9612), (89, 9693), (92, 9699), (96, 9747), (105, 9867), (113, 9978), (116, 9999), (120, 10029),

Gene: Bxz1\_29 Start: 9866, Stop: 10810, Start Num: 20

Candidate Starts for Bxz1\_29:

(Start: 20 @9866 has 139 MA's), (Start: 23 @9872 has 21 MA's), (49, 9995), (58, 10034), (61, 10058), (70, 10211), (72, 10220), (77, 10256), (78, 10268), (85, 10361), (89, 10442), (92, 10448), (96, 10496), (105, 10616), (113, 10727), (116, 10748), (120, 10778),

Gene: Cactojaque\_26 Start: 7985, Stop: 8929, Start Num: 21

Candidate Starts for Cactojaque\_26:

(Start: 21 @7985 has 11 MA's), (Start: 23 @7991 has 21 MA's), (49, 8114), (58, 8153), (61, 8177), (70, 8330), (72, 8339), (77, 8375), (78, 8387), (85, 8480), (89, 8561), (92, 8567), (96, 8615), (105, 8735), (113, 8846), (116, 8867), (120, 8897),

Gene: Cali\_29 Start: 10427, Stop: 11371, Start Num: 20

Candidate Starts for Cali\_29:

(Start: 20 @10427 has 139 MA's), (Start: 23 @10433 has 21 MA's), (49, 10556), (58, 10595), (61, 10619), (70, 10772), (72, 10781), (77, 10817), (78, 10829), (85, 10922), (89, 11003), (92, 11009), (96, 11057), (105, 11177), (113, 11288), (116, 11309), (120, 11339),

Gene: Candle\_76 Start: 60340, Stop: 61302, Start Num: 13

Candidate Starts for Candle\_76:

(Start: 13 @60340 has 4 MA's), (14, 60358), (Start: 17 @60376 has 2 MA's), (33, 60433), (48, 60505), (49, 60508), (54, 60523), (55, 60526), (56, 60529), (59, 60547), (62, 60571), (64, 60616), (67, 60643), (68, 60652), (69, 60676), (71, 60703), (74, 60730), (76, 60739), (77, 60745), (81, 60811), (84, 60847), (88, 60865), (94, 60946), (95, 60961), (96, 60985), (101, 61027), (102, 61033), (108, 61156), (113, 61213), (118, 61249),

Gene: Cane17\_22 Start: 7459, Stop: 8403, Start Num: 21

Candidate Starts for Cane17\_22:

(Start: 21 @7459 has 11 MA's), (Start: 23 @7465 has 21 MA's), (49, 7588), (58, 7627), (61, 7651), (70, 7804), (72, 7813), (77, 7849), (78, 7861), (85, 7954), (89, 8035), (92, 8041), (96, 8089), (110, 8293), (113, 8320), (116, 8341), (120, 8371),

Gene: Capablanca\_31 Start: 9986, Stop: 10930, Start Num: 20

Candidate Starts for Capablanca\_31:

(Start: 20 @9986 has 139 MA's), (Start: 23 @9992 has 21 MA's), (49, 10115), (58, 10154), (61, 10178), (70, 10331), (72, 10340), (77, 10376), (78, 10388), (85, 10481), (89, 10562), (92, 10568), (96, 10616), (105, 10736), (113, 10847), (116, 10868), (120, 10898),

Gene: Caravan\_27 Start: 8676, Stop: 9620, Start Num: 21

Candidate Starts for Caravan\_27:

(Start: 21 @8676 has 11 MA's), (Start: 23 @8682 has 21 MA's), (49, 8805), (58, 8844), (61, 8868), (70, 9021), (72, 9030), (77, 9066), (78, 9078), (85, 9171), (89, 9252), (92, 9258), (96, 9306), (105, 9426), (113, 9537), (116, 9558), (120, 9588),

Gene: Catera\_27 Start: 8284, Stop: 9228, Start Num: 20

Candidate Starts for Catera\_27:

(Start: 20 @8284 has 139 MA's), (Start: 23 @8290 has 21 MA's), (49, 8413), (58, 8452), (61, 8476), (70, 8629), (72, 8638), (77, 8674), (78, 8686), (85, 8779), (89, 8860), (92, 8866), (96, 8914), (105,

9034), (113, 9145), (116, 9166), (120, 9196),

Gene: Chargie21\_28 Start: 8280, Stop: 9224, Start Num: 20

Candidate Starts for Chargie21\_28:

(Start: 20 @8280 has 139 MA's), (Start: 23 @8286 has 21 MA's), (49, 8409), (58, 8448), (61, 8472), (70, 8625), (72, 8634), (77, 8670), (78, 8682), (85, 8775), (89, 8856), (92, 8862), (96, 8910), (105, 9030), (113, 9141), (116, 9162), (120, 9192),

Gene: CharlieB\_29 Start: 8437, Stop: 9381, Start Num: 20

Candidate Starts for CharlieB\_29:

(Start: 20 @8437 has 139 MA's), (Start: 23 @8443 has 21 MA's), (49, 8566), (58, 8605), (61, 8629), (70, 8782), (72, 8791), (77, 8827), (78, 8839), (85, 8932), (89, 9013), (92, 9019), (96, 9067), (105, 9187), (113, 9298), (116, 9319), (120, 9349),

Gene: ChaylaJr\_28 Start: 8367, Stop: 9311, Start Num: 20

Candidate Starts for ChaylaJr\_28:

(Start: 20 @8367 has 139 MA's), (Start: 23 @8373 has 21 MA's), (49, 8496), (58, 8535), (61, 8559), (70, 8712), (72, 8721), (77, 8757), (78, 8769), (85, 8862), (89, 8943), (92, 8949), (96, 8997), (105, 9117), (113, 9228), (116, 9249), (120, 9279),

Gene: ChickenPhender\_28 Start: 8331, Stop: 9269, Start Num: 23

Candidate Starts for ChickenPhender\_28:

(Start: 20 @8325 has 139 MA's), (Start: 23 @8331 has 21 MA's), (49, 8454), (58, 8493), (61, 8517), (70, 8670), (72, 8679), (77, 8715), (78, 8727), (85, 8820), (89, 8901), (92, 8907), (96, 8955), (105, 9075), (113, 9186), (116, 9207), (120, 9237),

Gene: Chomp\_29 Start: 8861, Stop: 9805, Start Num: 20

Candidate Starts for Chomp\_29:

(Start: 20 @8861 has 139 MA's), (Start: 23 @8867 has 21 MA's), (49, 8990), (58, 9029), (61, 9053), (70, 9206), (72, 9215), (77, 9251), (78, 9263), (85, 9356), (89, 9437), (92, 9443), (96, 9491), (105, 9611), (113, 9722), (116, 9743), (120, 9773),

Gene: CindyLou\_29 Start: 8861, Stop: 9805, Start Num: 20

Candidate Starts for CindyLou\_29:

(Start: 20 @8861 has 139 MA's), (Start: 23 @8867 has 21 MA's), (49, 8990), (58, 9029), (61, 9053), (70, 9206), (72, 9215), (77, 9251), (78, 9263), (85, 9356), (89, 9437), (92, 9443), (96, 9491), (105, 9611), (113, 9722), (116, 9743), (120, 9773),

Gene: Colt\_22 Start: 7465, Stop: 8409, Start Num: 21

Candidate Starts for Colt\_22:

(Start: 21 @7465 has 11 MA's), (Start: 23 @7471 has 21 MA's), (49, 7594), (58, 7633), (61, 7657), (70, 7810), (72, 7819), (77, 7855), (78, 7867), (85, 7960), (89, 8041), (92, 8047), (96, 8095), (110, 8299), (113, 8326), (116, 8347), (120, 8377),

Gene: Concombre\_28 Start: 9632, Stop: 10576, Start Num: 20

Candidate Starts for Concombre\_28:

(Start: 20 @9632 has 139 MA's), (Start: 23 @9638 has 21 MA's), (49, 9761), (58, 9800), (61, 9824), (70, 9977), (72, 9986), (77, 10022), (78, 10034), (85, 10127), (89, 10208), (92, 10214), (96, 10262), (105, 10382), (113, 10493), (116, 10514), (120, 10544),

Gene: DTDevon\_30 Start: 10025, Stop: 10969, Start Num: 20

Candidate Starts for DTDevon\_30:

(Start: 20 @10025 has 139 MA's), (Start: 23 @10031 has 21 MA's), (49, 10154), (58, 10193), (61, 10217), (70, 10370), (72, 10379), (77, 10415), (78, 10427), (85, 10520), (89, 10601), (92, 10607), (96, 10655), (105, 10775), (113, 10886), (116, 10907), (120, 10937),

Gene: Daffodil\_31 Start: 9406, Stop: 10350, Start Num: 20

Candidate Starts for Daffodil\_31:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),

Gene: Dandelion\_33 Start: 10721, Stop: 11665, Start Num: 21

Candidate Starts for Dandelion\_33:

(Start: 21 @10721 has 11 MA's), (Start: 23 @10727 has 21 MA's), (49, 10850), (58, 10889), (61, 10913), (70, 11066), (72, 11075), (77, 11111), (78, 11123), (83, 11204), (85, 11216), (89, 11297), (92, 11303), (96, 11351), (105, 11471), (113, 11582), (116, 11603), (120, 11633),

Gene: Darko\_28 Start: 9265, Stop: 10203, Start Num: 23

Candidate Starts for Darko\_28:

(Start: 20 @9259 has 139 MA's), (Start: 23 @9265 has 21 MA's), (49, 9388), (58, 9427), (61, 9451), (70, 9604), (72, 9613), (77, 9649), (78, 9661), (85, 9754), (89, 9835), (92, 9841), (96, 9889), (105, 10009), (113, 10120), (116, 10141), (120, 10171),

Gene: Delilah\_29 Start: 9406, Stop: 10350, Start Num: 20

Candidate Starts for Delilah\_29:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),

Gene: Delylah\_30 Start: 9186, Stop: 10130, Start Num: 21

Candidate Starts for Delylah\_30:

(Start: 21 @9186 has 11 MA's), (Start: 23 @9192 has 21 MA's), (49, 9315), (58, 9354), (61, 9378), (70, 9531), (72, 9540), (77, 9576), (78, 9588), (85, 9681), (89, 9762), (92, 9768), (96, 9816), (105, 9936), (110, 10020), (113, 10047), (116, 10068), (120, 10098),

Gene: Demodog\_27 Start: 9638, Stop: 10576, Start Num: 23

Candidate Starts for Demodog\_27:

(Start: 20 @9632 has 139 MA's), (Start: 23 @9638 has 21 MA's), (49, 9761), (58, 9800), (61, 9824), (70, 9977), (72, 9986), (77, 10022), (78, 10034), (85, 10127), (89, 10208), (92, 10214), (96, 10262), (105, 10382), (113, 10493), (116, 10514), (120, 10544),

Gene: Derek\_30 Start: 8818, Stop: 9762, Start Num: 20

Candidate Starts for Derek\_30:

(Start: 20 @8818 has 139 MA's), (Start: 23 @8824 has 21 MA's), (49, 8947), (58, 8986), (61, 9010), (70, 9163), (72, 9172), (77, 9208), (78, 9220), (85, 9313), (89, 9394), (92, 9400), (96, 9448), (105, 9568), (113, 9679), (116, 9700), (120, 9730),

Gene: Dietrick\_24 Start: 8053, Stop: 8997, Start Num: 20

Candidate Starts for Dietrick\_24:

(Start: 20 @8053 has 139 MA's), (Start: 23 @8059 has 21 MA's), (49, 8182), (58, 8221), (61, 8245), (70, 8398), (72, 8407), (77, 8443), (78, 8455), (85, 8548), (89, 8629), (92, 8635), (96, 8683), (105, 8803), (113, 8914), (116, 8935), (120, 8965),

Gene: Diminimus\_117 Start: 61708, Stop: 62607, Start Num: 15

Candidate Starts for Diminimus\_117:

(14, 61702), (Start: 15 @61708 has 16 MA's), (Start: 17 @61720 has 2 MA's), (27, 61753), (36, 61789), (39, 61819), (40, 61825), (54, 61873), (60, 61912), (67, 61993), (68, 62002), (71, 62053), (81, 62161), (82, 62173), (91, 62254), (97, 62317), (99, 62332), (101, 62338), (105, 62413), (108, 62467), (109, 62479), (111, 62503), (114, 62527), (115, 62539), (119, 62575),

Gene: DirtMonster\_28 Start: 9944, Stop: 10888, Start Num: 20

Candidate Starts for DirtMonster\_28:

(Start: 20 @9944 has 139 MA's), (Start: 23 @9950 has 21 MA's), (49, 10073), (58, 10112), (61, 10136), (70, 10289), (72, 10298), (77, 10334), (78, 10346), (85, 10439), (89, 10520), (92, 10526), (96, 10574), (105, 10694), (113, 10805), (116, 10826), (120, 10856),

Gene: Domi\_24 Start: 8678, Stop: 9622, Start Num: 20

Candidate Starts for Domi\_24:

(Start: 20 @8678 has 139 MA's), (Start: 23 @8684 has 21 MA's), (49, 8807), (58, 8846), (61, 8870), (70, 9023), (72, 9032), (77, 9068), (78, 9080), (85, 9173), (89, 9254), (92, 9260), (96, 9308), (105, 9428), (113, 9539), (116, 9560), (120, 9590),

Gene: DrPhinkDaddy\_29 Start: 9403, Stop: 10347, Start Num: 20

Candidate Starts for DrPhinkDaddy\_29:

(Start: 20 @9403 has 139 MA's), (Start: 23 @9409 has 21 MA's), (49, 9532), (58, 9571), (61, 9595), (70, 9748), (72, 9757), (77, 9793), (78, 9805), (85, 9898), (89, 9979), (92, 9985), (96, 10033), (105, 10153), (113, 10264), (116, 10285), (120, 10315),

Gene: Drazdys\_29 Start: 9191, Stop: 10135, Start Num: 20

Candidate Starts for Drazdys\_29:

(Start: 20 @9191 has 139 MA's), (Start: 23 @9197 has 21 MA's), (49, 9320), (58, 9359), (61, 9383), (70, 9536), (72, 9545), (77, 9581), (78, 9593), (85, 9686), (89, 9767), (92, 9773), (96, 9821), (105, 9941), (113, 10052), (116, 10073), (120, 10103),

Gene: Dulcita\_117 Start: 61709, Stop: 62608, Start Num: 15

Candidate Starts for Dulcita\_117:

(14, 61703), (Start: 15 @61709 has 16 MA's), (Start: 17 @61721 has 2 MA's), (27, 61754), (36, 61790), (39, 61820), (40, 61826), (54, 61874), (60, 61913), (67, 61994), (68, 62003), (71, 62054), (81, 62162), (82, 62174), (91, 62255), (97, 62318), (99, 62333), (101, 62339), (105, 62414), (108, 62468), (109, 62480), (111, 62504), (114, 62528), (115, 62540), (119, 62576),

Gene: ET08\_24 Start: 8862, Stop: 9806, Start Num: 20

Candidate Starts for ET08\_24:

(Start: 20 @8862 has 139 MA's), (Start: 23 @8868 has 21 MA's), (49, 8991), (58, 9030), (61, 9054), (70, 9207), (72, 9216), (77, 9252), (78, 9264), (85, 9357), (89, 9438), (92, 9444), (96, 9492), (105, 9612), (110, 9696), (113, 9723), (116, 9744), (120, 9774),

Gene: EasyJones\_28 Start: 8030, Stop: 8974, Start Num: 20

Candidate Starts for EasyJones\_28:

(Start: 20 @8030 has 139 MA's), (Start: 23 @8036 has 21 MA's), (49, 8159), (58, 8198), (61, 8222), (70, 8375), (72, 8384), (77, 8420), (78, 8432), (85, 8525), (89, 8606), (92, 8612), (96, 8660), (105, 8780), (113, 8891), (116, 8912), (120, 8942),

Gene: EggyFarm\_33 Start: 10386, Stop: 11330, Start Num: 20

Candidate Starts for EggyFarm\_33:

(Start: 20 @10386 has 139 MA's), (Start: 23 @10392 has 21 MA's), (49, 10515), (58, 10554), (61, 10578), (70, 10731), (72, 10740), (77, 10776), (78, 10788), (85, 10881), (89, 10962), (92, 10968), (96,

11016), (105, 11136), (113, 11247), (116, 11268), (120, 11298),

Gene: EmToTheThree\_32 Start: 10820, Stop: 11764, Start Num: 20

Candidate Starts for EmToTheThree\_32:

(Start: 20 @10820 has 139 MA's), (Start: 23 @10826 has 21 MA's), (49, 10949), (58, 10988), (61, 11012), (70, 11165), (72, 11174), (77, 11210), (78, 11222), (85, 11315), (89, 11396), (92, 11402), (96, 11450), (105, 11570), (110, 11654), (113, 11681), (116, 11702), (120, 11732),

Gene: EmmaElysia\_27 Start: 8045, Stop: 8989, Start Num: 20

Candidate Starts for EmmaElysia\_27:

(Start: 20 @8045 has 139 MA's), (Start: 23 @8051 has 21 MA's), (49, 8174), (58, 8213), (61, 8237), (70, 8390), (72, 8399), (77, 8435), (78, 8447), (85, 8540), (89, 8621), (92, 8627), (96, 8675), (105, 8795), (113, 8906), (116, 8927), (120, 8957),

Gene: Erdmann\_30 Start: 9406, Stop: 10350, Start Num: 20

Candidate Starts for Erdmann\_30:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),

Gene: ErnieJ\_30 Start: 9226, Stop: 10170, Start Num: 20

Candidate Starts for ErnieJ\_30:

(Start: 20 @9226 has 139 MA's), (Start: 23 @9232 has 21 MA's), (49, 9355), (58, 9394), (61, 9418), (70, 9571), (72, 9580), (77, 9616), (78, 9628), (85, 9721), (89, 9802), (92, 9808), (96, 9856), (105, 9976), (113, 10087), (116, 10108), (120, 10138),

Gene: Essence\_28 Start: 8580, Stop: 9524, Start Num: 21

Candidate Starts for Essence\_28:

(Start: 21 @8580 has 11 MA's), (Start: 23 @8586 has 21 MA's), (49, 8709), (58, 8748), (61, 8772), (70, 8925), (72, 8934), (77, 8970), (78, 8982), (85, 9075), (89, 9156), (92, 9162), (96, 9210), (105, 9330), (113, 9441), (116, 9462), (120, 9492),

Gene: Ewok\_29 Start: 9409, Stop: 10353, Start Num: 20

Candidate Starts for Ewok\_29:

(Start: 20 @9409 has 139 MA's), (Start: 23 @9415 has 21 MA's), (49, 9538), (58, 9577), (61, 9601), (70, 9754), (72, 9763), (77, 9799), (78, 9811), (85, 9904), (89, 9985), (92, 9991), (96, 10039), (105, 10159), (113, 10270), (116, 10291), (120, 10321),

Gene: Flabslab\_30 Start: 9336, Stop: 10280, Start Num: 20

Candidate Starts for Flabslab\_30:

(Start: 20 @9336 has 139 MA's), (Start: 23 @9342 has 21 MA's), (49, 9465), (58, 9504), (61, 9528), (70, 9681), (72, 9690), (77, 9726), (78, 9738), (85, 9831), (89, 9912), (92, 9918), (96, 9966), (105, 10086), (110, 10170), (113, 10197), (116, 10218), (120, 10248),

Gene: Fludd\_28 Start: 8287, Stop: 9225, Start Num: 23

Candidate Starts for Fludd\_28:

(Start: 20 @8281 has 139 MA's), (Start: 23 @8287 has 21 MA's), (49, 8410), (58, 8449), (61, 8473), (70, 8626), (72, 8635), (77, 8671), (78, 8683), (85, 8776), (89, 8857), (92, 8863), (96, 8911), (105, 9031), (113, 9142), (116, 9163), (120, 9193),

Gene: Forza\_125 Start: 79874, Stop: 79014, Start Num: 24

Candidate Starts for Forza\_125:

(Start: 17 @79898 has 2 MA's), (Start: 24 @79874 has 3 MA's), (35, 79835), (45, 79769), (57, 79727), (58, 79718), (79, 79484), (80, 79478), (95, 79343), (96, 79319), (99, 79280), (109, 79133), (117, 79067),

Gene: FoxtrotP1\_29 Start: 9734, Stop: 10678, Start Num: 20

Candidate Starts for FoxtrotP1\_29:

(Start: 20 @9734 has 139 MA's), (Start: 23 @9740 has 21 MA's), (49, 9863), (58, 9902), (61, 9926), (70, 10079), (72, 10088), (77, 10124), (78, 10136), (85, 10229), (89, 10310), (92, 10316), (95, 10340), (96, 10364), (105, 10484), (113, 10595), (116, 10616), (120, 10646),

Gene: FrayBell\_35 Start: 10974, Stop: 11918, Start Num: 20

Candidate Starts for FrayBell\_35:

(Start: 20 @10974 has 139 MA's), (Start: 23 @10980 has 21 MA's), (49, 11103), (58, 11142), (61, 11166), (70, 11319), (72, 11328), (77, 11364), (78, 11376), (85, 11469), (89, 11550), (92, 11556), (96, 11604), (105, 11724), (113, 11835), (116, 11856), (120, 11886),

Gene: FudgeTart\_30 Start: 9412, Stop: 10350, Start Num: 23

Candidate Starts for FudgeTart\_30:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),

Gene: Gabriel\_29 Start: 8280, Stop: 9224, Start Num: 20

Candidate Starts for Gabriel\_29:

(Start: 20 @8280 has 139 MA's), (Start: 23 @8286 has 21 MA's), (49, 8409), (58, 8448), (61, 8472), (70, 8625), (72, 8634), (77, 8670), (78, 8682), (85, 8775), (89, 8856), (92, 8862), (96, 8910), (105, 9030), (113, 9141), (116, 9162), (120, 9192),

Gene: Gamgam\_29 Start: 8867, Stop: 9805, Start Num: 23

Candidate Starts for Gamgam\_29:

(Start: 20 @8861 has 139 MA's), (Start: 23 @8867 has 21 MA's), (49, 8990), (58, 9029), (61, 9053), (70, 9206), (72, 9215), (77, 9251), (78, 9263), (85, 9356), (89, 9437), (92, 9443), (96, 9491), (105, 9611), (113, 9722), (116, 9743), (120, 9773),

Gene: Ghost\_29 Start: 8861, Stop: 9805, Start Num: 20

Candidate Starts for Ghost\_29:

(Start: 20 @8861 has 139 MA's), (Start: 23 @8867 has 21 MA's), (49, 8990), (58, 9029), (61, 9053), (70, 9206), (72, 9215), (77, 9251), (78, 9263), (85, 9356), (89, 9437), (92, 9443), (96, 9491), (105, 9611), (113, 9722), (116, 9743), (120, 9773),

Gene: Gizmo\_31 Start: 9408, Stop: 10352, Start Num: 20

Candidate Starts for Gizmo\_31:

(Start: 20 @9408 has 139 MA's), (Start: 23 @9414 has 21 MA's), (49, 9537), (58, 9576), (61, 9600), (70, 9753), (72, 9762), (77, 9798), (78, 9810), (85, 9903), (89, 9984), (92, 9990), (96, 10038), (105, 10158), (113, 10269), (116, 10290), (120, 10320),

Gene: Glaske16\_119 Start: 62826, Stop: 63725, Start Num: 15

Candidate Starts for Glaske16\_119:

(14, 62820), (Start: 15 @62826 has 16 MA's), (Start: 17 @62838 has 2 MA's), (27, 62871), (36, 62907), (39, 62937), (40, 62943), (54, 62991), (60, 63030), (67, 63111), (68, 63120), (71, 63171), (81, 63279), (82, 63291), (91, 63372), (97, 63435), (99, 63450), (101, 63456), (105, 63531), (109, 63597), (111, 63621), (115, 63657), (119, 63693),



Gene: Grasshills\_33 Start: 10386, Stop: 11330, Start Num: 20

Candidate Starts for Grasshills\_33:

(Start: 20 @10386 has 139 MA's), (Start: 23 @10392 has 21 MA's), (49, 10515), (58, 10554), (61, 10578), (70, 10731), (72, 10740), (77, 10776), (78, 10788), (85, 10881), (89, 10962), (92, 10968), (96, 11016), (105, 11136), (113, 11247), (116, 11268), (120, 11298),

Gene: Grayson\_141 Start: 80240, Stop: 81109, Start Num: 18

Candidate Starts for Grayson\_141:

(10, 80162), (Start: 18 @80240 has 4 MA's), (63, 80477), (73, 80585), (79, 80642), (90, 80771), (112, 81032),

Gene: Grungle\_22 Start: 6977, Stop: 7921, Start Num: 20

Candidate Starts for Grungle\_22:

(Start: 20 @6977 has 139 MA's), (Start: 23 @6983 has 21 MA's), (49, 7106), (58, 7145), (61, 7169), (70, 7322), (72, 7331), (77, 7367), (78, 7379), (85, 7472), (89, 7553), (92, 7559), (96, 7607), (105, 7727), (113, 7838), (116, 7859), (120, 7889),

Gene: Guwapp\_29 Start: 8818, Stop: 9762, Start Num: 20

Candidate Starts for Guwapp\_29:

(Start: 20 @8818 has 139 MA's), (Start: 23 @8824 has 21 MA's), (49, 8947), (58, 8986), (61, 9010), (70, 9163), (72, 9172), (77, 9208), (78, 9220), (85, 9313), (89, 9394), (92, 9400), (96, 9448), (105, 9568), (113, 9679), (116, 9700), (120, 9730),

Gene: Halldule\_25 Start: 7647, Stop: 8591, Start Num: 20

Candidate Starts for Halldule\_25:

(Start: 20 @7647 has 139 MA's), (Start: 23 @7653 has 21 MA's), (49, 7776), (58, 7815), (61, 7839), (70, 7992), (72, 8001), (77, 8037), (78, 8049), (85, 8142), (89, 8223), (92, 8229), (96, 8277), (105, 8397), (113, 8508), (116, 8529), (120, 8559),

Gene: HyRo\_28 Start: 9593, Stop: 10537, Start Num: 20

Candidate Starts for HyRo\_28:

(Start: 20 @9593 has 139 MA's), (Start: 23 @9599 has 21 MA's), (49, 9722), (58, 9761), (61, 9785), (70, 9938), (72, 9947), (77, 9983), (78, 9995), (85, 10088), (89, 10169), (92, 10175), (96, 10223), (105, 10343), (110, 10427), (113, 10454), (116, 10475), (120, 10505),

Gene: I3\_31 Start: 9973, Stop: 10917, Start Num: 20

Candidate Starts for I3\_31:

(Start: 20 @9973 has 139 MA's), (Start: 23 @9979 has 21 MA's), (49, 10102), (58, 10141), (61, 10165), (70, 10318), (72, 10327), (77, 10363), (78, 10375), (85, 10468), (89, 10549), (92, 10555), (96, 10603), (105, 10723), (113, 10834), (116, 10855), (120, 10885),

Gene: IPHane7\_114 Start: 61713, Stop: 62612, Start Num: 15

Candidate Starts for IPHane7\_114:

(14, 61707), (Start: 15 @61713 has 16 MA's), (Start: 17 @61725 has 2 MA's), (27, 61758), (36, 61794), (39, 61824), (40, 61830), (54, 61878), (60, 61917), (67, 61998), (68, 62007), (71, 62058), (81, 62166), (82, 62178), (91, 62259), (97, 62322), (99, 62337), (101, 62343), (105, 62418), (108, 62472), (109, 62484), (111, 62508), (114, 62532), (115, 62544), (119, 62580),

Gene: IkeLoa\_25 Start: 8704, Stop: 9648, Start Num: 20

Candidate Starts for IkeLoa\_25:

(Start: 20 @8704 has 139 MA's), (Start: 23 @8710 has 21 MA's), (49, 8833), (58, 8872), (61, 8896), (70, 9049), (72, 9058), (77, 9094), (78, 9106), (85, 9199), (89, 9280), (92, 9286), (96, 9334), (105, 9454), (113, 9565), (116, 9586), (120, 9616),

Gene: Indlulamithi\_79 Start: 56823, Stop: 57701, Start Num: 23

Candidate Starts for Indlulamithi\_79:

(Start: 23 @56823 has 21 MA's), (28, 56841), (35, 56865), (42, 56913), (43, 56916), (62, 57000), (66, 57054), (68, 57081), (72, 57138), (74, 57159), (76, 57168), (79, 57210), (81, 57240), (88, 57294), (96, 57384), (107, 57543), (108, 57558), (112, 57606), (113, 57615),

Gene: InigoMontoya\_30 Start: 8822, Stop: 9766, Start Num: 20

Candidate Starts for InigoMontoya\_30:

(Start: 20 @8822 has 139 MA's), (Start: 23 @8828 has 21 MA's), (49, 8951), (58, 8990), (61, 9014), (70, 9167), (72, 9176), (77, 9212), (78, 9224), (85, 9317), (89, 9398), (92, 9404), (96, 9452), (105, 9572), (113, 9683), (116, 9704), (120, 9734),

Gene: InterFolia\_36 Start: 11512, Stop: 12456, Start Num: 20

Candidate Starts for InterFolia\_36:

(Start: 20 @11512 has 139 MA's), (Start: 23 @11518 has 21 MA's), (49, 11641), (58, 11680), (61, 11704), (70, 11857), (72, 11866), (77, 11902), (78, 11914), (85, 12007), (89, 12088), (92, 12094), (96, 12142), (105, 12262), (113, 12373), (116, 12394), (120, 12424),

Gene: Iota\_26 Start: 8941, Stop: 9885, Start Num: 20

Candidate Starts for Iota\_26:

(Start: 20 @8941 has 139 MA's), (Start: 23 @8947 has 21 MA's), (49, 9070), (58, 9109), (61, 9133), (70, 9286), (72, 9295), (77, 9331), (78, 9343), (85, 9436), (89, 9517), (92, 9523), (96, 9571), (105, 9691), (110, 9775), (113, 9802), (116, 9823), (120, 9853),

Gene: Issimir\_29 Start: 9401, Stop: 10345, Start Num: 20

Candidate Starts for Issimir\_29:

(Start: 20 @9401 has 139 MA's), (Start: 23 @9407 has 21 MA's), (49, 9530), (58, 9569), (61, 9593), (70, 9746), (72, 9755), (77, 9791), (78, 9803), (85, 9896), (89, 9977), (92, 9983), (96, 10031), (105, 10151), (110, 10235), (113, 10262), (116, 10283), (120, 10313),

Gene: Izajani\_30 Start: 9406, Stop: 10350, Start Num: 20

Candidate Starts for Izajani\_30:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),

Gene: JPickles\_27 Start: 8055, Stop: 8999, Start Num: 20

Candidate Starts for JPickles\_27:

(Start: 20 @8055 has 139 MA's), (Start: 23 @8061 has 21 MA's), (49, 8184), (58, 8223), (61, 8247), (70, 8400), (72, 8409), (77, 8445), (78, 8457), (85, 8550), (89, 8631), (92, 8637), (96, 8685), (105, 8805), (113, 8916), (116, 8937), (120, 8967),

Gene: Janiyra\_29 Start: 8840, Stop: 9784, Start Num: 20

Candidate Starts for Janiyra\_29:

(Start: 20 @8840 has 139 MA's), (Start: 23 @8846 has 21 MA's), (49, 8969), (58, 9008), (61, 9032), (70, 9185), (72, 9194), (77, 9230), (78, 9242), (85, 9335), (89, 9416), (92, 9422), (96, 9470), (105, 9590), (113, 9701), (116, 9722), (120, 9752),

Gene: JayJay\_30 Start: 9377, Stop: 10315, Start Num: 23

Candidate Starts for JayJay\_30:

(Start: 20 @9371 has 139 MA's), (Start: 23 @9377 has 21 MA's), (49, 9500), (58, 9539), (61, 9563), (70, 9716), (72, 9725), (77, 9761), (78, 9773), (85, 9866), (89, 9947), (92, 9953), (96, 10001), (105,

10121), (113, 10232), (116, 10253), (120, 10283),

Gene: Jaygup\_29 Start: 8857, Stop: 9801, Start Num: 20

Candidate Starts for Jaygup\_29:

(Start: 20 @8857 has 139 MA's), (Start: 23 @8863 has 21 MA's), (49, 8986), (58, 9025), (61, 9049), (70, 9202), (72, 9211), (77, 9247), (78, 9259), (85, 9352), (89, 9433), (92, 9439), (96, 9487), (105, 9607), (113, 9718), (116, 9739), (120, 9769),

Gene: Jedediah\_29 Start: 8326, Stop: 9270, Start Num: 20

Candidate Starts for Jedediah\_29:

(Start: 20 @8326 has 139 MA's), (Start: 23 @8332 has 21 MA's), (49, 8455), (58, 8494), (61, 8518), (70, 8671), (72, 8680), (77, 8716), (78, 8728), (85, 8821), (89, 8902), (92, 8908), (96, 8956), (105, 9076), (113, 9187), (116, 9208), (120, 9238),

Gene: Jemmno\_29 Start: 8861, Stop: 9805, Start Num: 20

Candidate Starts for Jemmno\_29:

(Start: 20 @8861 has 139 MA's), (Start: 23 @8867 has 21 MA's), (49, 8990), (58, 9029), (61, 9053), (70, 9206), (72, 9215), (77, 9251), (78, 9263), (85, 9356), (89, 9437), (92, 9443), (96, 9491), (105, 9611), (113, 9722), (116, 9743), (120, 9773),

Gene: Jessibeth14\_28 Start: 9132, Stop: 10070, Start Num: 23

Candidate Starts for Jessibeth14\_28:

(Start: 20 @9126 has 139 MA's), (Start: 23 @9132 has 21 MA's), (49, 9255), (58, 9294), (61, 9318), (70, 9471), (72, 9480), (77, 9516), (78, 9528), (85, 9621), (89, 9702), (92, 9708), (96, 9756), (105, 9876), (113, 9987), (116, 10008), (120, 10038),

Gene: JigglyPuff\_29 Start: 9682, Stop: 10626, Start Num: 20

Candidate Starts for JigglyPuff\_29:

(Start: 20 @9682 has 139 MA's), (Start: 23 @9688 has 21 MA's), (49, 9811), (58, 9850), (61, 9874), (70, 10027), (72, 10036), (77, 10072), (78, 10084), (85, 10177), (89, 10258), (92, 10264), (96, 10312), (105, 10432), (113, 10543), (116, 10564), (120, 10594),

Gene: JulietS\_24 Start: 7286, Stop: 8224, Start Num: 23

Candidate Starts for JulietS\_24:

(Start: 20 @7280 has 139 MA's), (Start: 23 @7286 has 21 MA's), (49, 7409), (58, 7448), (61, 7472), (70, 7625), (72, 7634), (77, 7670), (78, 7682), (85, 7775), (89, 7856), (92, 7862), (96, 7910), (105, 8030), (113, 8141), (116, 8162), (120, 8192),

Gene: JustHall\_28 Start: 9306, Stop: 10250, Start Num: 20

Candidate Starts for JustHall\_28:

(Start: 20 @9306 has 139 MA's), (Start: 23 @9312 has 21 MA's), (49, 9435), (58, 9474), (61, 9498), (70, 9651), (72, 9660), (77, 9696), (78, 9708), (85, 9801), (89, 9882), (92, 9888), (96, 9936), (105, 10056), (113, 10167), (116, 10188), (120, 10218),

Gene: Kamryn\_29 Start: 9179, Stop: 10123, Start Num: 20

Candidate Starts for Kamryn\_29:

(Start: 20 @9179 has 139 MA's), (Start: 23 @9185 has 21 MA's), (49, 9308), (58, 9347), (61, 9371), (70, 9524), (72, 9533), (77, 9569), (78, 9581), (85, 9674), (89, 9755), (92, 9761), (96, 9809), (105, 9929), (113, 10040), (116, 10061), (120, 10091),

Gene: Kboogie\_29 Start: 8336, Stop: 9280, Start Num: 20

Candidate Starts for Kboogie\_29:

(Start: 20 @8336 has 139 MA's), (Start: 23 @8342 has 21 MA's), (49, 8465), (58, 8504), (61, 8528), (70, 8681), (72, 8690), (77, 8726), (78, 8738), (85, 8831), (89, 8912), (92, 8918), (96, 8966), (105, 9086), (113, 9197), (116, 9218), (120, 9248),

Gene: Khaleesi\_28 Start: 9153, Stop: 10097, Start Num: 20

Candidate Starts for Khaleesi\_28:

(Start: 20 @9153 has 139 MA's), (Start: 23 @9159 has 21 MA's), (49, 9282), (58, 9321), (61, 9345), (70, 9498), (72, 9507), (77, 9543), (78, 9555), (85, 9648), (89, 9729), (92, 9735), (96, 9783), (105, 9903), (113, 10014), (116, 10035), (120, 10065),

Gene: Koguma\_25 Start: 7623, Stop: 8567, Start Num: 20

Candidate Starts for Koguma\_25:

(Start: 20 @7623 has 139 MA's), (Start: 23 @7629 has 21 MA's), (49, 7752), (58, 7791), (61, 7815), (70, 7968), (72, 7977), (77, 8013), (78, 8025), (85, 8118), (89, 8199), (92, 8205), (96, 8253), (105, 8373), (113, 8484), (116, 8505), (120, 8535),

Gene: Kudrefre\_53 Start: 36597, Stop: 37475, Start Num: 15

Candidate Starts for Kudrefre\_53:

(Start: 15 @36597 has 16 MA's), (25, 36633), (29, 36648), (31, 36657), (62, 36801), (68, 36882), (72, 36939), (73, 36954), (77, 36975), (86, 37089), (87, 37092), (96, 37176), (98, 37209), (99, 37215), (100, 37218), (106, 37302),

Gene: LRRHood\_26 Start: 9546, Stop: 10490, Start Num: 20

Candidate Starts for LRRHood\_26:

(Start: 20 @9546 has 139 MA's), (Start: 23 @9552 has 21 MA's), (49, 9675), (58, 9714), (61, 9738), (70, 9891), (72, 9900), (77, 9936), (78, 9948), (85, 10041), (89, 10122), (92, 10128), (96, 10176), (105, 10296), (113, 10407), (116, 10428), (120, 10458),

Gene: Latch\_29 Start: 8861, Stop: 9805, Start Num: 20

Candidate Starts for Latch\_29:

(Start: 20 @8861 has 139 MA's), (Start: 23 @8867 has 21 MA's), (49, 8990), (58, 9029), (61, 9053), (70, 9206), (72, 9215), (77, 9251), (78, 9263), (85, 9356), (89, 9437), (92, 9443), (96, 9491), (105, 9611), (113, 9722), (116, 9743), (120, 9773),

Gene: Lee7\_28 Start: 9403, Stop: 10347, Start Num: 20

Candidate Starts for Lee7\_28:

(Start: 20 @9403 has 139 MA's), (Start: 23 @9409 has 21 MA's), (49, 9532), (58, 9571), (61, 9595), (70, 9748), (72, 9757), (77, 9793), (78, 9805), (85, 9898), (89, 9979), (92, 9985), (96, 10033), (105, 10153), (113, 10264), (116, 10285), (120, 10315),

Gene: LifeSavor\_30 Start: 8857, Stop: 9801, Start Num: 20

Candidate Starts for LifeSavor\_30:

(Start: 20 @8857 has 139 MA's), (Start: 23 @8863 has 21 MA's), (49, 8986), (58, 9025), (61, 9049), (70, 9202), (72, 9211), (77, 9247), (78, 9259), (85, 9352), (89, 9433), (92, 9439), (96, 9487), (105, 9607), (113, 9718), (116, 9739), (120, 9769),

Gene: LilhomieP\_116 Start: 62991, Stop: 63890, Start Num: 15

Candidate Starts for LilhomieP\_116:

(14, 62985), (Start: 15 @62991 has 16 MA's), (Start: 17 @63003 has 2 MA's), (27, 63036), (36, 63072), (39, 63102), (40, 63108), (54, 63156), (60, 63195), (67, 63276), (68, 63285), (71, 63336), (81, 63444), (82, 63456), (91, 63537), (97, 63600), (99, 63615), (101, 63621), (105, 63696), (109, 63762), (111, 63786), (115, 63822), (119, 63858),

Gene: LinStu\_29 Start: 9756, Stop: 10700, Start Num: 20

Candidate Starts for LinStu\_29:

(Start: 20 @9756 has 139 MA's), (Start: 23 @9762 has 21 MA's), (49, 9885), (58, 9924), (61, 9948), (70, 10101), (72, 10110), (77, 10146), (78, 10158), (85, 10251), (89, 10332), (92, 10338), (96, 10386), (105, 10506), (113, 10617), (116, 10638), (120, 10668),

Gene: Littleton\_29 Start: 8861, Stop: 9805, Start Num: 20

Candidate Starts for Littleton\_29:

(Start: 20 @8861 has 139 MA's), (Start: 23 @8867 has 21 MA's), (49, 8990), (58, 9029), (61, 9053), (70, 9206), (72, 9215), (77, 9251), (78, 9263), (85, 9356), (89, 9437), (92, 9443), (96, 9491), (105, 9611), (113, 9722), (116, 9743), (120, 9773),

Gene: Loanshark\_29 Start: 9406, Stop: 10350, Start Num: 20

Candidate Starts for Loanshark\_29:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (110, 10240), (113, 10267), (116, 10288), (120, 10318),

Gene: LolaVinca\_32 Start: 10618, Stop: 11562, Start Num: 20

Candidate Starts for LolaVinca\_32:

(Start: 20 @10618 has 139 MA's), (Start: 23 @10624 has 21 MA's), (49, 10747), (58, 10786), (61, 10810), (70, 10963), (72, 10972), (77, 11008), (78, 11020), (85, 11113), (89, 11194), (92, 11200), (96, 11248), (105, 11368), (113, 11479), (116, 11500), (120, 11530),

Gene: LordLeafolot\_34 Start: 10979, Stop: 11917, Start Num: 23

Candidate Starts for LordLeafolot\_34:

(Start: 20 @10973 has 139 MA's), (Start: 23 @10979 has 21 MA's), (49, 11102), (58, 11141), (61, 11165), (70, 11318), (72, 11327), (77, 11363), (78, 11375), (85, 11468), (89, 11549), (92, 11555), (96, 11603), (105, 11723), (113, 11834), (116, 11855), (120, 11885),

Gene: Lukilu\_22 Start: 7997, Stop: 8941, Start Num: 20

Candidate Starts for Lukilu\_22:

(Start: 20 @7997 has 139 MA's), (Start: 23 @8003 has 21 MA's), (49, 8126), (58, 8165), (61, 8189), (70, 8342), (72, 8351), (77, 8387), (78, 8399), (85, 8492), (89, 8573), (92, 8579), (96, 8627), (105, 8747), (113, 8858), (116, 8879), (120, 8909),

Gene: Maby2021\_30 Start: 9406, Stop: 10350, Start Num: 20

Candidate Starts for Maby2021\_30:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),

Gene: Mangeria\_32 Start: 9935, Stop: 10873, Start Num: 23

Candidate Starts for Mangeria\_32:

(Start: 20 @9929 has 139 MA's), (Start: 23 @9935 has 21 MA's), (49, 10058), (58, 10097), (61, 10121), (70, 10274), (72, 10283), (77, 10319), (78, 10331), (85, 10424), (89, 10505), (92, 10511), (96, 10559), (105, 10679), (113, 10790), (116, 10811), (120, 10841),

Gene: Mareelih\_123 Start: 79376, Stop: 78516, Start Num: 24

Candidate Starts for Mareelih\_123:

(Start: 17 @79400 has 2 MA's), (Start: 24 @79376 has 3 MA's), (35, 79337), (45, 79271), (57, 79229), (58, 79220), (79, 78986), (80, 78980), (95, 78845), (96, 78821), (99, 78782), (109, 78635), (117, 78569),

Gene: Matsumoto\_28 Start: 8828, Stop: 9766, Start Num: 23

Candidate Starts for Matsumoto\_28:

(Start: 20 @8822 has 139 MA's), (Start: 23 @8828 has 21 MA's), (49, 8951), (58, 8990), (61, 9014), (70, 9167), (72, 9176), (77, 9212), (78, 9224), (85, 9317), (89, 9398), (92, 9404), (96, 9452), (105, 9572), (113, 9683), (116, 9704), (120, 9734),

Gene: McGee\_28 Start: 8045, Stop: 8989, Start Num: 20

Candidate Starts for McGee\_28:

(Start: 20 @8045 has 139 MA's), (Start: 23 @8051 has 21 MA's), (49, 8174), (58, 8213), (61, 8237), (70, 8390), (72, 8399), (77, 8435), (78, 8447), (85, 8540), (89, 8621), (92, 8627), (96, 8675), (105, 8795), (113, 8906), (116, 8927), (120, 8957),

Gene: McWolfish\_28 Start: 9153, Stop: 10097, Start Num: 20

Candidate Starts for McWolfish\_28:

(Start: 20 @9153 has 139 MA's), (Start: 23 @9159 has 21 MA's), (49, 9282), (58, 9321), (61, 9345), (70, 9498), (72, 9507), (77, 9543), (78, 9555), (85, 9648), (89, 9729), (92, 9735), (96, 9783), (105, 9903), (113, 10014), (116, 10035), (120, 10065),

Gene: Megamind\_29 Start: 9391, Stop: 10335, Start Num: 20

Candidate Starts for Megamind\_29:

(Start: 20 @9391 has 139 MA's), (Start: 23 @9397 has 21 MA's), (49, 9520), (58, 9559), (61, 9583), (70, 9736), (72, 9745), (77, 9781), (78, 9793), (85, 9886), (89, 9967), (92, 9973), (96, 10021), (105, 10141), (113, 10252), (116, 10273), (120, 10303),

Gene: Melpomini\_28 Start: 8263, Stop: 9207, Start Num: 20

Candidate Starts for Melpomini\_28:

(Start: 20 @8263 has 139 MA's), (Start: 23 @8269 has 21 MA's), (49, 8392), (58, 8431), (61, 8455), (70, 8608), (72, 8617), (77, 8653), (78, 8665), (85, 8758), (89, 8839), (92, 8845), (96, 8893), (105, 9013), (113, 9124), (116, 9145), (120, 9175),

Gene: MikeLiesIn\_29 Start: 9406, Stop: 10350, Start Num: 20

Candidate Starts for MikeLiesIn\_29:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),

Gene: Mikro\_27 Start: 9892, Stop: 10836, Start Num: 20

Candidate Starts for Mikro\_27:

(Start: 20 @9892 has 139 MA's), (Start: 23 @9898 has 21 MA's), (49, 10021), (58, 10060), (61, 10084), (70, 10237), (72, 10246), (77, 10282), (78, 10294), (85, 10387), (89, 10468), (92, 10474), (96, 10522), (105, 10642), (113, 10753), (116, 10774), (120, 10804),

Gene: MoMoMixon\_30 Start: 9720, Stop: 10664, Start Num: 20

Candidate Starts for MoMoMixon\_30:

(Start: 20 @9720 has 139 MA's), (Start: 23 @9726 has 21 MA's), (49, 9849), (58, 9888), (61, 9912), (70, 10065), (72, 10074), (77, 10110), (78, 10122), (85, 10215), (89, 10296), (92, 10302), (96, 10350), (105, 10470), (113, 10581), (116, 10602), (120, 10632),

Gene: Momo\_28 Start: 8861, Stop: 9805, Start Num: 20

Candidate Starts for Momo\_28:

(Start: 20 @8861 has 139 MA's), (Start: 23 @8867 has 21 MA's), (49, 8990), (58, 9029), (61, 9053), (70, 9206), (72, 9215), (77, 9251), (78, 9263), (85, 9356), (89, 9437), (92, 9443), (96, 9491), (105,

9611), (113, 9722), (116, 9743), (120, 9773),

Gene: MontyDev\_80 Start: 59983, Stop: 60945, Start Num: 13

Candidate Starts for MontyDev\_80:

(Start: 13 @59983 has 4 MA's), (14, 60001), (Start: 17 @60019 has 2 MA's), (33, 60076), (48, 60148), (49, 60151), (54, 60166), (55, 60169), (56, 60172), (59, 60190), (62, 60214), (64, 60259), (67, 60286), (68, 60295), (69, 60319), (71, 60346), (74, 60373), (76, 60382), (81, 60454), (84, 60490), (88, 60508), (94, 60589), (95, 60604), (96, 60628), (101, 60670), (102, 60676), (113, 60856), (118, 60892),

Gene: Morizzled23\_28 Start: 8257, Stop: 9201, Start Num: 20

Candidate Starts for Morizzled23\_28:

(Start: 20 @8257 has 139 MA's), (Start: 23 @8263 has 21 MA's), (49, 8386), (58, 8425), (61, 8449), (70, 8602), (72, 8611), (77, 8647), (78, 8659), (85, 8752), (89, 8833), (92, 8839), (96, 8887), (105, 9007), (113, 9118), (116, 9139), (120, 9169),

Gene: Naija\_29 Start: 8867, Stop: 9805, Start Num: 23

Candidate Starts for Naija\_29:

(Start: 20 @8861 has 139 MA's), (Start: 23 @8867 has 21 MA's), (49, 8990), (58, 9029), (61, 9053), (70, 9206), (72, 9215), (77, 9251), (78, 9263), (85, 9356), (89, 9437), (92, 9443), (96, 9491), (105, 9611), (113, 9722), (116, 9743), (120, 9773),

Gene: Napoleon13\_28 Start: 8282, Stop: 9220, Start Num: 23

Candidate Starts for Napoleon13\_28:

(Start: 20 @8276 has 139 MA's), (Start: 23 @8282 has 21 MA's), (49, 8405), (58, 8444), (61, 8468), (70, 8621), (72, 8630), (77, 8666), (78, 8678), (85, 8771), (89, 8852), (92, 8858), (96, 8906), (105, 9026), (113, 9137), (116, 9158), (120, 9188),

Gene: Nappy\_30 Start: 9571, Stop: 10515, Start Num: 21

Candidate Starts for Nappy\_30:

(Start: 21 @9571 has 11 MA's), (Start: 23 @9577 has 21 MA's), (49, 9700), (58, 9739), (61, 9763), (70, 9916), (72, 9925), (77, 9961), (78, 9973), (83, 10054), (85, 10066), (89, 10147), (92, 10153), (96, 10201), (105, 10321), (113, 10432), (116, 10453), (120, 10483),

Gene: Naval22\_31 Start: 9446, Stop: 10390, Start Num: 20

Candidate Starts for Naval22\_31:

(Start: 20 @9446 has 139 MA's), (Start: 23 @9452 has 21 MA's), (49, 9575), (58, 9614), (61, 9638), (70, 9791), (72, 9800), (77, 9836), (78, 9848), (85, 9941), (89, 10022), (92, 10028), (96, 10076), (105, 10196), (113, 10307), (116, 10328), (120, 10358),

Gene: NedWong\_30 Start: 9406, Stop: 10350, Start Num: 20

Candidate Starts for NedWong\_30:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),

Gene: Ngannou\_27 Start: 8037, Stop: 8981, Start Num: 20

Candidate Starts for Ngannou\_27:

(Start: 20 @8037 has 139 MA's), (Start: 23 @8043 has 21 MA's), (49, 8166), (58, 8205), (61, 8229), (70, 8382), (72, 8391), (77, 8427), (78, 8439), (85, 8532), (89, 8613), (92, 8619), (96, 8667), (105, 8787), (113, 8898), (116, 8919), (120, 8949),

Gene: NiceHouse\_121 Start: 80985, Stop: 81857, Start Num: 18

Candidate Starts for NiceHouse\_121:

(Start: 18 @80985 has 4 MA's), (19, 80991), (38, 81072), (44, 81096), (47, 81111), (49, 81117), (53, 81129), (54, 81135), (59, 81159), (64, 81225), (65, 81231), (73, 81333), (80, 81396), (83, 81447), (93, 81525), (96, 81558), (109, 81744), (110, 81762), (111, 81768),

Gene: Nidhogg\_30 Start: 9470, Stop: 10414, Start Num: 20

Candidate Starts for Nidhogg\_30:

(Start: 20 @9470 has 139 MA's), (Start: 23 @9476 has 21 MA's), (49, 9599), (58, 9638), (61, 9662), (70, 9815), (72, 9824), (77, 9860), (78, 9872), (85, 9965), (89, 10046), (92, 10052), (96, 10100), (105, 10220), (113, 10331), (116, 10352), (120, 10382),

Gene: Nilo\_80 Start: 60329, Stop: 61303, Start Num: 12

Candidate Starts for Nilo\_80:

(11, 60326), (Start: 12 @60329 has 4 MA's), (Start: 13 @60341 has 4 MA's), (14, 60359), (Start: 17 @60377 has 2 MA's), (33, 60434), (48, 60506), (49, 60509), (54, 60524), (55, 60527), (56, 60530), (59, 60548), (62, 60572), (64, 60617), (67, 60644), (68, 60653), (69, 60677), (71, 60704), (74, 60731), (76, 60740), (77, 60746), (81, 60812), (84, 60848), (88, 60866), (94, 60947), (95, 60962), (96, 60986), (101, 61028), (102, 61034), (108, 61157), (113, 61214), (118, 61250),

Gene: NoodleTree\_28 Start: 9168, Stop: 10112, Start Num: 20

Candidate Starts for NoodleTree\_28:

(Start: 20 @9168 has 139 MA's), (Start: 23 @9174 has 21 MA's), (49, 9297), (58, 9336), (61, 9360), (70, 9513), (72, 9522), (77, 9558), (78, 9570), (85, 9663), (89, 9744), (92, 9750), (96, 9798), (105, 9918), (113, 10029), (116, 10050), (120, 10080),

Gene: Norm\_29 Start: 9406, Stop: 10350, Start Num: 20

Candidate Starts for Norm\_29:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),

Gene: NuevoMundo\_32 Start: 10460, Stop: 11404, Start Num: 21

Candidate Starts for NuevoMundo\_32:

(Start: 21 @10460 has 11 MA's), (Start: 23 @10466 has 21 MA's), (49, 10589), (58, 10628), (61, 10652), (70, 10805), (72, 10814), (77, 10850), (78, 10862), (85, 10955), (89, 11036), (92, 11042), (96, 11090), (105, 11210), (113, 11321), (116, 11342), (120, 11372),

Gene: Octobien14\_54 Start: 37174, Stop: 38052, Start Num: 15

Candidate Starts for Octobien14\_54:

(Start: 15 @37174 has 16 MA's), (16, 37180), (25, 37210), (29, 37225), (31, 37234), (62, 37378), (68, 37459), (72, 37516), (73, 37531), (77, 37552), (86, 37666), (87, 37669), (96, 37753), (98, 37786), (99, 37792), (100, 37795), (106, 37879), (111, 37960),

Gene: ParkTD\_28 Start: 9406, Stop: 10350, Start Num: 20

Candidate Starts for ParkTD\_28:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),

Gene: Patter\_29 Start: 8878, Stop: 9822, Start Num: 20

Candidate Starts for Patter\_29:

(Start: 20 @8878 has 139 MA's), (Start: 23 @8884 has 21 MA's), (49, 9007), (58, 9046), (61, 9070), (70, 9223), (72, 9232), (77, 9268), (78, 9280), (85, 9373), (89, 9454), (92, 9460), (96, 9508), (105, 9628), (113, 9739), (116, 9760), (120, 9790),



Gene: PegLeg\_120 Start: 62875, Stop: 63774, Start Num: 15

Candidate Starts for PegLeg\_120:

(14, 62869), (Start: 15 @62875 has 16 MA's), (Start: 17 @62887 has 2 MA's), (27, 62920), (36, 62956), (39, 62986), (40, 62992), (54, 63040), (60, 63079), (67, 63160), (68, 63169), (71, 63220), (81, 63328), (82, 63340), (91, 63421), (97, 63484), (99, 63499), (101, 63505), (105, 63580), (109, 63646), (111, 63670), (115, 63706), (119, 63742),

Gene: Peregrin\_142 Start: 80771, Stop: 81640, Start Num: 18

Candidate Starts for Peregrin\_142:

(10, 80693), (Start: 18 @80771 has 4 MA's), (63, 81008), (73, 81116), (79, 81173), (90, 81302), (112, 81563),

Gene: Phlegm\_31 Start: 8861, Stop: 9805, Start Num: 20

Candidate Starts for Phlegm\_31:

(Start: 20 @8861 has 139 MA's), (Start: 23 @8867 has 21 MA's), (49, 8990), (58, 9029), (61, 9053), (70, 9206), (72, 9215), (77, 9251), (78, 9263), (85, 9356), (89, 9437), (92, 9443), (96, 9491), (105, 9611), (113, 9722), (116, 9743), (120, 9773),

Gene: Phox\_28 Start: 9570, Stop: 10514, Start Num: 20

Candidate Starts for Phox\_28:

(Start: 20 @9570 has 139 MA's), (Start: 23 @9576 has 21 MA's), (49, 9699), (58, 9738), (61, 9762), (70, 9915), (72, 9924), (77, 9960), (78, 9972), (85, 10065), (89, 10146), (92, 10152), (96, 10200), (105, 10320), (113, 10431), (116, 10452), (120, 10482),

Gene: Phusco\_29 Start: 8863, Stop: 9801, Start Num: 23

Candidate Starts for Phusco\_29:

(Start: 20 @8857 has 139 MA's), (Start: 23 @8863 has 21 MA's), (49, 8986), (58, 9025), (61, 9049), (70, 9202), (72, 9211), (77, 9247), (78, 9259), (85, 9352), (89, 9433), (92, 9439), (96, 9487), (105, 9607), (113, 9718), (116, 9739), (120, 9769),

Gene: Pier\_31 Start: 9564, Stop: 10508, Start Num: 20

Candidate Starts for Pier\_31:

(Start: 20 @9564 has 139 MA's), (Start: 23 @9570 has 21 MA's), (49, 9693), (58, 9732), (61, 9756), (63, 9789), (70, 9909), (72, 9918), (77, 9954), (78, 9966), (85, 10059), (89, 10140), (92, 10146), (96, 10194), (105, 10314), (113, 10425), (116, 10446), (120, 10476),

Gene: Pinkcreek\_21 Start: 7265, Stop: 8209, Start Num: 20

Candidate Starts for Pinkcreek\_21:

(Start: 20 @7265 has 139 MA's), (Start: 23 @7271 has 21 MA's), (49, 7394), (58, 7433), (61, 7457), (70, 7610), (72, 7619), (77, 7655), (78, 7667), (85, 7760), (89, 7841), (92, 7847), (96, 7895), (105, 8015), (110, 8099), (113, 8126), (116, 8147), (120, 8177),

Gene: Pio\_32 Start: 10255, Stop: 11199, Start Num: 20

Candidate Starts for Pio\_32:

(Start: 20 @10255 has 139 MA's), (Start: 23 @10261 has 21 MA's), (49, 10384), (58, 10423), (61, 10447), (70, 10600), (72, 10609), (77, 10645), (78, 10657), (85, 10750), (89, 10831), (92, 10837), (96, 10885), (105, 11005), (113, 11116), (116, 11137), (120, 11167),

Gene: Pivoine\_29 Start: 8861, Stop: 9805, Start Num: 20

Candidate Starts for Pivoine\_29:

(Start: 20 @8861 has 139 MA's), (Start: 23 @8867 has 21 MA's), (49, 8990), (58, 9029), (61, 9053), (70, 9206), (72, 9215), (77, 9251), (78, 9263), (85, 9356), (89, 9437), (92, 9443), (96, 9491), (105,

9611), (113, 9722), (116, 9743), (120, 9773),

Gene: Pleione\_31 Start: 9406, Stop: 10350, Start Num: 20

Candidate Starts for Pleione\_31:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),

Gene: PurduePete\_28 Start: 9117, Stop: 10061, Start Num: 20

Candidate Starts for PurduePete\_28:

(Start: 20 @9117 has 139 MA's), (Start: 23 @9123 has 21 MA's), (49, 9246), (58, 9285), (61, 9309), (70, 9462), (72, 9471), (77, 9507), (78, 9519), (85, 9612), (89, 9693), (92, 9699), (96, 9747), (105, 9867), (113, 9978), (116, 9999), (120, 10029),

Gene: QBert\_27 Start: 9570, Stop: 10514, Start Num: 20

Candidate Starts for QBert\_27:

(Start: 20 @9570 has 139 MA's), (Start: 23 @9576 has 21 MA's), (49, 9699), (58, 9738), (61, 9762), (70, 9915), (72, 9924), (77, 9960), (78, 9972), (85, 10065), (89, 10146), (92, 10152), (96, 10200), (105, 10320), (110, 10404), (113, 10431), (116, 10452), (120, 10482),

Gene: Quasimodo\_29 Start: 9821, Stop: 10765, Start Num: 20

Candidate Starts for Quasimodo\_29:

(Start: 20 @9821 has 139 MA's), (Start: 23 @9827 has 21 MA's), (49, 9950), (58, 9989), (61, 10013), (70, 10166), (72, 10175), (77, 10211), (78, 10223), (85, 10316), (89, 10397), (92, 10403), (96, 10451), (105, 10571), (113, 10682), (116, 10703), (120, 10733),

Gene: Rabinovish\_28 Start: 9858, Stop: 10802, Start Num: 20

Candidate Starts for Rabinovish\_28:

(Start: 20 @9858 has 139 MA's), (Start: 23 @9864 has 21 MA's), (49, 9987), (58, 10026), (61, 10050), (70, 10203), (72, 10212), (77, 10248), (78, 10260), (85, 10353), (89, 10434), (92, 10440), (96, 10488), (105, 10608), (110, 10692), (113, 10719), (116, 10740), (120, 10770),

Gene: Rahel\_29 Start: 8857, Stop: 9801, Start Num: 20

Candidate Starts for Rahel\_29:

(Start: 20 @8857 has 139 MA's), (Start: 23 @8863 has 21 MA's), (49, 8986), (58, 9025), (61, 9049), (70, 9202), (72, 9211), (77, 9247), (78, 9259), (85, 9352), (89, 9433), (92, 9439), (96, 9487), (105, 9607), (113, 9718), (116, 9739), (120, 9769),

Gene: Reindeer\_119 Start: 63689, Stop: 64588, Start Num: 15

Candidate Starts for Reindeer\_119:

(14, 63683), (Start: 15 @63689 has 16 MA's), (Start: 17 @63701 has 2 MA's), (30, 63743), (34, 63758), (40, 63806), (67, 63974), (68, 63983), (71, 64034), (72, 64040), (81, 64142), (82, 64154), (86, 64190), (91, 64235), (97, 64298), (99, 64313), (101, 64319), (103, 64328), (104, 64367), (105, 64394), (109, 64460), (114, 64508), (115, 64520), (119, 64556), (120, 64559),

Gene: Riparian\_80 Start: 59776, Stop: 60750, Start Num: 12

Candidate Starts for Riparian\_80:

(11, 59773), (Start: 12 @59776 has 4 MA's), (Start: 13 @59788 has 4 MA's), (14, 59806), (Start: 17 @59824 has 2 MA's), (33, 59881), (48, 59953), (49, 59956), (54, 59971), (55, 59974), (56, 59977), (59, 59995), (62, 60019), (64, 60064), (67, 60091), (68, 60100), (69, 60124), (71, 60151), (74, 60178), (76, 60187), (77, 60193), (81, 60259), (84, 60295), (88, 60313), (94, 60394), (95, 60409), (96, 60433), (101, 60475), (102, 60481), (108, 60604), (113, 60661), (118, 60697),

Gene: Rizal\_27 Start: 8323, Stop: 9267, Start Num: 20

Candidate Starts for Rizal\_27:

(Start: 20 @8323 has 139 MA's), (Start: 23 @8329 has 21 MA's), (49, 8452), (58, 8491), (61, 8515), (70, 8668), (72, 8677), (77, 8713), (78, 8725), (85, 8818), (89, 8899), (92, 8905), (96, 8953), (105, 9073), (113, 9184), (116, 9205), (120, 9235),

Gene: RoMag\_24 Start: 8655, Stop: 9599, Start Num: 20

Candidate Starts for RoMag\_24:

(Start: 20 @8655 has 139 MA's), (Start: 23 @8661 has 21 MA's), (49, 8784), (58, 8823), (61, 8847), (70, 9000), (72, 9009), (77, 9045), (78, 9057), (85, 9150), (89, 9231), (92, 9237), (96, 9285), (105, 9405), (110, 9489), (113, 9516), (116, 9537), (120, 9567),

Gene: Ronan\_24 Start: 6963, Stop: 7907, Start Num: 20

Candidate Starts for Ronan\_24:

(Start: 20 @6963 has 139 MA's), (Start: 23 @6969 has 21 MA's), (49, 7092), (58, 7131), (61, 7155), (70, 7308), (72, 7317), (77, 7353), (78, 7365), (85, 7458), (89, 7539), (92, 7545), (96, 7593), (105, 7713), (110, 7797), (113, 7824), (116, 7845), (120, 7875),

Gene: Roots515\_29 Start: 9405, Stop: 10349, Start Num: 20

Candidate Starts for Roots515\_29:

(Start: 20 @9405 has 139 MA's), (Start: 23 @9411 has 21 MA's), (49, 9534), (58, 9573), (61, 9597), (70, 9750), (72, 9759), (77, 9795), (78, 9807), (85, 9900), (89, 9981), (92, 9987), (96, 10035), (105, 10155), (113, 10266), (116, 10287), (120, 10317),

Gene: Rope\_78 Start: 59935, Stop: 60909, Start Num: 12

Candidate Starts for Rope\_78:

(11, 59932), (Start: 12 @59935 has 4 MA's), (Start: 13 @59947 has 4 MA's), (14, 59965), (Start: 17 @59983 has 2 MA's), (33, 60040), (48, 60112), (49, 60115), (54, 60130), (55, 60133), (56, 60136), (59, 60154), (62, 60178), (64, 60223), (67, 60250), (68, 60259), (69, 60283), (71, 60310), (74, 60337), (76, 60346), (77, 60352), (81, 60418), (84, 60454), (88, 60472), (94, 60553), (95, 60568), (96, 60592), (101, 60634), (102, 60640), (108, 60763), (113, 60820), (118, 60856),

Gene: Salacia\_31 Start: 9406, Stop: 10350, Start Num: 20

Candidate Starts for Salacia\_31:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),

Gene: Sauce\_30 Start: 9533, Stop: 10477, Start Num: 20

Candidate Starts for Sauce\_30:

(Start: 20 @9533 has 139 MA's), (Start: 23 @9539 has 21 MA's), (49, 9662), (58, 9701), (61, 9725), (70, 9878), (72, 9887), (77, 9923), (78, 9935), (85, 10028), (89, 10109), (92, 10115), (96, 10163), (105, 10283), (110, 10367), (113, 10394), (116, 10415), (120, 10445),

Gene: ScottMcG\_29 Start: 9719, Stop: 10657, Start Num: 23

Candidate Starts for ScottMcG\_29:

(Start: 20 @9713 has 139 MA's), (Start: 23 @9719 has 21 MA's), (49, 9842), (58, 9881), (61, 9905), (70, 10058), (72, 10067), (77, 10103), (78, 10115), (85, 10208), (89, 10289), (92, 10295), (96, 10343), (105, 10463), (113, 10574), (116, 10595), (120, 10625),

Gene: Sebata\_29 Start: 9762, Stop: 10700, Start Num: 23

Candidate Starts for Sebata\_29:

(Start: 20 @9756 has 139 MA's), (Start: 23 @9762 has 21 MA's), (49, 9885), (58, 9924), (61, 9948), (70, 10101), (72, 10110), (77, 10146), (78, 10158), (85, 10251), (89, 10332), (92, 10338), (96, 10386), (105, 10506), (113, 10617), (116, 10638), (120, 10668),

Gene: Send513\_78 Start: 60324, Stop: 61286, Start Num: 13

Candidate Starts for Send513\_78:

(Start: 13 @60324 has 4 MA's), (14, 60342), (Start: 17 @60360 has 2 MA's), (33, 60417), (48, 60489), (49, 60492), (54, 60507), (55, 60510), (56, 60513), (59, 60531), (62, 60555), (64, 60600), (67, 60627), (68, 60636), (69, 60660), (71, 60687), (74, 60714), (76, 60723), (77, 60729), (81, 60795), (84, 60831), (88, 60849), (94, 60930), (95, 60945), (96, 60969), (101, 61011), (102, 61017), (108, 61140), (113, 61197), (118, 61233),

Gene: Sephiroth\_52 Start: 36766, Stop: 37644, Start Num: 15

Candidate Starts for Sephiroth\_52:

(Start: 15 @36766 has 16 MA's), (25, 36802), (29, 36817), (31, 36826), (62, 36970), (68, 37051), (72, 37108), (73, 37123), (77, 37144), (86, 37258), (87, 37261), (96, 37345), (98, 37378), (99, 37384), (100, 37387), (106, 37471), (111, 37552),

Gene: Shaqnato\_25 Start: 7980, Stop: 8924, Start Num: 20

Candidate Starts for Shaqnato\_25:

(Start: 20 @7980 has 139 MA's), (Start: 23 @7986 has 21 MA's), (49, 8109), (58, 8148), (61, 8172), (70, 8325), (72, 8334), (77, 8370), (78, 8382), (85, 8475), (89, 8556), (92, 8562), (96, 8610), (105, 8730), (113, 8841), (116, 8862), (120, 8892),

Gene: Shelob\_31 Start: 10288, Stop: 11232, Start Num: 20

Candidate Starts for Shelob\_31:

(Start: 20 @10288 has 139 MA's), (Start: 23 @10294 has 21 MA's), (49, 10417), (58, 10456), (61, 10480), (70, 10633), (72, 10642), (77, 10678), (78, 10690), (85, 10783), (89, 10864), (92, 10870), (96, 10918), (105, 11038), (110, 11122), (113, 11149), (116, 11170), (120, 11200),

Gene: ShiaLabeouf\_29 Start: 8857, Stop: 9801, Start Num: 20

Candidate Starts for ShiaLabeouf\_29:

(Start: 20 @8857 has 139 MA's), (Start: 23 @8863 has 21 MA's), (49, 8986), (58, 9025), (61, 9049), (70, 9202), (72, 9211), (77, 9247), (78, 9259), (85, 9352), (89, 9433), (92, 9439), (96, 9487), (105, 9607), (113, 9718), (116, 9739), (120, 9769),

Gene: Shifa\_26 Start: 9039, Stop: 9983, Start Num: 20

Candidate Starts for Shifa\_26:

(Start: 20 @9039 has 139 MA's), (Start: 23 @9045 has 21 MA's), (49, 9168), (58, 9207), (61, 9231), (70, 9384), (72, 9393), (77, 9429), (78, 9441), (85, 9534), (89, 9615), (92, 9621), (96, 9669), (105, 9789), (110, 9873), (113, 9900), (116, 9921), (120, 9951),

Gene: Shnickers\_29 Start: 8857, Stop: 9801, Start Num: 20

Candidate Starts for Shnickers\_29:

(Start: 20 @8857 has 139 MA's), (Start: 23 @8863 has 21 MA's), (49, 8986), (58, 9025), (61, 9049), (70, 9202), (72, 9211), (77, 9247), (78, 9259), (85, 9352), (89, 9433), (92, 9439), (96, 9487), (105, 9607), (113, 9718), (116, 9739), (120, 9769),

Gene: Shrimp\_29 Start: 9410, Stop: 10354, Start Num: 20

Candidate Starts for Shrimp\_29:

(Start: 20 @9410 has 139 MA's), (Start: 23 @9416 has 21 MA's), (49, 9539), (58, 9578), (61, 9602), (70, 9755), (72, 9764), (77, 9800), (78, 9812), (85, 9905), (89, 9986), (92, 9992), (96, 10040), (105, 10160), (113, 10271), (116, 10292), (120, 10322),

Gene: SilverDipper\_30 Start: 8861, Stop: 9805, Start Num: 20

Candidate Starts for SilverDipper\_30:

(Start: 20 @8861 has 139 MA's), (Start: 23 @8867 has 21 MA's), (49, 8990), (58, 9029), (61, 9053), (70, 9206), (72, 9215), (77, 9251), (78, 9263), (85, 9356), (89, 9437), (92, 9443), (96, 9491), (105, 9611), (113, 9722), (116, 9743), (120, 9773),

Gene: Sixama\_124 Start: 79551, Stop: 78667, Start Num: 17

Candidate Starts for Sixama\_124:

(9, 79659), (Start: 17 @79551 has 2 MA's), (Start: 24 @79527 has 3 MA's), (35, 79488), (37, 79452), (41, 79434), (46, 79419), (47, 79413), (51, 79401), (57, 79380), (58, 79371), (63, 79314), (65, 79296), (75, 79185), (80, 79131), (83, 79080), (96, 78972), (109, 78786),

Gene: Skinny\_122 Start: 63991, Stop: 64890, Start Num: 15

Candidate Starts for Skinny\_122:

(14, 63985), (Start: 15 @63991 has 16 MA's), (Start: 17 @64003 has 2 MA's), (27, 64036), (36, 64072), (39, 64102), (40, 64108), (54, 64156), (60, 64195), (67, 64276), (68, 64285), (71, 64336), (81, 64444), (82, 64456), (91, 64537), (97, 64600), (99, 64615), (101, 64621), (105, 64696), (109, 64762), (111, 64786), (115, 64822), (119, 64858),

Gene: SmallFry\_29 Start: 8857, Stop: 9801, Start Num: 20

Candidate Starts for SmallFry\_29:

(Start: 20 @8857 has 139 MA's), (Start: 23 @8863 has 21 MA's), (49, 8986), (58, 9025), (61, 9049), (70, 9202), (72, 9211), (77, 9247), (78, 9259), (85, 9352), (89, 9433), (92, 9439), (96, 9487), (105, 9607), (113, 9718), (116, 9739), (120, 9769),

Gene: Spec\_27 Start: 8863, Stop: 9807, Start Num: 20

Candidate Starts for Spec\_27:

(Start: 20 @8863 has 139 MA's), (Start: 23 @8869 has 21 MA's), (49, 8992), (58, 9031), (61, 9055), (70, 9208), (72, 9217), (77, 9253), (78, 9265), (85, 9358), (89, 9439), (92, 9445), (96, 9493), (105, 9613), (113, 9724), (116, 9745), (120, 9775),

Gene: Specks\_34 Start: 10701, Stop: 11639, Start Num: 23

Candidate Starts for Specks\_34:

(Start: 20 @10695 has 139 MA's), (Start: 23 @10701 has 21 MA's), (49, 10824), (58, 10863), (61, 10887), (70, 11040), (72, 11049), (77, 11085), (78, 11097), (85, 11190), (89, 11271), (92, 11277), (96, 11325), (105, 11445), (113, 11556), (116, 11577), (120, 11607),

Gene: Sprinklers\_29 Start: 8895, Stop: 9839, Start Num: 20

Candidate Starts for Sprinklers\_29:

(Start: 20 @8895 has 139 MA's), (Start: 23 @8901 has 21 MA's), (49, 9024), (58, 9063), (61, 9087), (70, 9240), (72, 9249), (77, 9285), (78, 9297), (85, 9390), (89, 9471), (92, 9477), (96, 9525), (105, 9645), (113, 9756), (116, 9777), (120, 9807),

Gene: Spud\_31 Start: 10252, Stop: 11196, Start Num: 20

Candidate Starts for Spud\_31:

(Start: 20 @10252 has 139 MA's), (Start: 23 @10258 has 21 MA's), (49, 10381), (58, 10420), (61, 10444), (70, 10597), (72, 10606), (77, 10642), (78, 10654), (85, 10747), (89, 10828), (92, 10834), (96, 10882), (105, 11002), (113, 11113), (116, 11134), (120, 11164),

Gene: SrishMeg2525\_28 Start: 9117, Stop: 10061, Start Num: 20

Candidate Starts for SrishMeg2525\_28:

(Start: 20 @9117 has 139 MA's), (Start: 23 @9123 has 21 MA's), (49, 9246), (58, 9285), (61, 9309), (70, 9462), (72, 9471), (77, 9507), (78, 9519), (85, 9612), (89, 9693), (92, 9699), (96, 9747), (105, 9867), (113, 9978), (116, 9999), (120, 10029),

Gene: StephanieG\_29 Start: 9586, Stop: 10530, Start Num: 20

Candidate Starts for StephanieG\_29:

(Start: 20 @9586 has 139 MA's), (Start: 23 @9592 has 21 MA's), (49, 9715), (58, 9754), (61, 9778), (70, 9931), (72, 9940), (77, 9976), (78, 9988), (85, 10081), (89, 10162), (92, 10168), (96, 10216), (105, 10336), (113, 10447), (116, 10468), (120, 10498),

Gene: Stubby\_27 Start: 8666, Stop: 9610, Start Num: 20

Candidate Starts for Stubby\_27:

(Start: 20 @8666 has 139 MA's), (Start: 23 @8672 has 21 MA's), (49, 8795), (58, 8834), (61, 8858), (70, 9011), (72, 9020), (77, 9056), (78, 9068), (85, 9161), (89, 9242), (92, 9248), (96, 9296), (105, 9416), (110, 9500), (113, 9527), (116, 9548), (120, 9578),

Gene: StubbySaigey\_28 Start: 8046, Stop: 8990, Start Num: 20

Candidate Starts for StubbySaigey\_28:

(Start: 20 @8046 has 139 MA's), (Start: 23 @8052 has 21 MA's), (49, 8175), (58, 8214), (61, 8238), (70, 8391), (72, 8400), (77, 8436), (78, 8448), (85, 8541), (89, 8622), (92, 8628), (96, 8676), (105, 8796), (113, 8907), (116, 8928), (120, 8958),

Gene: Syleon\_54 Start: 36693, Stop: 37568, Start Num: 15

Candidate Starts for Syleon\_54:

(Start: 15 @36693 has 16 MA's), (22, 36720), (29, 36741), (31, 36750), (62, 36894), (68, 36975), (72, 37032), (73, 37047), (77, 37068), (86, 37182), (87, 37185), (96, 37269), (98, 37302), (99, 37308), (100, 37311), (106, 37395),

Gene: Tainan\_34 Start: 10973, Stop: 11917, Start Num: 20

Candidate Starts for Tainan\_34:

(Start: 20 @10973 has 139 MA's), (Start: 23 @10979 has 21 MA's), (49, 11102), (58, 11141), (61, 11165), (70, 11318), (72, 11327), (77, 11363), (78, 11375), (85, 11468), (89, 11549), (92, 11555), (96, 11603), (105, 11723), (113, 11834), (116, 11855), (120, 11885),

Gene: Teardrop\_28 Start: 8322, Stop: 9266, Start Num: 20

Candidate Starts for Teardrop\_28:

(Start: 20 @8322 has 139 MA's), (Start: 23 @8328 has 21 MA's), (49, 8451), (58, 8490), (61, 8514), (70, 8667), (72, 8676), (77, 8712), (78, 8724), (85, 8817), (89, 8898), (92, 8904), (96, 8952), (105, 9072), (113, 9183), (116, 9204), (120, 9234),

Gene: TinyTim\_29 Start: 9406, Stop: 10350, Start Num: 20

Candidate Starts for TinyTim\_29:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),

Gene: Tonenili\_33 Start: 10505, Stop: 11449, Start Num: 21

Candidate Starts for Tonenili\_33:

(1, 9845), (2, 9851), (3, 9890), (4, 9992), (5, 10022), (6, 10145), (7, 10148), (8, 10250), (Start: 21 @10505 has 11 MA's), (Start: 23 @10511 has 21 MA's), (49, 10634), (58, 10673), (61, 10697), (63, 10730), (70, 10850), (72, 10859), (77, 10895), (78, 10907), (85, 11000), (92, 11087), (96, 11135), (105, 11255), (113, 11366), (116, 11387), (120, 11417),

Gene: Tortoise16\_28 Start: 8857, Stop: 9801, Start Num: 20

Candidate Starts for Tortoise16\_28:

(Start: 20 @8857 has 139 MA's), (Start: 23 @8863 has 21 MA's), (49, 8986), (58, 9025), (61, 9049), (70, 9202), (72, 9211), (77, 9247), (78, 9259), (85, 9352), (89, 9433), (92, 9439), (96, 9487), (105, 9607), (113, 9718), (116, 9739), (120, 9769),

Gene: Trina\_138 Start: 86276, Stop: 87130, Start Num: 18

Candidate Starts for Trina\_138:

(Start: 18 @86276 has 4 MA's), (19, 86282), (26, 86303), (32, 86333), (52, 86384), (55, 86396), (59, 86417), (61, 86438), (63, 86471), (64, 86483), (73, 86579), (80, 86642), (85, 86705), (96, 86831), (102, 86882), (108, 87005), (112, 87053),

Gene: Trinitium\_28 Start: 8311, Stop: 9255, Start Num: 20

Candidate Starts for Trinitium\_28:

(Start: 20 @8311 has 139 MA's), (Start: 23 @8317 has 21 MA's), (49, 8440), (50, 8443), (58, 8479), (61, 8503), (70, 8656), (72, 8665), (77, 8701), (78, 8713), (85, 8806), (89, 8887), (92, 8893), (96, 8941), (105, 9061), (113, 9172), (116, 9193), (120, 9223),

Gene: Turret\_27 Start: 8034, Stop: 8978, Start Num: 20

Candidate Starts for Turret\_27:

(Start: 20 @8034 has 139 MA's), (Start: 23 @8040 has 21 MA's), (49, 8163), (58, 8202), (61, 8226), (70, 8379), (72, 8388), (77, 8424), (78, 8436), (85, 8529), (89, 8610), (92, 8616), (96, 8664), (105, 8784), (113, 8895), (116, 8916), (120, 8946),

Gene: TyDawg\_111 Start: 61716, Stop: 62615, Start Num: 15

Candidate Starts for TyDawg\_111:

(14, 61710), (Start: 15 @61716 has 16 MA's), (Start: 17 @61728 has 2 MA's), (27, 61761), (36, 61797), (39, 61827), (40, 61833), (54, 61881), (60, 61920), (67, 62001), (68, 62010), (71, 62061), (81, 62169), (82, 62181), (91, 62262), (97, 62325), (99, 62340), (101, 62346), (105, 62421), (108, 62475), (109, 62487), (111, 62511), (114, 62535), (115, 62547), (119, 62583),

Gene: Tyke\_31 Start: 10269, Stop: 11213, Start Num: 20

Candidate Starts for Tyke\_31:

(Start: 20 @10269 has 139 MA's), (Start: 23 @10275 has 21 MA's), (49, 10398), (58, 10437), (61, 10461), (70, 10614), (72, 10623), (77, 10659), (78, 10671), (85, 10764), (89, 10845), (92, 10851), (96, 10899), (105, 11019), (113, 11130), (116, 11151), (120, 11181),

Gene: ValleyTerrace\_29 Start: 8861, Stop: 9805, Start Num: 20

Candidate Starts for ValleyTerrace\_29:

(Start: 20 @8861 has 139 MA's), (Start: 23 @8867 has 21 MA's), (49, 8990), (58, 9029), (61, 9053), (70, 9206), (72, 9215), (77, 9251), (78, 9263), (85, 9356), (89, 9437), (92, 9443), (96, 9491), (105, 9611), (113, 9722), (116, 9743), (120, 9773),

Gene: Wally\_28 Start: 8278, Stop: 9222, Start Num: 20

Candidate Starts for Wally\_28:

(Start: 20 @8278 has 139 MA's), (Start: 23 @8284 has 21 MA's), (49, 8407), (58, 8446), (61, 8470), (70, 8623), (72, 8632), (77, 8668), (78, 8680), (85, 8773), (89, 8854), (92, 8860), (96, 8908), (105, 9028), (113, 9139), (116, 9160), (120, 9190),

Gene: Weiss13\_78 Start: 60025, Stop: 60987, Start Num: 13

Candidate Starts for Weiss13\_78:

(11, 60010), (Start: 12 @60013 has 4 MA's), (Start: 13 @60025 has 4 MA's), (14, 60043), (Start: 17 @60061 has 2 MA's), (33, 60118), (48, 60190), (49, 60193), (54, 60208), (55, 60211), (56, 60214),

(59, 60232), (62, 60256), (64, 60301), (67, 60328), (68, 60337), (69, 60361), (71, 60388), (74, 60415), (76, 60424), (77, 60430), (81, 60496), (84, 60532), (88, 60550), (94, 60631), (95, 60646), (96, 60670), (101, 60712), (102, 60718), (108, 60841), (113, 60898), (118, 60934),

Gene: Willis\_29 Start: 9301, Stop: 10245, Start Num: 20

Candidate Starts for Willis\_29:

(Start: 20 @9301 has 139 MA's), (Start: 23 @9307 has 21 MA's), (49, 9430), (58, 9469), (61, 9493), (70, 9646), (72, 9655), (77, 9691), (78, 9703), (85, 9796), (89, 9877), (92, 9883), (96, 9931), (105, 10051), (113, 10162), (116, 10183), (120, 10213),

Gene: Yassified\_26 Start: 8064, Stop: 9002, Start Num: 23

Candidate Starts for Yassified\_26:

(Start: 20 @8058 has 139 MA's), (Start: 23 @8064 has 21 MA's), (49, 8187), (58, 8226), (61, 8250), (70, 8403), (72, 8412), (77, 8448), (78, 8460), (85, 8553), (89, 8634), (92, 8640), (96, 8688), (105, 8808), (113, 8919), (116, 8940), (120, 8970),

Gene: Yelo\_77 Start: 60379, Stop: 61341, Start Num: 13

Candidate Starts for Yelo\_77:

(Start: 13 @60379 has 4 MA's), (14, 60397), (Start: 17 @60415 has 2 MA's), (33, 60472), (48, 60544), (49, 60547), (54, 60562), (55, 60565), (56, 60568), (59, 60586), (62, 60610), (64, 60655), (67, 60682), (68, 60691), (69, 60715), (71, 60742), (74, 60769), (76, 60778), (77, 60784), (81, 60850), (84, 60886), (88, 60904), (94, 60985), (95, 61000), (96, 61024), (101, 61066), (102, 61072), (108, 61195), (113, 61252), (118, 61288),

Gene: YemiJoy2021\_30 Start: 9406, Stop: 10350, Start Num: 20

Candidate Starts for YemiJoy2021\_30:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),

Gene: YoungMoneyMata\_29 Start: 8612, Stop: 9556, Start Num: 20

Candidate Starts for YoungMoneyMata\_29:

(Start: 20 @8612 has 139 MA's), (Start: 23 @8618 has 21 MA's), (49, 8741), (58, 8780), (61, 8804), (70, 8957), (72, 8966), (77, 9002), (78, 9014), (85, 9107), (89, 9188), (92, 9194), (96, 9242), (105, 9362), (113, 9473), (116, 9494), (120, 9524),

Gene: Yucca\_29 Start: 9328, Stop: 10272, Start Num: 20

Candidate Starts for Yucca\_29:

(Start: 20 @9328 has 139 MA's), (Start: 23 @9334 has 21 MA's), (49, 9457), (58, 9496), (61, 9520), (70, 9673), (72, 9682), (77, 9718), (78, 9730), (85, 9823), (89, 9904), (92, 9910), (96, 9958), (105, 10078), (113, 10189), (116, 10210), (120, 10240),

Gene: Zalkecks\_31 Start: 9410, Stop: 10354, Start Num: 20

Candidate Starts for Zalkecks\_31:

(Start: 20 @9410 has 139 MA's), (Start: 23 @9416 has 21 MA's), (49, 9539), (58, 9578), (61, 9602), (70, 9755), (72, 9764), (77, 9800), (78, 9812), (85, 9905), (89, 9986), (92, 9992), (96, 10040), (105, 10160), (113, 10271), (116, 10292), (120, 10322),

Gene: Zeenon\_31 Start: 9398, Stop: 10336, Start Num: 23

Candidate Starts for Zeenon\_31:

(Start: 20 @9392 has 139 MA's), (Start: 23 @9398 has 21 MA's), (49, 9521), (58, 9560), (61, 9584), (70, 9737), (72, 9746), (77, 9782), (78, 9794), (85, 9887), (89, 9968), (92, 9974), (96, 10022), (105, 10142), (113, 10253), (116, 10274), (120, 10304),



Gene: Zenon\_80 Start: 60339, Stop: 61313, Start Num: 12

Candidate Starts for Zenon\_80:

(11, 60336), (Start: 12 @60339 has 4 MA's), (Start: 13 @60351 has 4 MA's), (14, 60369), (Start: 17 @60387 has 2 MA's), (33, 60444), (48, 60516), (49, 60519), (54, 60534), (55, 60537), (56, 60540), (59, 60558), (62, 60582), (64, 60627), (67, 60654), (68, 60663), (69, 60687), (71, 60714), (74, 60741), (76, 60750), (77, 60756), (81, 60822), (84, 60858), (88, 60876), (94, 60957), (95, 60972), (96, 60996), (101, 61038), (102, 61044), (108, 61167), (113, 61224), (118, 61260),

Gene: ZygoTaiga\_29 Start: 9412, Stop: 10350, Start Num: 23

Candidate Starts for ZygoTaiga\_29:

(Start: 20 @9406 has 139 MA's), (Start: 23 @9412 has 21 MA's), (49, 9535), (58, 9574), (61, 9598), (70, 9751), (72, 9760), (77, 9796), (78, 9808), (85, 9901), (89, 9982), (92, 9988), (96, 10036), (105, 10156), (113, 10267), (116, 10288), (120, 10318),