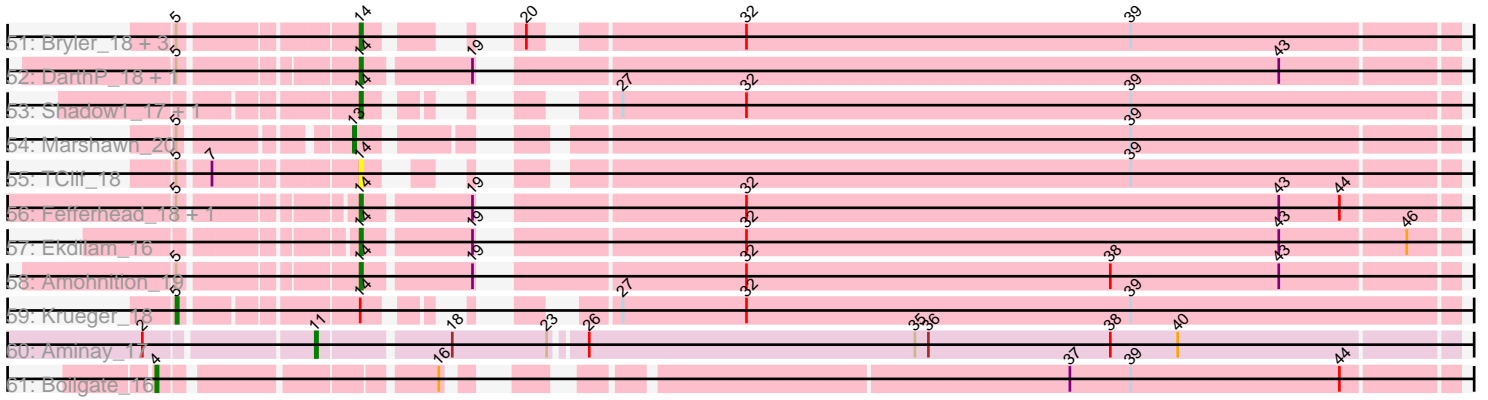


Pham 156132



Sample	Variant Position
51: Bryler_I8 + 3	6
52: DarrhP_I8 + 1	14
53: Shadow1_I7 + 1	14
54: Marshawn_I2	14
55: TCM_I8	1
56: Fellehead_I8 + 1	14, 19, 20, 32, 33, 34, 46
57: Ekollam_I6	6, 19, 20, 28, 30, 33, 34
58: Amohnton_I3	6, 21, 24, 30, 33, 34
59: Krueger_I3	6, 11, 16, 18, 23, 26, 35, 36, 38, 40
60: Aminay_I1	4, 11, 16, 18, 23, 26, 31, 32, 38, 39, 40, 44
61: Bollgate_I6	4, 11, 16, 18, 23, 26, 31, 32, 38, 39, 40, 44

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 156132 Report

This analysis was run 04/12/24 on database version 558.

Pham number 156132 has 189 members, 11 are drafts.

Phages represented in each track:

- Track 1 : Lemuria_14
- Track 2 : Jolie2_14
- Track 3 : JAWS_19, Padpat_19, Capricorn_19, Blizzard_19, BEEST_19, Belladonna_19, Lunahalos_19, Adephagia_19, Tachez_19, ActinUp_19, YoureAdopted_18, Mynx_19, Homura_19, Spock_19, Twitch_19, MeaningOfLife_19, Durfee_19, ShiaSurprise_19, Llorens_19, Jayhawk_20, Rosmarinus_19, Ramen_19, CaseJules_19, Asayake_19, Jarvi_19, TruffulaTree_19, BGlluviae_19, Peel_19, CREW_19, Piatt_19, Padfoot_19, Dalmuri_19, Topper_19, Boiiii_19, Rapunzel97_19, Hyperbowlee_19, BarrelRoll_19, Inky_20, Zabiza_20, Jeckyll_19, Atiba_19, Emerson_20, Veliki_19, AlishaPH_19, Slimphazie_19, HedwigODU_19
- Track 4 : LilPharaoh_15, Mdavu_15, Nikao_15, Nutello_15, SgtBeansprout_15, Enkosi_15, Binglebops_15, Amelie_15
- Track 5 : Scarlett_18, LeMond_18
- Track 6 : Yunkel11_19, Guanica15_19, Efra2_19
- Track 7 : SamuelLPlaqson_19, Urkel_19, DrHayes_19, TiniBug_19
- Track 8 : Deby_19, TreyKay_19, Adonis_19, Angelica_19, CheetoDust_19, Ganymede_20, Prithvi_19, Sulley_19, Tiri_19, LindNT_19, Megsy_20, QuincyRose_18, BaghaKamala_19, TaiwanKao_20, Pokerus_18, Joy99_19
- Track 9 : Shaobing_19, Niklas_19
- Track 10 : Ageofdapage_19, Murucutumbu_19, Stinson_19, Devera_19, Illumine_19, LaterM_19, Dole_19
- Track 11 : MarkPhew_19
- Track 12 : KiSi_18
- Track 13 : CrimD_20
- Track 14 : Anaya_20
- Track 15 : Curiosium_20
- Track 16 : Beezoo_19, Geraldini_19
- Track 17 : Peanam_19
- Track 18 : Apocalypse_19, Zavala_19
- Track 19 : Bella96_19
- Track 20 : Validus_19
- Track 21 : Oscar_18
- Track 22 : Chris_18
- Track 23 : LastHope_20
- Track 24 : Nibb_18
- Track 25 : TM4_15

- Track 26 : Milly_15, Marcoliusprime_15, Findley_15, DismalFunk_16, Strobilo_16, DismalStressor_15
- Track 27 : Mufasa_15, BoostSeason_15
- Track 28 : ZoeJ_15
- Track 29 : Pharb_18
- Track 30 : TribbleTrouble_17
- Track 31 : ShedlockHolmes_18, Pixie_19, TBond007_18, Hurricane_18
- Track 32 : MacnCheese_19
- Track 33 : Keshu_18
- Track 34 : Taquito_18, Juliette_20, Ruthiejr_19, Eponine_20
- Track 35 : MissDaisy_20, Patt_21, Reptar3000_20
- Track 36 : Slarp_21, Mitti_20, Fionnbharth_20, Chancellor_20, JF1_20, Cheetobro_20, SamScheppers_18, Y2_20, Wintermute_20, Y10_20
- Track 37 : OmniCritical_20
- Track 38 : Malthus_20
- Track 39 : Omnicron_18
- Track 40 : Dadosky_17, InvictusManeo_17, Agent47_17, Edugator_17
- Track 41 : AlleyCat_17, Collard_18, Psycho_17, Rando14_17, Larva_17
- Track 42 : Kratio_16
- Track 43 : Thyatira_17, Waterfoul_17, Feyre_17
- Track 44 : Miryou_17, SoSeph_17, OkiRoe_17, Heftyboy_17, Guillsminger_18, Gengar_17, Leston_17, Paola_17
- Track 45 : Syra333_18
- Track 46 : PhelpsODU_18, Unicorn_18
- Track 47 : Yuna_19
- Track 48 : Ximenita_19
- Track 49 : SirPhilip_18
- Track 50 : Amgine_17
- Track 51 : Bryler_18, Cain_18, Phrank_18, Tierra_18
- Track 52 : DARTH_P_18, Hammy_18
- Track 53 : Shadow1_17, Sunflower1121_17
- Track 54 : Marshawn_20
- Track 55 : TClif_18
- Track 56 : Fefferhead_18, Ellie_16
- Track 57 : Ekdilam_16
- Track 58 : Amohnition_19
- Track 59 : Krueger_18
- Track 60 : Aminay_17
- Track 61 : Boilgate_16

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

The start number called the most often in the published annotations is 14, it was called in 113 of the 178 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_19, Adephegia_19, Adonis_19, Ageofdapage_19, AlishaPH_19, Amelie_15, Amohnition_19, Anaya_20, Angelica_19, Apocalypse_19, Asayake_19, Atiba_19, BEEST_19, BGlluviae_19, BaghaKamala_19, BarrelRoll_19, Beezoo_19, Bella96_19, Belladonna_19, Binglebops_15, Blizzard_19, Boiiii_19, Bryler_18,

CREW_19, Cain_18, Capricorn_19, CaseJules_19, CheetoDust_19, CrimD_20, Dalmuri_19, DarthP_18, Deby_19, Devera_19, Dole_19, DrHayes_19, Durfee_19, Efra2_19, Ekdilam_16, Ellie_16, Emerson_20, Enkosi_15, Fefferhead_18, Ganymede_20, Geraldini_19, Guanica15_19, Hammy_18, HedwigODU_19, Homura_19, Hurricane_18, Hyperbowlee_19, Illumine_19, Inky_20, JAWS_19, Jarvi_19, Jayhawk_20, Jeckyll_19, Joy99_19, Keshu_18, LastHope_20, LaterM_19, LilPharaoh_15, LindNT_19, Llorens_19, Lunahalos_19, MacnCheese_19, Mdavu_15, MeaningOfLife_19, Megsy_20, Murucutumbu_19, Mynx_19, Nikao_15, Niklas_19, Nutello_15, Padfoot_19, Padpat_19, Peel_19, Pharb_18, PhelpsODU_18, Phrank_18, Piatt_19, Pixie_19, Pokerus_18, Prithvi_19, QuincyRose_18, Ramen_19, Rapunzel97_19, Rosmarinus_19, SamuelLPlaqsom_19, SgtBeansprout_15, Shadow1_17, Shaobing_19, ShedlockHolmes_18, ShiaSurprise_19, Slimphazie_19, Spock_19, Stinson_19, Sulley_19, Sunflower1121_17, Syra333_18, TBond007_18, TClif_18, Tachez_19, TaiwanKao_20, Tierra_18, TiniBug_19, Tiri_19, Topper_19, TreyKay_19, TribbleTrouble_17, TruffulaTree_19, Twitch_19, Unicorn_18, Urkel_19, Veliki_19, Ximenita_19, YoureAdopted_18, Yuna_19, Yunkel11_19, Zabiza_20, Zavala_19,

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

- Amgine_17, Curiosium_20, Krueger_18, Peanam_19, Validus_19,

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

- Agent47_17, AlleyCat_17, Aminay_17, Boilgate_16, BoostSeason_15, Chancellor_20, Cheetobro_20, Chris_18, Collard_18, Dadosky_17, DismalFunk_16, DismalStressor_15, Edugator_17, Eponine_20, Feyre_17, Findley_15, Fionnbharth_20, Gengar_17, Guillsminger_18, Heftyboy_17, InvictusManeo_17, JF1_20, Jolie2_14, Juliette_20, KiSi_18, Kratio_16, Larva_17, LeMond_18, Lemuria_14, Leston_17, Malthus_20, Marcoliusprime_15, MarkPhew_19, Marshawn_20, Milly_15, Miryou_17, MissDaisy_20, Mitti_20, Mufasa_15, Nibb_18, OkiRoe_17, OmniCritical_20, Omnicron_18, Oscar_18, Paola_17, Patt_21, Psycho_17, Rando14_17, Reptar3000_20, Ruthiejr_19, SamScheppers_18, Scarlett_18, SirPhilip_18, Slarp_21, SoSeph_17, Strobilo_16, TM4_15, Taquito_18, Thyatira_17, Waterfoul_17, Wintermute_20, Y10_20, Y2_20, ZoeJ_15,

Summary by start number:

Start 2:

- Found in 99 of 189 (52.4%) of genes in pham
- Manual Annotations of this start: 2 of 178
- Called 2.0% of time when present
- Phage (with cluster) where this start called: Peanam_19 (K1), Validus_19 (K1),

Start 4:

- Found in 1 of 189 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 178
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Boilgate_16 (K8),

Start 5:

- Found in 120 of 189 (63.5%) of genes in pham
- Manual Annotations of this start: 10 of 178
- Called 8.3% of time when present

- Phage (with cluster) where this start called: AlleyCat_17 (K5), Amgine_17 (K6), Collard_18 (K5), Curiosium_20 (K1), Kratio_16 (K5), Krueger_18 (K6), Larva_17 (K5), Omnicron_18 (K5), Psycho_17 (K5), Rando14_17 (K5),

Start 9:

- Found in 2 of 189 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 178
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jolie2_14 (G4), Lemuria_14 (G4),

Start 10:

- Found in 19 of 189 (10.1%) of genes in pham
- Manual Annotations of this start: 19 of 178
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chancellor_20 (K4), Cheetobro_20 (K4), Eponine_20 (K4), Fionnbharth_20 (K4), JF1_20 (K4), Juliette_20 (K4), Malthus_20 (K4), MissDaisy_20 (K4), Mitti_20 (K4), OmniCritical_20 (K4), Patt_21 (K4), Reptar3000_20 (K4), Ruthiejr_19 (K4), SamScheppers_18 (K4), Slarp_21 (K4), Taquito_18 (K4), Wintermute_20 (K4), Y10_20 (K4), Y2_20 (K4),

Start 11:

- Found in 33 of 189 (17.5%) of genes in pham
- Manual Annotations of this start: 23 of 178
- Called 78.8% of time when present
- Phage (with cluster) where this start called: Agent47_17 (K5), Aminay_17 (K7), BoostSeason_15 (K2), Dadosky_17 (K5), DismalFunk_16 (K2), DismalStressor_15 (K2), Edugator_17 (K5), Feyre_17 (K5), Findley_15 (K2), Gengar_17 (K5), Guillsminger_18 (K5), Heftyboy_17 (K5), InvictusManeo_17 (K5), Leston_17 (K5), Marcoliusprime_15 (K2), Milly_15 (K2), Miryou_17 (K5), Mufasa_15 (K2), OkiRoe_17 (K5), Paola_17 (K5), SoSeph_17 (K5), Strobilo_16 (K2), TM4_15 (K2), Thyatira_17 (K5), Waterfoul_17 (K5), ZoeJ_15 (K2),

Start 13:

- Found in 9 of 189 (4.8%) of genes in pham
- Manual Annotations of this start: 9 of 178
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chris_18 (K1), KiSi_18 (K1), LeMond_18 (K1), MarkPhew_19 (K1), Marshawn_20 (K6), Nibb_18 (K1), Oscar_18 (K1), Scarlett_18 (K1), SirPhilip_18 (K6),

Start 14:

- Found in 125 of 189 (66.1%) of genes in pham
- Manual Annotations of this start: 113 of 178
- Called 96.0% of time when present
- Phage (with cluster) where this start called: ActinUp_19 (K1), Adephegia_19 (K1), Adonis_19 (K1), Ageofdapage_19 (K1), AlishaPH_19 (K1), Amelie_15 (K1), Amohntion_19 (K6), Anaya_20 (K1), Angelica_19 (K1), Apocalypse_19 (K1), Asayake_19 (K1), Atiba_19 (K1), BEEST_19 (K1), BGIluviae_19 (K1), BaghaKamala_19 (K1), BarrelRoll_19 (K1), Beezoo_19 (K1), Bella96_19 (K1), Belladonna_19 (K1), Biglebops_15 (K1), Blizzard_19 (K1), Boiiii_19 (K1), Bryler_18 (K6), CREW_19 (K1), Cain_18 (K6), Capricorn_19 (K1), CaseJules_19 (K1), CheetoDust_19 (K1), CrimD_20 (K1), Dalmuri_19 (K1), DarthP_18 (K6), Deby_19 (K1), Devera_19 (K1), Dole_19 (K1), DrHayes_19 (K1), Durfee_19 (K1), Efra2_19

(K1), Ekdilam_16 (K6), Ellie_16 (K6), Emerson_20 (K1), Enkosi_15 (K1), Fefferhead_18 (K6), Ganymede_20 (K1), Geraldini_19 (K1), Guanica15_19 (K1), Hammy_18 (K6), HedwigODU_19 (K1), Homura_19 (K1), Hurricane_18 (K3), Hyperbowlee_19 (K1), Illumine_19 (K1), Inky_20 (K1), JAWS_19 (K1), Jarvi_19 (K1), Jayhawk_20 (K1), Jeckyll_19 (K1), Joy99_19 (K1), Keshu_18 (K3), LastHope_20 (K1), LaterM_19 (K1), LilPharaoh_15 (K1), LindNT_19 (K1), Llorens_19 (K1), Lunahalos_19 (K1), MacnCheese_19 (K3), Mdavu_15 (K1), MeaningOfLife_19 (K1), Megsy_20 (K1), Murucutumbu_19 (K1), Mynx_19 (K1), Nikao_15 (K1), Niklas_19 (K1), Nutello_15 (K1), Padfoot_19 (K1), Padpat_19 (K1), Peel_19 (K1), Pharb_18 (K3), PhelpsODU_18 (K6), Phrank_18 (K6), Piatt_19 (K1), Pixie_19 (K3), Pokerus_18 (K1), Prithvi_19 (K1), QuincyRose_18 (K1), Ramen_19 (K1), Rapunzel97_19 (K1), Rosmarinus_19 (K1), SamuelLPlaqson_19 (K1), SgtBeansprout_15 (K1), Shadow1_17 (K6), Shaobing_19 (K1), ShedlockHolmes_18 (K3), ShiaSurprise_19 (K1), Slimphazie_19 (K1), Spock_19 (K1), Stinson_19 (K1), Sulley_19 (K1), Sunflower1121_17 (K6), Syra333_18 (K6), TBond007_18 (K3), TClif_18 (K6), Tachez_19 (K1), TaiwanKao_20 (K1), Tierra_18 (K6), TiniBug_19 (K1), Tiri_19 (K1), Topper_19 (K1), TreyKay_19 (K1), TribbleTrouble_17 (K3), TruffulaTree_19 (K1), Twitch_19 (K1), Unicorn_18 (K6), Urkel_19 (K1), Veliki_19 (K1), Ximenita_19 (K6), YoureAdopted_18 (K1), Yuna_19 (K6), Yunkel11_19 (K1), Zabiza_20 (K1), Zavala_19 (K1),

Summary by clusters:

There are 9 clusters represented in this pham: G4, K3, K2, K1, K7, K6, K5, K4, K8,

Info for manual annotations of cluster G4:

- Start number 9 was manually annotated 1 time for cluster G4.

Info for manual annotations of cluster K1:

- Start number 2 was manually annotated 2 times for cluster K1.
- Start number 5 was manually annotated 1 time for cluster K1.
- Start number 13 was manually annotated 7 times for cluster K1.
- Start number 14 was manually annotated 89 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 11 was manually annotated 9 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 14 was manually annotated 7 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 10 was manually annotated 19 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 5 was manually annotated 7 times for cluster K5.
- Start number 11 was manually annotated 13 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 5 was manually annotated 2 times for cluster K6.
- Start number 13 was manually annotated 2 times for cluster K6.
- Start number 14 was manually annotated 17 times for cluster K6.

Info for manual annotations of cluster K7:

- Start number 11 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 4 was manually annotated 1 time for cluster K8.

Gene Information:

Gene: ActinUp_19 Start: 11232, Stop: 11669, Start Num: 14

Candidate Starts for ActinUp_19:

(Start: 2 @11154 has 2 MA's), (Start: 5 @11166 has 10 MA's), (Start: 14 @11232 has 113 MA's), (25, 11289), (34, 11406), (39, 11529), (43, 11595),

Gene: Adephagia_19 Start: 11232, Stop: 11669, Start Num: 14

Candidate Starts for Adephagia_19:

(Start: 2 @11154 has 2 MA's), (Start: 5 @11166 has 10 MA's), (Start: 14 @11232 has 113 MA's), (25, 11289), (34, 11406), (39, 11529), (43, 11595),

Gene: Adonis_19 Start: 11241, Stop: 11678, Start Num: 14

Candidate Starts for Adonis_19:

(Start: 2 @11163 has 2 MA's), (Start: 5 @11175 has 10 MA's), (Start: 14 @11241 has 113 MA's), (25, 11298), (39, 11538), (43, 11604),

Gene: Agent47_17 Start: 11377, Stop: 11823, Start Num: 11

Candidate Starts for Agent47_17:

(Start: 5 @11332 has 10 MA's), (Start: 11 @11377 has 23 MA's), (28, 11461), (32, 11512), (36, 11593),

Gene: Ageofdapage_19 Start: 11170, Stop: 11604, Start Num: 14

Candidate Starts for Ageofdapage_19:

(Start: 2 @11092 has 2 MA's), (Start: 5 @11104 has 10 MA's), (Start: 14 @11170 has 113 MA's), (32, 11293), (39, 11464), (43, 11530),

Gene: AlishaPH_19 Start: 11228, Stop: 11665, Start Num: 14

Candidate Starts for AlishaPH_19:

(Start: 2 @11150 has 2 MA's), (Start: 5 @11162 has 10 MA's), (Start: 14 @11228 has 113 MA's), (25, 11285), (34, 11402), (39, 11525), (43, 11591),

Gene: AlleyCat_17 Start: 11208, Stop: 11699, Start Num: 5

Candidate Starts for AlleyCat_17:

(Start: 5 @11208 has 10 MA's), (Start: 11 @11253 has 23 MA's), (28, 11337), (32, 11388), (36, 11469),

Gene: Amelie_15 Start: 10504, Stop: 10920, Start Num: 14

Candidate Starts for Amelie_15:

(Start: 14 @10504 has 113 MA's), (39, 10780),

Gene: Amgine_17 Start: 10940, Stop: 11455, Start Num: 5

Candidate Starts for Amgine_17:

(Start: 5 @10940 has 10 MA's), (Start: 14 @11003 has 113 MA's), (19, 11045), (32, 11144), (43, 11381),

Gene: Aminay_17 Start: 11067, Stop: 11555, Start Num: 11
Candidate Starts for Aminay_17:
(Start: 2 @11001 has 2 MA's), (Start: 11 @11067 has 23 MA's), (18, 11121), (23, 11163), (26, 11175),
(35, 11319), (36, 11325), (38, 11406), (40, 11436),

Gene: Amohnition_19 Start: 11325, Stop: 11780, Start Num: 14
Candidate Starts for Amohnition_19:
(Start: 5 @11256 has 10 MA's), (Start: 14 @11325 has 113 MA's), (19, 11370), (32, 11469), (38,
11631), (43, 11706),

Gene: Anaya_20 Start: 11244, Stop: 11687, Start Num: 14
Candidate Starts for Anaya_20:
(Start: 14 @11244 has 113 MA's), (39, 11547), (43, 11613),

Gene: Angelica_19 Start: 11203, Stop: 11640, Start Num: 14
Candidate Starts for Angelica_19:
(Start: 2 @11125 has 2 MA's), (Start: 5 @11137 has 10 MA's), (Start: 14 @11203 has 113 MA's), (25,
11260), (39, 11500), (43, 11566),

Gene: Apocalypse_19 Start: 11206, Stop: 11643, Start Num: 14
Candidate Starts for Apocalypse_19:
(Start: 2 @11128 has 2 MA's), (Start: 5 @11140 has 10 MA's), (Start: 14 @11206 has 113 MA's), (25,
11263), (34, 11380), (39, 11503), (43, 11569),

Gene: Asayake_19 Start: 11269, Stop: 11706, Start Num: 14
Candidate Starts for Asayake_19:
(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25,
11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Atiba_19 Start: 11195, Stop: 11632, Start Num: 14
Candidate Starts for Atiba_19:
(Start: 2 @11117 has 2 MA's), (Start: 5 @11129 has 10 MA's), (Start: 14 @11195 has 113 MA's), (25,
11252), (34, 11369), (39, 11492), (43, 11558),

Gene: BEEST_19 Start: 11269, Stop: 11706, Start Num: 14
Candidate Starts for BEEST_19:
(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25,
11326), (34, 11443), (39, 11566), (43, 11632),

Gene: BGlluviae_19 Start: 11269, Stop: 11706, Start Num: 14
Candidate Starts for BGlluviae_19:
(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25,
11326), (34, 11443), (39, 11566), (43, 11632),

Gene: BaghaKamala_19 Start: 11198, Stop: 11635, Start Num: 14
Candidate Starts for BaghaKamala_19:
(Start: 2 @11120 has 2 MA's), (Start: 5 @11132 has 10 MA's), (Start: 14 @11198 has 113 MA's), (25,
11255), (39, 11495), (43, 11561),

Gene: BarrelRoll_19 Start: 11221, Stop: 11658, Start Num: 14
Candidate Starts for BarrelRoll_19:
(Start: 2 @11143 has 2 MA's), (Start: 5 @11155 has 10 MA's), (Start: 14 @11221 has 113 MA's), (25,
11278), (34, 11395), (39, 11518), (43, 11584),

Gene: Beezoo_19 Start: 11245, Stop: 11682, Start Num: 14
Candidate Starts for Beezoo_19:
(Start: 14 @11245 has 113 MA's), (25, 11302), (34, 11419), (39, 11542), (43, 11608),

Gene: Bella96_19 Start: 11152, Stop: 11595, Start Num: 14
Candidate Starts for Bella96_19:
(Start: 2 @11074 has 2 MA's), (Start: 5 @11086 has 10 MA's), (Start: 14 @11152 has 113 MA's), (39, 11455), (43, 11521),

Gene: Belladonna_19 Start: 11269, Stop: 11706, Start Num: 14
Candidate Starts for Belladonna_19:
(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Biglebops_15 Start: 10504, Stop: 10920, Start Num: 14
Candidate Starts for Biglebops_15:
(Start: 14 @10504 has 113 MA's), (39, 10780),

Gene: Blizzard_19 Start: 11269, Stop: 11706, Start Num: 14
Candidate Starts for Blizzard_19:
(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Boiiii_19 Start: 11271, Stop: 11708, Start Num: 14
Candidate Starts for Boiiii_19:
(Start: 2 @11193 has 2 MA's), (Start: 5 @11205 has 10 MA's), (Start: 14 @11271 has 113 MA's), (25, 11328), (34, 11445), (39, 11568), (43, 11634),

Gene: Boilgate_16 Start: 11192, Stop: 11695, Start Num: 4
Candidate Starts for Boilgate_16:
(Start: 4 @11192 has 1 MA's), (16, 11297), (37, 11528), (39, 11555), (44, 11648),

Gene: BoostSeason_15 Start: 9260, Stop: 9730, Start Num: 11
Candidate Starts for BoostSeason_15:
(Start: 5 @9203 has 10 MA's), (Start: 11 @9260 has 23 MA's), (21, 9350), (35, 9503),

Gene: Bryler_18 Start: 10254, Stop: 10676, Start Num: 14
Candidate Starts for Bryler_18:
(Start: 5 @10188 has 10 MA's), (Start: 14 @10254 has 113 MA's), (20, 10287), (32, 10365), (39, 10536),

Gene: CREW_19 Start: 11269, Stop: 11706, Start Num: 14
Candidate Starts for CREW_19:
(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Cain_18 Start: 10242, Stop: 10664, Start Num: 14
Candidate Starts for Cain_18:
(Start: 5 @10176 has 10 MA's), (Start: 14 @10242 has 113 MA's), (20, 10275), (32, 10353), (39, 10524),

Gene: Capricorn_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Capricorn_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: CaseJules_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for CaseJules_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Chancellor_20 Start: 12441, Stop: 12890, Start Num: 10

Candidate Starts for Chancellor_20:

(Start: 2 @12378 has 2 MA's), (Start: 10 @12441 has 19 MA's), (30, 12540), (33, 12594), (36, 12660),

Gene: CheetoDust_19 Start: 11246, Stop: 11683, Start Num: 14

Candidate Starts for CheetoDust_19:

(Start: 2 @11168 has 2 MA's), (Start: 5 @11180 has 10 MA's), (Start: 14 @11246 has 113 MA's), (25, 11303), (39, 11543), (43, 11609),

Gene: Cheetobro_20 Start: 12441, Stop: 12890, Start Num: 10

Candidate Starts for Cheetobro_20:

(Start: 2 @12378 has 2 MA's), (Start: 10 @12441 has 19 MA's), (30, 12540), (33, 12594), (36, 12660),

Gene: Chris_18 Start: 10215, Stop: 10664, Start Num: 13

Candidate Starts for Chris_18:

(12, 10209), (Start: 13 @10215 has 9 MA's), (39, 10524), (40, 10545),

Gene: Collard_18 Start: 11293, Stop: 11784, Start Num: 5

Candidate Starts for Collard_18:

(Start: 5 @11293 has 10 MA's), (Start: 11 @11338 has 23 MA's), (28, 11422), (32, 11473), (36, 11554),

Gene: CrimD_20 Start: 11200, Stop: 11640, Start Num: 14

Candidate Starts for CrimD_20:

(Start: 14 @11200 has 113 MA's), (23, 11251), (39, 11500), (43, 11566),

Gene: Curiosium_20 Start: 10615, Stop: 11094, Start Num: 5

Candidate Starts for Curiosium_20:

(Start: 5 @10615 has 10 MA's), (Start: 14 @10681 has 113 MA's), (20, 10705), (27, 10729), (39, 10954),

Gene: Dadosky_17 Start: 11254, Stop: 11700, Start Num: 11

Candidate Starts for Dadosky_17:

(Start: 5 @11209 has 10 MA's), (Start: 11 @11254 has 23 MA's), (28, 11338), (32, 11389), (36, 11470),

Gene: Dalmuri_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Dalmuri_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: DarthP_18 Start: 11325, Stop: 11780, Start Num: 14

Candidate Starts for DarthP_18:

(Start: 5 @11256 has 10 MA's), (Start: 14 @11325 has 113 MA's), (19, 11370), (43, 11706),

Gene: Deby_19 Start: 11203, Stop: 11640, Start Num: 14

Candidate Starts for Deby_19:

(Start: 2 @11125 has 2 MA's), (Start: 5 @11137 has 10 MA's), (Start: 14 @11203 has 113 MA's), (25, 11260), (39, 11500), (43, 11566),

Gene: Devera_19 Start: 11230, Stop: 11664, Start Num: 14

Candidate Starts for Devera_19:

(Start: 2 @11152 has 2 MA's), (Start: 5 @11164 has 10 MA's), (Start: 14 @11230 has 113 MA's), (32, 11353), (39, 11524), (43, 11590),

Gene: DismalFunk_16 Start: 9253, Stop: 9702, Start Num: 11

Candidate Starts for DismalFunk_16:

(Start: 5 @9196 has 10 MA's), (Start: 11 @9253 has 23 MA's), (21, 9325), (35, 9475), (36, 9481),

Gene: DismalStressor_15 Start: 9253, Stop: 9702, Start Num: 11

Candidate Starts for DismalStressor_15:

(Start: 5 @9196 has 10 MA's), (Start: 11 @9253 has 23 MA's), (21, 9325), (35, 9475), (36, 9481),

Gene: Dole_19 Start: 11232, Stop: 11666, Start Num: 14

Candidate Starts for Dole_19:

(Start: 2 @11154 has 2 MA's), (Start: 5 @11166 has 10 MA's), (Start: 14 @11232 has 113 MA's), (32, 11355), (39, 11526), (43, 11592),

Gene: DrHayes_19 Start: 11173, Stop: 11613, Start Num: 14

Candidate Starts for DrHayes_19:

(Start: 2 @11095 has 2 MA's), (Start: 5 @11107 has 10 MA's), (8, 11134), (Start: 14 @11173 has 113 MA's), (39, 11473), (43, 11539),

Gene: Durfee_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Durfee_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Edugator_17 Start: 11254, Stop: 11700, Start Num: 11

Candidate Starts for Edugator_17:

(Start: 5 @11209 has 10 MA's), (Start: 11 @11254 has 23 MA's), (28, 11338), (32, 11389), (36, 11470),

Gene: Efra2_19 Start: 10171, Stop: 10584, Start Num: 14

Candidate Starts for Efra2_19:

(Start: 5 @10105 has 10 MA's), (Start: 14 @10171 has 113 MA's), (20, 10195), (27, 10219), (39, 10444),

Gene: Ekdilam_16 Start: 11036, Stop: 11491, Start Num: 14

Candidate Starts for Ekdilam_16:

(Start: 14 @11036 has 113 MA's), (19, 11081), (32, 11180), (43, 11417), (46, 11471),

Gene: Ellie_16 Start: 11081, Stop: 11536, Start Num: 14

Candidate Starts for Ellie_16:

(Start: 5 @11015 has 10 MA's), (Start: 14 @11081 has 113 MA's), (19, 11126), (32, 11225), (43, 11462), (44, 11489),

Gene: Emerson_20 Start: 11229, Stop: 11666, Start Num: 14

Candidate Starts for Emerson_20:

(Start: 2 @11151 has 2 MA's), (Start: 5 @11163 has 10 MA's), (Start: 14 @11229 has 113 MA's), (25, 11286), (34, 11403), (39, 11526), (43, 11592),

Gene: Enkosi_15 Start: 10504, Stop: 10920, Start Num: 14

Candidate Starts for Enkosi_15:

(Start: 14 @10504 has 113 MA's), (39, 10780),

Gene: Eponine_20 Start: 12303, Stop: 12755, Start Num: 10

Candidate Starts for Eponine_20:

(Start: 10 @12303 has 19 MA's), (22, 12372), (32, 12447), (33, 12459), (36, 12525), (44, 12708),

Gene: Fefferhead_18 Start: 11248, Stop: 11703, Start Num: 14

Candidate Starts for Fefferhead_18:

(Start: 5 @11182 has 10 MA's), (Start: 14 @11248 has 113 MA's), (19, 11293), (32, 11392), (43, 11629), (44, 11656),

Gene: Feyre_17 Start: 11196, Stop: 11642, Start Num: 11

Candidate Starts for Feyre_17:

(Start: 11 @11196 has 23 MA's), (26, 11268), (28, 11280), (32, 11331), (37, 11475),

Gene: Findley_15 Start: 9253, Stop: 9702, Start Num: 11

Candidate Starts for Findley_15:

(Start: 5 @9196 has 10 MA's), (Start: 11 @9253 has 23 MA's), (21, 9325), (35, 9475), (36, 9481),

Gene: Fionnbharth_20 Start: 12431, Stop: 12880, Start Num: 10

Candidate Starts for Fionnbharth_20:

(Start: 2 @12368 has 2 MA's), (Start: 10 @12431 has 19 MA's), (30, 12530), (33, 12584), (36, 12650),

Gene: Ganymede_20 Start: 11249, Stop: 11686, Start Num: 14

Candidate Starts for Ganymede_20:

(Start: 2 @11171 has 2 MA's), (Start: 5 @11183 has 10 MA's), (Start: 14 @11249 has 113 MA's), (25, 11306), (39, 11546), (43, 11612),

Gene: Gengar_17 Start: 11303, Stop: 11749, Start Num: 11

Candidate Starts for Gengar_17:

(Start: 11 @11303 has 23 MA's), (28, 11387), (32, 11438), (37, 11582),

Gene: Geraldini_19 Start: 11245, Stop: 11682, Start Num: 14

Candidate Starts for Geraldini_19:

(Start: 14 @11245 has 113 MA's), (25, 11302), (34, 11419), (39, 11542), (43, 11608),

Gene: Guanica15_19 Start: 10187, Stop: 10600, Start Num: 14

Candidate Starts for Guanica15_19:

(Start: 5 @10121 has 10 MA's), (Start: 14 @10187 has 113 MA's), (20, 10211), (27, 10235), (39, 10460),

Gene: Guillsminger_18 Start: 11278, Stop: 11724, Start Num: 11

Candidate Starts for Guillsminger_18:

(Start: 11 @11278 has 23 MA's), (28, 11362), (32, 11413), (37, 11557),

Gene: Hammy_18 Start: 11319, Stop: 11774, Start Num: 14

Candidate Starts for Hammy_18:

(Start: 5 @11250 has 10 MA's), (Start: 14 @11319 has 113 MA's), (19, 11364), (43, 11700),

Gene: HedwigODU_19 Start: 11232, Stop: 11669, Start Num: 14

Candidate Starts for HedwigODU_19:

(Start: 2 @11154 has 2 MA's), (Start: 5 @11166 has 10 MA's), (Start: 14 @11232 has 113 MA's), (25, 11289), (34, 11406), (39, 11529), (43, 11595),

Gene: Heftyboy_17 Start: 11405, Stop: 11851, Start Num: 11

Candidate Starts for Heftyboy_17:

(Start: 11 @11405 has 23 MA's), (28, 11489), (32, 11540), (37, 11684),

Gene: Homura_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Homura_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Hurricane_18 Start: 11360, Stop: 11794, Start Num: 14

Candidate Starts for Hurricane_18:

(Start: 5 @11297 has 10 MA's), (Start: 14 @11360 has 113 MA's), (17, 11378), (32, 11483), (37, 11627), (39, 11654), (40, 11675),

Gene: Hyperbowlee_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Hyperbowlee_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Illumine_19 Start: 11232, Stop: 11666, Start Num: 14

Candidate Starts for Illumine_19:

(Start: 2 @11154 has 2 MA's), (Start: 5 @11166 has 10 MA's), (Start: 14 @11232 has 113 MA's), (32, 11355), (39, 11526), (43, 11592),

Gene: Inky_20 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Inky_20:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: InvictusManeo_17 Start: 11381, Stop: 11827, Start Num: 11

Candidate Starts for InvictusManeo_17:

(Start: 5 @11336 has 10 MA's), (Start: 11 @11381 has 23 MA's), (28, 11465), (32, 11516), (36, 11597),

Gene: JAWS_19 Start: 11223, Stop: 11660, Start Num: 14

Candidate Starts for JAWS_19:

(Start: 2 @11145 has 2 MA's), (Start: 5 @11157 has 10 MA's), (Start: 14 @11223 has 113 MA's), (25, 11280), (34, 11397), (39, 11520), (43, 11586),

Gene: JF1_20 Start: 12430, Stop: 12879, Start Num: 10

Candidate Starts for JF1_20:

(Start: 2 @12367 has 2 MA's), (Start: 10 @12430 has 19 MA's), (30, 12529), (33, 12583), (36, 12649),

Gene: Jarvi_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Jarvi_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Jayhawk_20 Start: 11233, Stop: 11670, Start Num: 14

Candidate Starts for Jayhawk_20:

(Start: 2 @11155 has 2 MA's), (Start: 5 @11167 has 10 MA's), (Start: 14 @11233 has 113 MA's), (25, 11290), (34, 11407), (39, 11530), (43, 11596),

Gene: Jeckyll_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Jeckyll_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Jolie2_14 Start: 9852, Stop: 10367, Start Num: 9

Candidate Starts for Jolie2_14:

(Start: 9 @9852 has 1 MA's), (29, 9996), (42, 10266), (45, 10308),

Gene: Joy99_19 Start: 11198, Stop: 11635, Start Num: 14

Candidate Starts for Joy99_19:

(Start: 2 @11120 has 2 MA's), (Start: 5 @11132 has 10 MA's), (Start: 14 @11198 has 113 MA's), (25, 11255), (39, 11495), (43, 11561),

Gene: Juliette_20 Start: 12303, Stop: 12755, Start Num: 10

Candidate Starts for Juliette_20:

(Start: 10 @12303 has 19 MA's), (22, 12372), (32, 12447), (33, 12459), (36, 12525), (44, 12708),

Gene: Keshu_18 Start: 11346, Stop: 11774, Start Num: 14

Candidate Starts for Keshu_18:

(Start: 5 @11283 has 10 MA's), (Start: 14 @11346 has 113 MA's), (17, 11358), (32, 11463), (37, 11607), (39, 11634),

Gene: KiSi_18 Start: 10161, Stop: 10604, Start Num: 13

Candidate Starts for KiSi_18:

(1, 10059), (Start: 2 @10086 has 2 MA's), (7, 10110), (Start: 13 @10161 has 9 MA's), (22, 10215), (39, 10464),

Gene: Kratio_16 Start: 10964, Stop: 11455, Start Num: 5

Candidate Starts for Kratio_16:

(Start: 5 @10964 has 10 MA's), (Start: 11 @11009 has 23 MA's), (28, 11093), (32, 11144), (36, 11225),

Gene: Krueger_18 Start: 10147, Stop: 10632, Start Num: 5

Candidate Starts for Krueger_18:

(Start: 5 @10147 has 10 MA's), (Start: 14 @10210 has 113 MA's), (27, 10264), (32, 10318), (39, 10489),

Gene: Larva_17 Start: 11076, Stop: 11567, Start Num: 5

Candidate Starts for Larva_17:

(Start: 5 @11076 has 10 MA's), (Start: 11 @11121 has 23 MA's), (28, 11205), (32, 11256), (36, 11337),

Gene: LastHope_20 Start: 10261, Stop: 10674, Start Num: 14

Candidate Starts for LastHope_20:

(Start: 5 @10195 has 10 MA's), (Start: 14 @10261 has 113 MA's), (27, 10309), (39, 10534),

Gene: LaterM_19 Start: 11198, Stop: 11632, Start Num: 14

Candidate Starts for LaterM_19:

(Start: 2 @11120 has 2 MA's), (Start: 5 @11132 has 10 MA's), (Start: 14 @11198 has 113 MA's), (32, 11321), (39, 11492), (43, 11558),

Gene: LeMond_18 Start: 10232, Stop: 10675, Start Num: 13

Candidate Starts for LeMond_18:

(Start: 13 @10232 has 9 MA's), (22, 10286), (39, 10535),

Gene: Lemuria_14 Start: 9901, Stop: 10413, Start Num: 9

Candidate Starts for Lemuria_14:

(Start: 9 @9901 has 1 MA's), (24, 10003), (45, 10354),

Gene: Leston_17 Start: 11408, Stop: 11854, Start Num: 11

Candidate Starts for Leston_17:

(Start: 11 @11408 has 23 MA's), (28, 11492), (32, 11543), (37, 11687),

Gene: LilPharaoh_15 Start: 10504, Stop: 10920, Start Num: 14

Candidate Starts for LilPharaoh_15:

(Start: 14 @10504 has 113 MA's), (39, 10780),

Gene: LindNT_19 Start: 11196, Stop: 11636, Start Num: 14

Candidate Starts for LindNT_19:

(Start: 2 @11118 has 2 MA's), (Start: 5 @11130 has 10 MA's), (Start: 14 @11196 has 113 MA's), (25, 11256), (39, 11496), (43, 11562),

Gene: Llorens_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Llorens_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Lunahalos_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Lunahalos_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: MacnCheese_19 Start: 11578, Stop: 12018, Start Num: 14

Candidate Starts for MacnCheese_19:

(Start: 2 @11497 has 2 MA's), (Start: 14 @11578 has 113 MA's), (32, 11707), (37, 11851), (40, 11899),

Gene: Malthus_20 Start: 12354, Stop: 12803, Start Num: 10

Candidate Starts for Malthus_20:

(Start: 10 @12354 has 19 MA's), (30, 12453), (33, 12507), (36, 12573),

Gene: Marcoliusprime_15 Start: 9253, Stop: 9702, Start Num: 11

Candidate Starts for Marcoliusprime_15:

(Start: 5 @9196 has 10 MA's), (Start: 11 @9253 has 23 MA's), (21, 9325), (35, 9475), (36, 9481),

Gene: MarkPhew_19 Start: 10120, Stop: 10566, Start Num: 13

Candidate Starts for MarkPhew_19:

(Start: 13 @10120 has 9 MA's), (39, 10426), (40, 10447),

Gene: Marshawn_20 Start: 10810, Stop: 11253, Start Num: 13

Candidate Starts for Marshawn_20:

(Start: 5 @10753 has 10 MA's), (Start: 13 @10810 has 9 MA's), (39, 11113),

Gene: Mdavu_15 Start: 10492, Stop: 10908, Start Num: 14

Candidate Starts for Mdavu_15:

(Start: 14 @10492 has 113 MA's), (39, 10768),

Gene: MeaningOfLife_19 Start: 11205, Stop: 11642, Start Num: 14

Candidate Starts for MeaningOfLife_19:

(Start: 2 @11127 has 2 MA's), (Start: 5 @11139 has 10 MA's), (Start: 14 @11205 has 113 MA's), (25, 11262), (34, 11379), (39, 11502), (43, 11568),

Gene: Megsy_20 Start: 11199, Stop: 11639, Start Num: 14

Candidate Starts for Megsy_20:

(Start: 2 @11121 has 2 MA's), (Start: 5 @11133 has 10 MA's), (Start: 14 @11199 has 113 MA's), (25, 11259), (39, 11499), (43, 11565),

Gene: Milly_15 Start: 9253, Stop: 9702, Start Num: 11

Candidate Starts for Milly_15:

(Start: 5 @9196 has 10 MA's), (Start: 11 @9253 has 23 MA's), (21, 9325), (35, 9475), (36, 9481),

Gene: Miryou_17 Start: 11256, Stop: 11702, Start Num: 11

Candidate Starts for Miryou_17:

(Start: 11 @11256 has 23 MA's), (28, 11340), (32, 11391), (37, 11535),

Gene: MissDaisy_20 Start: 12205, Stop: 12654, Start Num: 10

Candidate Starts for MissDaisy_20:

(Start: 2 @12142 has 2 MA's), (Start: 10 @12205 has 19 MA's), (30, 12304), (33, 12358), (36, 12424),

Gene: Mitti_20 Start: 12354, Stop: 12803, Start Num: 10

Candidate Starts for Mitti_20:

(Start: 2 @12291 has 2 MA's), (Start: 10 @12354 has 19 MA's), (30, 12453), (33, 12507), (36, 12573),

Gene: Mufasa_15 Start: 9254, Stop: 9724, Start Num: 11

Candidate Starts for Mufasa_15:

(Start: 5 @9197 has 10 MA's), (Start: 11 @9254 has 23 MA's), (21, 9344), (35, 9497),

Gene: Murucutumbu_19 Start: 11191, Stop: 11625, Start Num: 14

Candidate Starts for Murucutumbu_19:

(Start: 2 @11113 has 2 MA's), (Start: 5 @11125 has 10 MA's), (Start: 14 @11191 has 113 MA's), (32, 11314), (39, 11485), (43, 11551),

Gene: Mynx_19 Start: 11252, Stop: 11689, Start Num: 14

Candidate Starts for Mynx_19:

(Start: 2 @11174 has 2 MA's), (Start: 5 @11186 has 10 MA's), (Start: 14 @11252 has 113 MA's), (25, 11309), (34, 11426), (39, 11549), (43, 11615),

Gene: Nibb_18 Start: 10272, Stop: 10715, Start Num: 13

Candidate Starts for Nibb_18:

(12, 10266), (Start: 13 @10272 has 9 MA's), (39, 10575), (40, 10596),

Gene: Nikao_15 Start: 10504, Stop: 10920, Start Num: 14

Candidate Starts for Nikao_15:

(Start: 14 @10504 has 113 MA's), (39, 10780),

Gene: Niklas_19 Start: 10305, Stop: 10721, Start Num: 14

Candidate Starts for Niklas_19:

(Start: 2 @10227 has 2 MA's), (Start: 14 @10305 has 113 MA's), (20, 10332), (39, 10581),

Gene: Nutello_15 Start: 10504, Stop: 10920, Start Num: 14

Candidate Starts for Nutello_15:

(Start: 14 @10504 has 113 MA's), (39, 10780),

Gene: OkiRoe_17 Start: 11278, Stop: 11724, Start Num: 11

Candidate Starts for OkiRoe_17:

(Start: 11 @11278 has 23 MA's), (28, 11362), (32, 11413), (37, 11557),

Gene: OmniCritical_20 Start: 12342, Stop: 12791, Start Num: 10

Candidate Starts for OmniCritical_20:

(3, 12282), (Start: 10 @12342 has 19 MA's), (30, 12441), (33, 12495), (36, 12561),

Gene: Omnicron_18 Start: 10271, Stop: 10759, Start Num: 5

Candidate Starts for Omnicron_18:

(Start: 5 @10271 has 10 MA's), (Start: 11 @10316 has 23 MA's), (32, 10448), (36, 10529),

Gene: Oscar_18 Start: 10233, Stop: 10676, Start Num: 13

Candidate Starts for Oscar_18:

(Start: 13 @10233 has 9 MA's), (39, 10536),

Gene: Padfoot_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Padfoot_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Padpat_19 Start: 11229, Stop: 11666, Start Num: 14

Candidate Starts for Padpat_19:

(Start: 2 @11151 has 2 MA's), (Start: 5 @11163 has 10 MA's), (Start: 14 @11229 has 113 MA's), (25, 11286), (34, 11403), (39, 11526), (43, 11592),

Gene: Paola_17 Start: 11278, Stop: 11724, Start Num: 11

Candidate Starts for Paola_17:

(Start: 11 @11278 has 23 MA's), (28, 11362), (32, 11413), (37, 11557),

Gene: Patt_21 Start: 12181, Stop: 12630, Start Num: 10

Candidate Starts for Patt_21:

(Start: 2 @12118 has 2 MA's), (Start: 10 @12181 has 19 MA's), (30, 12280), (33, 12334), (36, 12400),

Gene: Peanam_19 Start: 10227, Stop: 10721, Start Num: 2

Candidate Starts for Peanam_19:

(Start: 2 @10227 has 2 MA's), (Start: 14 @10305 has 113 MA's), (20, 10332), (39, 10581),

Gene: Peel_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Peel_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Pharb_18 Start: 11150, Stop: 11599, Start Num: 14

Candidate Starts for Pharb_18:

(Start: 14 @11150 has 113 MA's), (15, 11162), (32, 11288), (37, 11432), (39, 11459), (40, 11480),

Gene: PhelpsODU_18 Start: 10279, Stop: 10701, Start Num: 14

Candidate Starts for PhelpsODU_18:

(Start: 2 @10207 has 2 MA's), (Start: 14 @10279 has 113 MA's), (20, 10312), (32, 10390), (39, 10561),

Gene: Phrank_18 Start: 10230, Stop: 10652, Start Num: 14

Candidate Starts for Phrank_18:

(Start: 5 @10164 has 10 MA's), (Start: 14 @10230 has 113 MA's), (20, 10263), (32, 10341), (39, 10512),

Gene: Piatt_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Piatt_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Pixie_19 Start: 11101, Stop: 11535, Start Num: 14

Candidate Starts for Pixie_19:

(Start: 5 @11038 has 10 MA's), (Start: 14 @11101 has 113 MA's), (17, 11119), (32, 11224), (37, 11368), (39, 11395), (40, 11416),

Gene: Pokerus_18 Start: 11186, Stop: 11623, Start Num: 14

Candidate Starts for Pokerus_18:

(Start: 2 @11108 has 2 MA's), (Start: 5 @11120 has 10 MA's), (Start: 14 @11186 has 113 MA's), (25, 11243), (39, 11483), (43, 11549),

Gene: Prithvi_19 Start: 11196, Stop: 11636, Start Num: 14

Candidate Starts for Prithvi_19:

(Start: 2 @11118 has 2 MA's), (Start: 5 @11130 has 10 MA's), (Start: 14 @11196 has 113 MA's), (25, 11256), (39, 11496), (43, 11562),

Gene: Psycho_17 Start: 11206, Stop: 11697, Start Num: 5

Candidate Starts for Psycho_17:

(Start: 5 @11206 has 10 MA's), (Start: 11 @11251 has 23 MA's), (28, 11335), (32, 11386), (36, 11467),

Gene: QuincyRose_18 Start: 11249, Stop: 11686, Start Num: 14

Candidate Starts for QuincyRose_18:

(Start: 2 @11171 has 2 MA's), (Start: 5 @11183 has 10 MA's), (Start: 14 @11249 has 113 MA's), (25, 11306), (39, 11546), (43, 11612),

Gene: Ramen_19 Start: 11232, Stop: 11669, Start Num: 14

Candidate Starts for Ramen_19:

(Start: 2 @11154 has 2 MA's), (Start: 5 @11166 has 10 MA's), (Start: 14 @11232 has 113 MA's), (25, 11289), (34, 11406), (39, 11529), (43, 11595),

Gene: Rando14_17 Start: 10173, Stop: 10661, Start Num: 5

Candidate Starts for Rando14_17:

(Start: 5 @10173 has 10 MA's), (Start: 11 @10218 has 23 MA's), (28, 10299), (32, 10350), (36, 10431),

Gene: Rapunzel97_19 Start: 11233, Stop: 11670, Start Num: 14

Candidate Starts for Rapunzel97_19:

(Start: 2 @11155 has 2 MA's), (Start: 5 @11167 has 10 MA's), (Start: 14 @11233 has 113 MA's), (25, 11290), (34, 11407), (39, 11530), (43, 11596),

Gene: Reptar3000_20 Start: 12183, Stop: 12632, Start Num: 10

Candidate Starts for Reptar3000_20:

(Start: 2 @12120 has 2 MA's), (Start: 10 @12183 has 19 MA's), (30, 12282), (33, 12336), (36, 12402),

Gene: Rosmarinus_19 Start: 11257, Stop: 11694, Start Num: 14

Candidate Starts for Rosmarinus_19:

(Start: 2 @11179 has 2 MA's), (Start: 5 @11191 has 10 MA's), (Start: 14 @11257 has 113 MA's), (25, 11314), (34, 11431), (39, 11554), (43, 11620),

Gene: Ruthiejr_19 Start: 12034, Stop: 12486, Start Num: 10

Candidate Starts for Ruthiejr_19:

(Start: 10 @12034 has 19 MA's), (22, 12103), (32, 12178), (33, 12190), (36, 12256), (44, 12439),

Gene: SamScheppers_18 Start: 11957, Stop: 12406, Start Num: 10

Candidate Starts for SamScheppers_18:

(Start: 2 @11894 has 2 MA's), (Start: 10 @11957 has 19 MA's), (30, 12056), (33, 12110), (36, 12176),

Gene: SamuelLPlaqson_19 Start: 11173, Stop: 11613, Start Num: 14

Candidate Starts for SamuelLPlaqson_19:

(Start: 2 @11095 has 2 MA's), (Start: 5 @11107 has 10 MA's), (8, 11134), (Start: 14 @11173 has 113 MA's), (39, 11473), (43, 11539),

Gene: Scarlett_18 Start: 10232, Stop: 10675, Start Num: 13

Candidate Starts for Scarlett_18:

(Start: 13 @10232 has 9 MA's), (22, 10286), (39, 10535),

Gene: SgtBeansprout_15 Start: 10504, Stop: 10920, Start Num: 14

Candidate Starts for SgtBeansprout_15:

(Start: 14 @10504 has 113 MA's), (39, 10780),

Gene: Shadow1_17 Start: 10121, Stop: 10543, Start Num: 14

Candidate Starts for Shadow1_17:

(Start: 14 @10121 has 113 MA's), (27, 10175), (32, 10229), (39, 10400),

Gene: Shaobing_19 Start: 10305, Stop: 10721, Start Num: 14

Candidate Starts for Shaobing_19:

(Start: 2 @10227 has 2 MA's), (Start: 14 @10305 has 113 MA's), (20, 10332), (39, 10581),

Gene: ShedlockHolmes_18 Start: 11349, Stop: 11783, Start Num: 14

Candidate Starts for ShedlockHolmes_18:

(Start: 5 @11286 has 10 MA's), (Start: 14 @11349 has 113 MA's), (17, 11367), (32, 11472), (37, 11616), (39, 11643), (40, 11664),

Gene: ShiaSurprise_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for ShiaSurprise_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: SirPhilip_18 Start: 10000, Stop: 10446, Start Num: 13

Candidate Starts for SirPhilip_18:

(Start: 2 @9922 has 2 MA's), (Start: 13 @10000 has 9 MA's), (32, 10135), (39, 10306), (41, 10333),

Gene: Slarp_21 Start: 12441, Stop: 12890, Start Num: 10

Candidate Starts for Slarp_21:

(Start: 2 @12378 has 2 MA's), (Start: 10 @12441 has 19 MA's), (30, 12540), (33, 12594), (36, 12660),

Gene: Slimphazie_19 Start: 11233, Stop: 11670, Start Num: 14

Candidate Starts for Slimphazie_19:

(Start: 2 @11155 has 2 MA's), (Start: 5 @11167 has 10 MA's), (Start: 14 @11233 has 113 MA's), (25, 11290), (34, 11407), (39, 11530), (43, 11596),

Gene: SoSeph_17 Start: 11405, Stop: 11851, Start Num: 11

Candidate Starts for SoSeph_17:

(Start: 11 @11405 has 23 MA's), (28, 11489), (32, 11540), (37, 11684),

Gene: Spock_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Spock_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Stinson_19 Start: 11203, Stop: 11637, Start Num: 14

Candidate Starts for Stinson_19:

(Start: 2 @11125 has 2 MA's), (Start: 5 @11137 has 10 MA's), (Start: 14 @11203 has 113 MA's), (32, 11326), (39, 11497), (43, 11563),

Gene: Strobilo_16 Start: 9253, Stop: 9702, Start Num: 11

Candidate Starts for Strobilo_16:

(Start: 5 @9196 has 10 MA's), (Start: 11 @9253 has 23 MA's), (21, 9325), (35, 9475), (36, 9481),

Gene: Sulley_19 Start: 11202, Stop: 11639, Start Num: 14

Candidate Starts for Sulley_19:

(Start: 2 @11124 has 2 MA's), (Start: 5 @11136 has 10 MA's), (Start: 14 @11202 has 113 MA's), (25, 11259), (39, 11499), (43, 11565),

Gene: Sunflower1121_17 Start: 10132, Stop: 10554, Start Num: 14

Candidate Starts for Sunflower1121_17:

(Start: 14 @10132 has 113 MA's), (27, 10186), (32, 10240), (39, 10411),

Gene: Syra333_18 Start: 10227, Stop: 10649, Start Num: 14

Candidate Starts for Syra333_18:

(Start: 5 @10164 has 10 MA's), (Start: 14 @10227 has 113 MA's), (27, 10281), (32, 10335), (39, 10506),

Gene: TBond007_18 Start: 11100, Stop: 11534, Start Num: 14

Candidate Starts for TBond007_18:

(Start: 5 @11037 has 10 MA's), (Start: 14 @11100 has 113 MA's), (17, 11118), (32, 11223), (37, 11367), (39, 11394), (40, 11415),

Gene: TClif_18 Start: 10225, Stop: 10647, Start Num: 14

Candidate Starts for TClif_18:

(Start: 5 @10156 has 10 MA's), (7, 10168), (Start: 14 @10225 has 113 MA's), (39, 10507),

Gene: TM4_15 Start: 9314, Stop: 9763, Start Num: 11

Candidate Starts for TM4_15:

(Start: 11 @9314 has 23 MA's), (21, 9383), (35, 9536),

Gene: Tachez_19 Start: 11195, Stop: 11632, Start Num: 14

Candidate Starts for Tachez_19:

(Start: 2 @11117 has 2 MA's), (Start: 5 @11129 has 10 MA's), (Start: 14 @11195 has 113 MA's), (25, 11252), (34, 11369), (39, 11492), (43, 11558),

Gene: TaiwanKao_20 Start: 11202, Stop: 11642, Start Num: 14

Candidate Starts for TaiwanKao_20:

(Start: 2 @11124 has 2 MA's), (Start: 5 @11136 has 10 MA's), (Start: 14 @11202 has 113 MA's), (25, 11262), (39, 11502), (43, 11568),

Gene: Taquito_18 Start: 12025, Stop: 12477, Start Num: 10

Candidate Starts for Taquito_18:

(Start: 10 @12025 has 19 MA's), (22, 12094), (32, 12169), (33, 12181), (36, 12247), (44, 12430),

Gene: Thyatira_17 Start: 11277, Stop: 11723, Start Num: 11

Candidate Starts for Thyatira_17:

(Start: 11 @11277 has 23 MA's), (26, 11349), (28, 11361), (32, 11412), (37, 11556),

Gene: Tierra_18 Start: 10951, Stop: 11373, Start Num: 14

Candidate Starts for Tierra_18:

(Start: 5 @10885 has 10 MA's), (Start: 14 @10951 has 113 MA's), (20, 10984), (32, 11062), (39, 11233),

Gene: TiniBug_19 Start: 11173, Stop: 11613, Start Num: 14

Candidate Starts for TiniBug_19:

(Start: 2 @11095 has 2 MA's), (Start: 5 @11107 has 10 MA's), (8, 11134), (Start: 14 @11173 has 113 MA's), (39, 11473), (43, 11539),

Gene: Tiri_19 Start: 11241, Stop: 11678, Start Num: 14

Candidate Starts for Tiri_19:

(Start: 2 @11163 has 2 MA's), (Start: 5 @11175 has 10 MA's), (Start: 14 @11241 has 113 MA's), (25, 11298), (39, 11538), (43, 11604),

Gene: Topper_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Topper_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: TreyKay_19 Start: 11196, Stop: 11636, Start Num: 14

Candidate Starts for TreyKay_19:

(Start: 2 @11118 has 2 MA's), (Start: 5 @11130 has 10 MA's), (Start: 14 @11196 has 113 MA's), (25, 11256), (39, 11496), (43, 11562),

Gene: TribbleTrouble_17 Start: 11167, Stop: 11592, Start Num: 14

Candidate Starts for TribbleTrouble_17:

(Start: 14 @11167 has 113 MA's), (32, 11281), (37, 11425), (38, 11443), (39, 11452), (40, 11473),

Gene: TruffulaTree_19 Start: 11229, Stop: 11666, Start Num: 14

Candidate Starts for TruffulaTree_19:

(Start: 2 @11151 has 2 MA's), (Start: 5 @11163 has 10 MA's), (Start: 14 @11229 has 113 MA's), (25, 11286), (34, 11403), (39, 11526), (43, 11592),

Gene: Twitch_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Twitch_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Unicorn_18 Start: 10279, Stop: 10701, Start Num: 14

Candidate Starts for Unicorn_18:

(Start: 2 @10207 has 2 MA's), (Start: 14 @10279 has 113 MA's), (20, 10312), (32, 10390), (39, 10561),

Gene: Urkel_19 Start: 11173, Stop: 11613, Start Num: 14

Candidate Starts for Urkel_19:

(Start: 2 @11095 has 2 MA's), (Start: 5 @11107 has 10 MA's), (8, 11134), (Start: 14 @11173 has 113 MA's), (39, 11473), (43, 11539),

Gene: Validus_19 Start: 10149, Stop: 10643, Start Num: 2

Candidate Starts for Validus_19:

(Start: 2 @10149 has 2 MA's), (Start: 14 @10230 has 113 MA's), (20, 10254), (31, 10293), (39, 10503),

Gene: Veliki_19 Start: 11269, Stop: 11706, Start Num: 14

Candidate Starts for Veliki_19:

(Start: 2 @11191 has 2 MA's), (Start: 5 @11203 has 10 MA's), (Start: 14 @11269 has 113 MA's), (25, 11326), (34, 11443), (39, 11566), (43, 11632),

Gene: Waterfoul_17 Start: 11299, Stop: 11745, Start Num: 11

Candidate Starts for Waterfoul_17:

(Start: 11 @11299 has 23 MA's), (26, 11371), (28, 11383), (32, 11434), (37, 11578),

Gene: Wintermute_20 Start: 12430, Stop: 12879, Start Num: 10

Candidate Starts for Wintermute_20:

(Start: 2 @12367 has 2 MA's), (Start: 10 @12430 has 19 MA's), (30, 12529), (33, 12583), (36, 12649),

Gene: Ximenita_19 Start: 10406, Stop: 10828, Start Num: 14

Candidate Starts for Ximenita_19:

(Start: 14 @10406 has 113 MA's), (20, 10436), (27, 10460), (32, 10514), (39, 10685),

Gene: Y10_20 Start: 12430, Stop: 12879, Start Num: 10

Candidate Starts for Y10_20:

(Start: 2 @12367 has 2 MA's), (Start: 10 @12430 has 19 MA's), (30, 12529), (33, 12583), (36, 12649),

Gene: Y2_20 Start: 12430, Stop: 12879, Start Num: 10

Candidate Starts for Y2_20:

(Start: 2 @12367 has 2 MA's), (Start: 10 @12430 has 19 MA's), (30, 12529), (33, 12583), (36, 12649),

Gene: YoureAdopted_18 Start: 11202, Stop: 11639, Start Num: 14

Candidate Starts for YoureAdopted_18:

(Start: 2 @11124 has 2 MA's), (Start: 5 @11136 has 10 MA's), (Start: 14 @11202 has 113 MA's), (25, 11259), (34, 11376), (39, 11499), (43, 11565),

Gene: Yuna_19 Start: 10337, Stop: 10783, Start Num: 14

Candidate Starts for Yuna_19:

(Start: 14 @10337 has 113 MA's), (32, 10472), (39, 10643), (46, 10763),

Gene: Yunkel11_19 Start: 10187, Stop: 10600, Start Num: 14

Candidate Starts for Yunkel11_19:

(Start: 5 @10121 has 10 MA's), (Start: 14 @10187 has 113 MA's), (20, 10211), (27, 10235), (39, 10460),

Gene: Zabiza_20 Start: 11230, Stop: 11667, Start Num: 14

Candidate Starts for Zabiza_20:

(Start: 2 @11152 has 2 MA's), (Start: 5 @11164 has 10 MA's), (Start: 14 @11230 has 113 MA's), (25, 11287), (34, 11404), (39, 11527), (43, 11593),

Gene: Zavala_19 Start: 11210, Stop: 11647, Start Num: 14

Candidate Starts for Zavala_19:

(Start: 2 @11132 has 2 MA's), (Start: 5 @11144 has 10 MA's), (Start: 14 @11210 has 113 MA's), (25, 11267), (34, 11384), (39, 11507), (43, 11573),

Gene: ZoeJ_15 Start: 9211, Stop: 9663, Start Num: 11

Candidate Starts for ZoeJ_15:

(Start: 5 @9154 has 10 MA's), (6, 9166), (Start: 11 @9211 has 23 MA's), (21, 9283), (35, 9436),