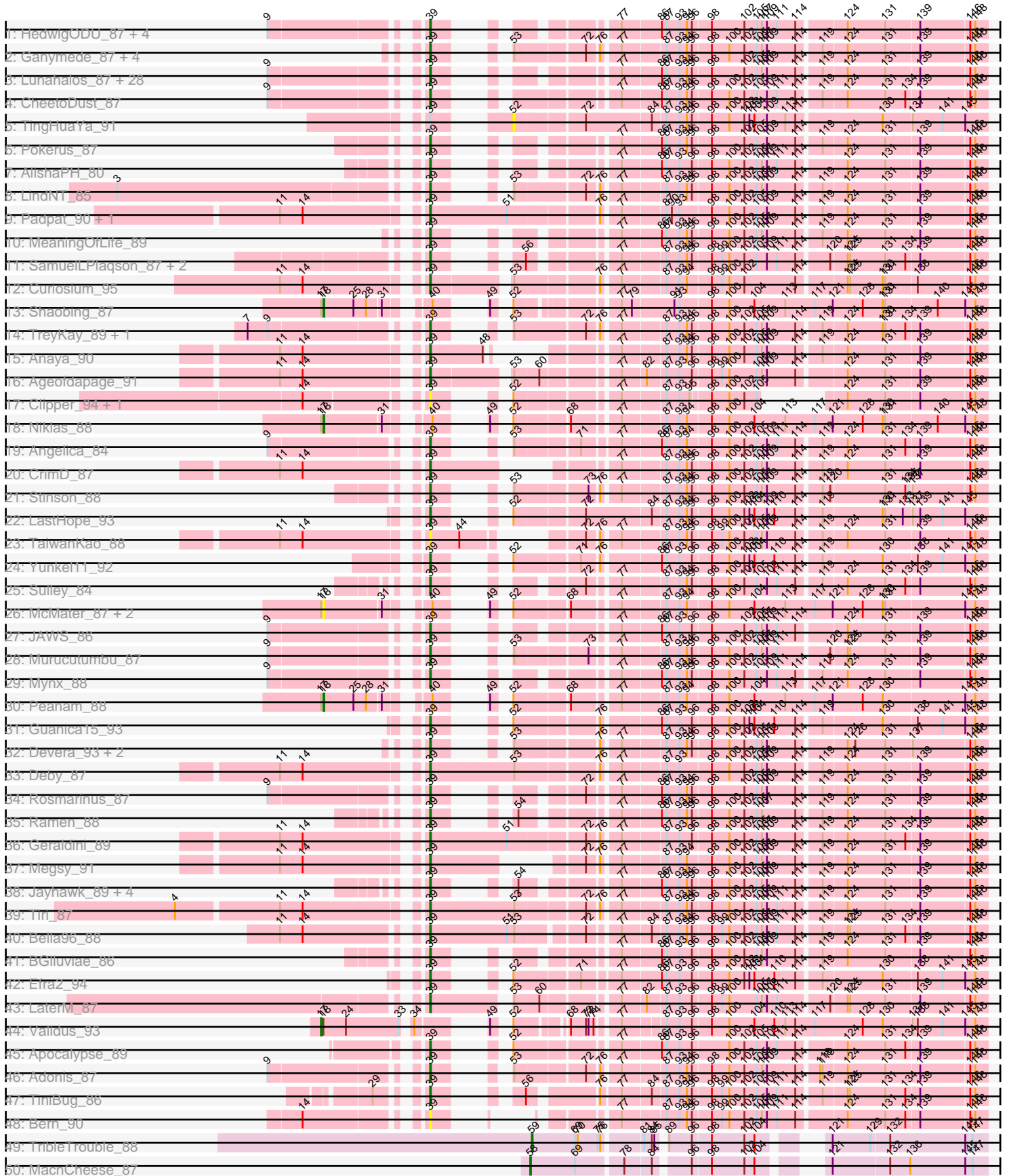
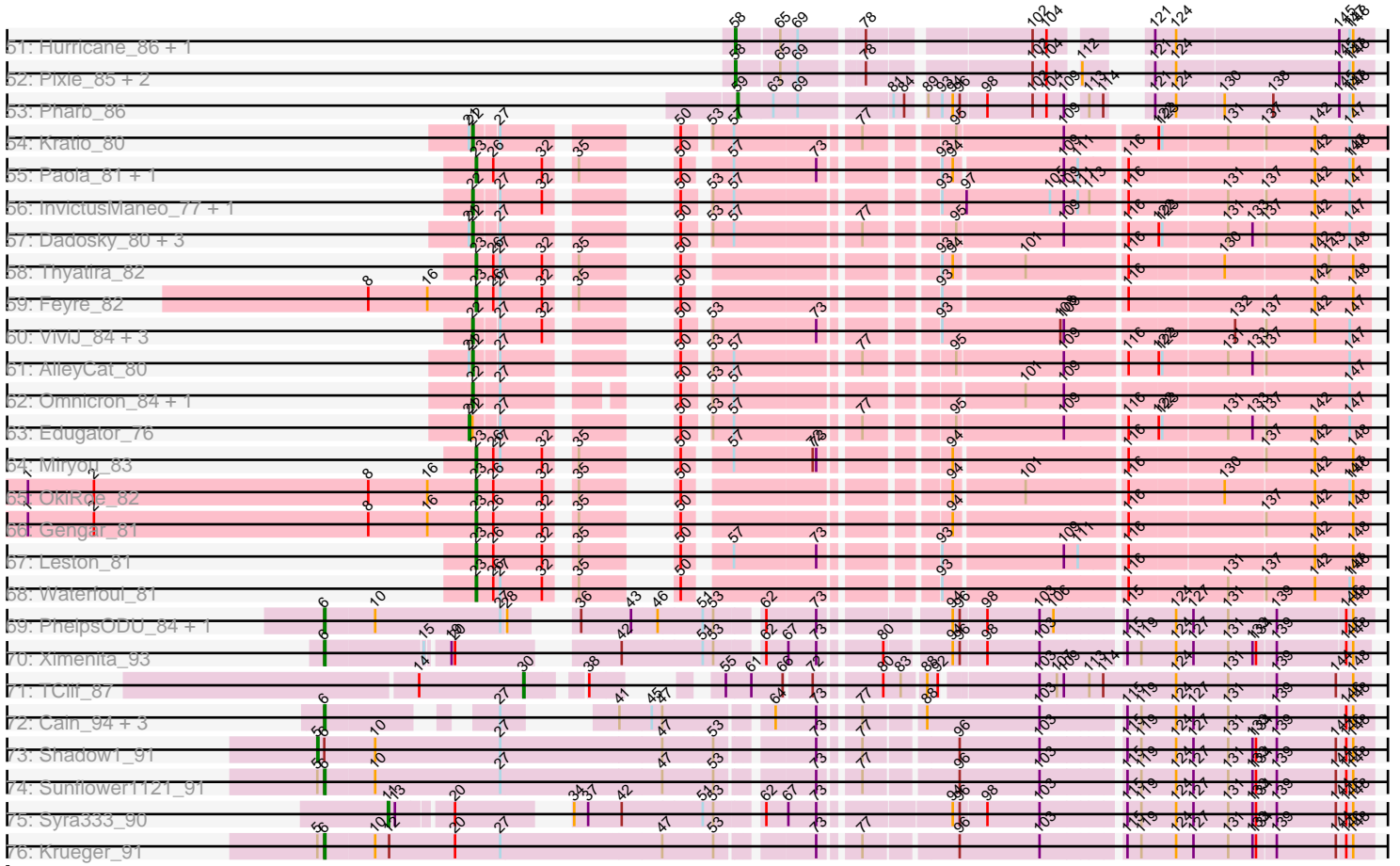


Pham 197881



Pham 197881



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 197881 Report

This analysis was run 01/18/25 on database version 583.

Pham number 197881 has 141 members, 11 are drafts.

Phages represented in each track:

- Track 1 : HedwigODU_87, Adephagia_86, ActinUp_88, Zabiza_83, Veliki_88
- Track 2 : Ganymede_87, Beezoo_90, QuincyRose_85, YoureAdopted_86, Zavala_89
- Track 3 : Lunahalos_87, ShiaSurprise_88, BEEST_87, Homura_86, CallaLilly_88, Spock_87, Capricorn_87, Tachez_87, Twitch_87, Piatt_86, Durfee_87, Peel_87, Dalmuri_87, Topper_87, Hyperbowlee_86, CaseJules_89, Jarvi_87, Jeckyll_87, Padfoot_87, Llorens_87, CREW_86, BaghaKamala_86, Joy99_88, Boiiii_87, Asayake_87, Belladonna_87, Atiba_88, Blizzard_87, Inky_87
- Track 4 : CheetoDust_87
- Track 5 : TingHuaYa_91
- Track 6 : Pokerus_87
- Track 7 : AlishaPH_80
- Track 8 : LindNT_85
- Track 9 : Padpat_90, Emerson_89
- Track 10 : MeaningOfLife_89
- Track 11 : SamuelLPlaqson_87, DrHayes_87, Urkel_87
- Track 12 : Curiosium_95
- Track 13 : Shaobing_87
- Track 14 : TreyKay_89, Prithvi_89
- Track 15 : Anaya_90
- Track 16 : Ageofdapage_91
- Track 17 : Clipper_94, MacKat_84
- Track 18 : Niklas_88
- Track 19 : Angelica_84
- Track 20 : CrimD_87
- Track 21 : Stinson_88
- Track 22 : LastHope_93
- Track 23 : TaiwanKao_88
- Track 24 : Yunkel11_92
- Track 25 : Sulley_84
- Track 26 : McMater_87, Richo_87, Dartin_87
- Track 27 : JAWS_86
- Track 28 : Murucutumbu_87
- Track 29 : Mynx_88
- Track 30 : Peanam_88
- Track 31 : Guanica15_93
- Track 32 : Devera_93, Illumine_91, Dole_90

- Track 33 : Deby_87
- Track 34 : Rosmarinus_87
- Track 35 : Ramen_88
- Track 36 : Geraldini_89
- Track 37 : Megsy_91
- Track 38 : Jayhawk_89, Rapunzel97_89, BarrelRoll_87, TruffulaTree_89, Slimphazie_89
- Track 39 : Tiri_87
- Track 40 : Bella96_88
- Track 41 : BGlluviae_86
- Track 42 : Efra2_94
- Track 43 : LaterM_87
- Track 44 : Validus_93
- Track 45 : Apocalypse_89
- Track 46 : Adonis_87
- Track 47 : TiniBug_86
- Track 48 : Bern_90
- Track 49 : TribbleTrouble_88
- Track 50 : MacnCheese_87
- Track 51 : Hurricane_86, Keshu_88
- Track 52 : Pixie_85, TBond007_82, ShedlockHolmes_88
- Track 53 : Pharb_86
- Track 54 : Kratio_80
- Track 55 : Paola_81, Guillsminger_82
- Track 56 : InvictusManeo_77, Agent47_79
- Track 57 : Dadosky_80, Psycho_78, Larva_79, Neighly_80
- Track 58 : Thyatira_82
- Track 59 : Feyre_82
- Track 60 : ViviJ_84, SoSeph_79, Collard_77, Heftyboy_79
- Track 61 : AlleyCat_80
- Track 62 : Omnicron_84, Rando14_81
- Track 63 : Edugator_76
- Track 64 : Miryou_83
- Track 65 : OkiRoe_82
- Track 66 : Gengar_81
- Track 67 : Leston_81
- Track 68 : Waterfoul_81
- Track 69 : PhelpsODU_84, Unicorn_94
- Track 70 : Ximenita_93
- Track 71 : TClif_87
- Track 72 : Cain_94, Bryler_86, Phrank_94, Tierra_94
- Track 73 : Shadow1_91
- Track 74 : Sunflower1121_91
- Track 75 : Syra333_90
- Track 76 : Krueger_91

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

The start number called the most often in the published annotations is 39, it was called in 84 of the 130 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_88, Adephagia_86, Adonis_87, Ageofdapage_91, AlishaPH_80, Anaya_90, Angelica_84, Apocalypse_89, Asayake_87, Atiba_88, BEEEST_87, BGIlluviae_86, BaghaKamala_86, BarrelRoll_87, Beezoo_90, Bella96_88, Belladonna_87, Bern_90, Blizzard_87, Boiiii_87, CREW_86, CallaLilly_88, Capricorn_87, CaseJules_89, CheetoDust_87, Clipper_94, CrimD_87, Curiosium_95, Dalmuri_87, Deby_87, Devera_93, Dole_90, DrHayes_87, Durfee_87, Efra2_94, Emerson_89, Ganymede_87, Geraldini_89, Guanica15_93, HedwigODU_87, Homura_86, Hyperbowlee_86, Illumine_91, Inky_87, JAWS_86, Jarvi_87, Jayhawk_89, Jeckyll_87, Joy99_88, LastHope_93, LaterM_87, LindNT_85, Llorens_87, Lunahalos_87, MacKat_84, MeaningOfLife_89, Megsy_91, Murucutumbu_87, Mynx_88, Padfoot_87, Padpat_90, Peel_87, Piatt_86, Pokerus_87, Prithvi_89, QuincyRose_85, Ramen_88, Rapunzel97_89, Rosmarinus_87, SamuelLPlaçon_87, ShiaSurprise_88, Slimphazie_89, Spock_87, Stinson_88, Sulley_84, Tachez_87, TaiwanKao_88, TiniBug_86, Tiri_87, Topper_87, TreyKay_89, TruffulaTree_89, Twitch_87, Urkel_87, Veliki_88, YoureAdopted_86, Yunkel11_92, Zabiza_83, Zavala_89,

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

- TingHuaYa_91,

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

- Agent47_79, AlleyCat_80, Bryler_86, Cain_94, Collard_77, Dadosky_80, Dartin_87, Edugator_76, Feyre_82, Gengar_81, Guillsminger_82, Heftyboy_79, Hurricane_86, InvictusManeo_77, Keshu_88, Kratio_80, Krueger_91, Larva_79, Leston_81, MacnCheese_87, McMater_87, Miryou_83, Neighly_80, Niklas_88, OkiRoe_82, Omnicron_84, Paola_81, Peanam_88, Pharb_86, PhelpsODU_84, Phrank_94, Pixie_85, Psycho_78, Rando14_81, Richo_87, Shadow1_91, Shaobing_87, ShedlockHolmes_88, SoSeph_79, Sunflower1121_91, Syra333_90, TBond007_82, TClif_87, Thyatira_82, Tierra_94, TribbleTrouble_88, Unicorn_94, Validus_93, ViviJ_84, Waterfoul_81, Ximenita_93,

Summary by start number:

Start 5:

- Found in 3 of 141 (2.1%) of genes in pham
- Manual Annotations of this start: 1 of 130
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Shadow1_91 (K6),

Start 6:

- Found in 10 of 141 (7.1%) of genes in pham
- Manual Annotations of this start: 9 of 130
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Bryler_86 (K6), Cain_94 (K6), Krueger_91 (K6), PhelpsODU_84 (K6), Phrank_94 (K6), Sunflower1121_91 (K6), Tierra_94 (K6), Unicorn_94 (K6), Ximenita_93 (K6),

Start 11:

- Found in 13 of 141 (9.2%) of genes in pham
- Manual Annotations of this start: 1 of 130
- Called 7.7% of time when present

- Phage (with cluster) where this start called: Syra333_90 (K6),

Start 17:

- Found in 7 of 141 (5.0%) of genes in pham
- Manual Annotations of this start: 1 of 130
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Validus_93 (K1),

Start 18:

- Found in 7 of 141 (5.0%) of genes in pham
- Manual Annotations of this start: 3 of 130
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Dartin_87 (K1), McMater_87 (K1), Niklas_88 (K1), Peanam_88 (K1), Richo_87 (K1), Shaobing_87 (K1),

Start 21:

- Found in 7 of 141 (5.0%) of genes in pham
- Manual Annotations of this start: 1 of 130
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Edugator_76 (K5),

Start 22:

- Found in 15 of 141 (10.6%) of genes in pham
- Manual Annotations of this start: 12 of 130
- Called 93.3% of time when present
- Phage (with cluster) where this start called: Agent47_79 (K5), AlleyCat_80 (K5), Collard_77 (K5), Dadosky_80 (K5), Heftyboy_79 (K5), InvictusManeo_77 (K5), Kratio_80 (K5), Larva_79 (K5), Neighly_80 (K3), Omnicron_84 (K5), Psycho_78 (K5), Rando14_81 (K5), SoSeph_79 (K5), ViviJ_84 (K5),

Start 23:

- Found in 9 of 141 (6.4%) of genes in pham
- Manual Annotations of this start: 9 of 130
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Feyre_82 (K5), Gengar_81 (K5), Guillsminger_82 (K5), Leston_81 (K5), Miryou_83 (K5), OkiRoe_82 (K5), Paola_81 (K5), Thyatira_82 (K5), Waterfoul_81 (K5),

Start 30:

- Found in 1 of 141 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 130
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TClif_87 (K6),

Start 39:

- Found in 90 of 141 (63.8%) of genes in pham
- Manual Annotations of this start: 84 of 130
- Called 98.9% of time when present
- Phage (with cluster) where this start called: ActinUp_88 (K1), Adephegia_86 (K1), Adonis_87 (K1), Ageofdapage_91 (K1), AlishaPH_80 (K1), Anaya_90 (K1), Angelica_84 (K1), Apocalypse_89 (K1), Asayake_87 (K1), Atiba_88 (K1), BEEST_87 (K1), BGIluviae_86 (K1), BaghaKamala_86 (K1), BarrelRoll_87 (K1), Beezoo_90 (K1), Bella96_88 (K1), Belladonna_87 (K1), Bern_90 (K1), Blizzard_87 (K1), Boiii_87 (K1),

CREW_86 (K1), CallaLilly_88 (K1), Capricorn_87 (K1), CaseJules_89 (K1), CheetoDust_87 (K1), Clipper_94 (K1), CrimD_87 (K1), Curiosium_95 (K1), Dalmuri_87 (K1), Deby_87 (K1), Devera_93 (K1), Dole_90 (K1), DrHayes_87 (K1), Durfee_87 (K1), Efra2_94 (K1), Emerson_89 (K1), Ganymede_87 (K1), Geraldini_89 (K1), Guanica15_93 (K1), HedwigODU_87 (K1), Homura_86 (K1), Hyperbowlee_86 (K1), Illumine_91 (K1), Inky_87 (K1), JAWS_86 (K1), Jarvi_87 (K1), Jayhawk_89 (K1), Jeckyll_87 (K1), Joy99_88 (K1), LastHope_93 (K1), LaterM_87 (K1), LindNT_85 (K1), Llorens_87 (K1), Lunahalos_87 (K1), MacKat_84 (K1), MeaningOfLife_89 (K1), Megsy_91 (K1), Murucutumbu_87 (K1), Mynx_88 (K1), Padfoot_87 (K1), Padpat_90 (K1), Peel_87 (K1), Piatt_86 (K1), Pokerus_87 (K1), Prithvi_89 (K1), QuincyRose_85 (K1), Ramen_88 (K1), Rapunzel97_89 (K1), Rosmarinus_87 (K1), SamuelLPlaqson_87 (K1), ShiaSurprise_88 (K1), Slimphazie_89 (K1), Spock_87 (K1), Stinson_88 (K1), Sulley_84 (K1), Tachez_87 (K1), TaiwanKao_88 (K1), TiniBug_86 (K1), Tiri_87 (K1), Topper_87 (K1), TreyKay_89 (K1), TruffulaTree_89 (K1), Twitch_87 (K1), Urkel_87 (K1), Veliki_88 (K1), YoureAdopted_86 (K1), Yunkel11_92 (K1), Zabiza_83 (K1), Zavala_89 (K1),

Start 52:

- Found in 15 of 141 (10.6%) of genes in pham
- No Manual Annotations of this start.
- Called 6.7% of time when present
- Phage (with cluster) where this start called: TingHuaYa_91 (K1),

Start 58:

- Found in 6 of 141 (4.3%) of genes in pham
- Manual Annotations of this start: 6 of 130
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hurricane_86 (K3), Keshu_88 (K3), MacnCheese_87 (K3), Pixie_85 (K3), ShedlockHolmes_88 (K3), TBond007_82 (K3),

Start 59:

- Found in 2 of 141 (1.4%) of genes in pham
- Manual Annotations of this start: 2 of 130
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pharb_86 (K3), TripleTrouble_88 (K3),

Summary by clusters:

There are 4 clusters represented in this pham: K3, K1, K6, K5,

Info for manual annotations of cluster K1:

- Start number 17 was manually annotated 1 time for cluster K1.
- Start number 18 was manually annotated 3 times for cluster K1.
- Start number 39 was manually annotated 84 times for cluster K1.

Info for manual annotations of cluster K3:

- Start number 58 was manually annotated 6 times for cluster K3.
- Start number 59 was manually annotated 2 times for cluster K3.

Info for manual annotations of cluster K5:

- Start number 21 was manually annotated 1 time for cluster K5.
- Start number 22 was manually annotated 12 times for cluster K5.
- Start number 23 was manually annotated 9 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 5 was manually annotated 1 time for cluster K6.
- Start number 6 was manually annotated 9 times for cluster K6.
- Start number 11 was manually annotated 1 time for cluster K6.
- Start number 30 was manually annotated 1 time for cluster K6.

Gene Information:

Gene: ActinUp_88 Start: 55559, Stop: 56098, Start Num: 39

Candidate Starts for ActinUp_88:

(9, 55403), (Start: 39 @55559 has 84 MA's), (77, 55688), (86, 55730), (87, 55736), (93, 55751), (94, 55760), (96, 55766), (98, 55787), (102, 55826), (105, 55841), (107, 55847), (109, 55853), (111, 55865), (114, 55886), (124, 55937), (131, 55982), (139, 56021), (146, 56078), (148, 56084),

Gene: Adephagia_86 Start: 55402, Stop: 55941, Start Num: 39

Candidate Starts for Adephagia_86:

(9, 55246), (Start: 39 @55402 has 84 MA's), (77, 55531), (86, 55573), (87, 55579), (93, 55594), (94, 55603), (96, 55609), (98, 55630), (102, 55669), (105, 55684), (107, 55690), (109, 55696), (111, 55708), (114, 55729), (124, 55780), (131, 55825), (139, 55864), (146, 55921), (148, 55927),

Gene: Adonis_87 Start: 55591, Stop: 56139, Start Num: 39

Candidate Starts for Adonis_87:

(9, 55435), (Start: 39 @55591 has 84 MA's), (53, 55624), (72, 55699), (76, 55711), (77, 55729), (87, 55777), (93, 55792), (94, 55801), (96, 55807), (98, 55828), (100, 55849), (102, 55867), (105, 55882), (107, 55888), (109, 55894), (114, 55927), (118, 55948), (119, 55951), (124, 55978), (131, 56023), (139, 56062), (146, 56119), (148, 56125),

Gene: Agent47_79 Start: 51751, Stop: 52398, Start Num: 22

Candidate Starts for Agent47_79:

(Start: 22 @51751 has 12 MA's), (27, 51769), (32, 51805), (50, 51865), (53, 51880), (57, 51898), (93, 52045), (97, 52066), (105, 52138), (109, 52150), (111, 52162), (113, 52171), (116, 52198), (131, 52279), (137, 52309), (142, 52351), (147, 52381),

Gene: Ageofdapage_91 Start: 56356, Stop: 56949, Start Num: 39

Candidate Starts for Ageofdapage_91:

(Start: 11 @56203 has 1 MA's), (14, 56230), (Start: 39 @56356 has 84 MA's), (53, 56434), (60, 56461), (77, 56539), (82, 56566), (87, 56587), (93, 56602), (96, 56617), (98, 56638), (99, 56650), (100, 56659), (105, 56692), (107, 56698), (109, 56704), (114, 56737), (124, 56788), (131, 56833), (139, 56872), (146, 56929), (148, 56935),

Gene: AlishaPH_80 Start: 52788, Stop: 53327, Start Num: 39

Candidate Starts for AlishaPH_80:

(Start: 39 @52788 has 84 MA's), (77, 52917), (86, 52959), (87, 52965), (93, 52980), (96, 52995), (98, 53016), (100, 53037), (102, 53055), (105, 53070), (107, 53076), (109, 53082), (111, 53094), (114, 53115), (124, 53166), (131, 53211), (139, 53250), (146, 53307), (148, 53313),

Gene: AlleyCat_80 Start: 52608, Stop: 53252, Start Num: 22

Candidate Starts for AlleyCat_80:

(Start: 21 @52605 has 1 MA's), (Start: 22 @52608 has 12 MA's), (27, 52626), (50, 52722), (53, 52737), (57, 52755), (77, 52851), (95, 52914), (109, 53004), (116, 53052), (122, 53076), (123, 53079), (131,

53133), (133, 53154), (137, 53163), (147, 53235),

Gene: Anaya_90 Start: 56620, Stop: 57162, Start Num: 39

Candidate Starts for Anaya_90:

(Start: 11 @56467 has 1 MA's), (14, 56494), (Start: 39 @56620 has 84 MA's), (48, 56680), (77, 56752), (87, 56800), (93, 56815), (94, 56824), (96, 56830), (98, 56851), (100, 56872), (102, 56890), (105, 56905), (107, 56911), (109, 56917), (114, 56950), (119, 56974), (124, 57001), (131, 57046), (139, 57085), (146, 57142), (148, 57148),

Gene: Angelica_84 Start: 54828, Stop: 55379, Start Num: 39

Candidate Starts for Angelica_84:

(9, 54672), (Start: 39 @54828 has 84 MA's), (53, 54861), (71, 54930), (77, 54969), (86, 55011), (87, 55017), (93, 55032), (94, 55041), (98, 55068), (100, 55089), (102, 55107), (105, 55122), (109, 55134), (111, 55146), (114, 55167), (119, 55191), (124, 55218), (131, 55263), (134, 55287), (139, 55302), (146, 55359), (148, 55365),

Gene: Apocalypse_89 Start: 55750, Stop: 56301, Start Num: 39

Candidate Starts for Apocalypse_89:

(Start: 39 @55750 has 84 MA's), (52, 55783), (77, 55891), (86, 55933), (87, 55939), (93, 55954), (96, 55969), (100, 56011), (102, 56029), (105, 56044), (109, 56056), (111, 56068), (114, 56089), (124, 56140), (131, 56185), (134, 56209), (139, 56224), (146, 56281), (148, 56287),

Gene: Asayake_87 Start: 55717, Stop: 56256, Start Num: 39

Candidate Starts for Asayake_87:

(9, 55561), (Start: 39 @55717 has 84 MA's), (77, 55846), (86, 55888), (87, 55894), (93, 55909), (94, 55918), (96, 55924), (98, 55945), (102, 55984), (105, 55999), (107, 56005), (109, 56011), (114, 56044), (119, 56068), (124, 56095), (131, 56140), (139, 56179), (146, 56236), (148, 56242),

Gene: Atiba_88 Start: 55365, Stop: 55904, Start Num: 39

Candidate Starts for Atiba_88:

(9, 55209), (Start: 39 @55365 has 84 MA's), (77, 55494), (86, 55536), (87, 55542), (93, 55557), (94, 55566), (96, 55572), (98, 55593), (102, 55632), (105, 55647), (107, 55653), (109, 55659), (114, 55692), (119, 55716), (124, 55743), (131, 55788), (139, 55827), (146, 55884), (148, 55890),

Gene: BEEST_87 Start: 55717, Stop: 56256, Start Num: 39

Candidate Starts for BEEST_87:

(9, 55561), (Start: 39 @55717 has 84 MA's), (77, 55846), (86, 55888), (87, 55894), (93, 55909), (94, 55918), (96, 55924), (98, 55945), (102, 55984), (105, 55999), (107, 56005), (109, 56011), (114, 56044), (119, 56068), (124, 56095), (131, 56140), (139, 56179), (146, 56236), (148, 56242),

Gene: BGlluviae_86 Start: 55097, Stop: 55636, Start Num: 39

Candidate Starts for BGlluviae_86:

(Start: 39 @55097 has 84 MA's), (77, 55226), (86, 55268), (87, 55274), (93, 55289), (96, 55304), (98, 55325), (100, 55346), (102, 55364), (105, 55379), (107, 55385), (109, 55391), (114, 55424), (119, 55448), (124, 55475), (131, 55520), (139, 55559), (146, 55616), (148, 55622),

Gene: BaghaKamala_86 Start: 54945, Stop: 55484, Start Num: 39

Candidate Starts for BaghaKamala_86:

(9, 54789), (Start: 39 @54945 has 84 MA's), (77, 55074), (86, 55116), (87, 55122), (93, 55137), (94, 55146), (96, 55152), (98, 55173), (102, 55212), (105, 55227), (107, 55233), (109, 55239), (114, 55272), (119, 55296), (124, 55323), (131, 55368), (139, 55407), (146, 55464), (148, 55470),

Gene: BarrelRoll_87 Start: 55476, Stop: 56015, Start Num: 39

Candidate Starts for BarrelRoll_87:

(Start: 39 @55476 has 84 MA's), (54, 55515), (77, 55605), (86, 55647), (87, 55653), (93, 55668), (94, 55677), (96, 55683), (98, 55704), (100, 55725), (102, 55743), (105, 55758), (107, 55764), (109, 55770), (114, 55803), (119, 55827), (124, 55854), (131, 55899), (139, 55938), (146, 55995), (148, 56001),

Gene: Beezoo_90 Start: 56297, Stop: 56845, Start Num: 39

Candidate Starts for Beezoo_90:

(Start: 39 @56297 has 84 MA's), (53, 56330), (72, 56405), (76, 56417), (77, 56435), (87, 56483), (93, 56498), (94, 56507), (96, 56513), (98, 56534), (100, 56555), (102, 56573), (105, 56588), (107, 56594), (109, 56600), (114, 56633), (119, 56657), (124, 56684), (131, 56729), (139, 56768), (146, 56825), (148, 56831),

Gene: Bella96_88 Start: 55904, Stop: 56509, Start Num: 39

Candidate Starts for Bella96_88:

(Start: 11 @55757 has 1 MA's), (14, 55784), (Start: 39 @55904 has 84 MA's), (51, 55991), (53, 56000), (72, 56069), (77, 56099), (84, 56132), (87, 56147), (93, 56162), (94, 56171), (96, 56177), (98, 56198), (99, 56210), (100, 56219), (102, 56237), (105, 56252), (107, 56258), (109, 56264), (111, 56276), (114, 56297), (119, 56321), (124, 56348), (125, 56351), (131, 56393), (134, 56417), (139, 56432), (146, 56489), (148, 56495),

Gene: Belladonna_87 Start: 55520, Stop: 56059, Start Num: 39

Candidate Starts for Belladonna_87:

(9, 55364), (Start: 39 @55520 has 84 MA's), (77, 55649), (86, 55691), (87, 55697), (93, 55712), (94, 55721), (96, 55727), (98, 55748), (102, 55787), (105, 55802), (107, 55808), (109, 55814), (114, 55847), (119, 55871), (124, 55898), (131, 55943), (139, 55982), (146, 56039), (148, 56045),

Gene: Bern_90 Start: 54011, Stop: 54514, Start Num: 39

Candidate Starts for Bern_90:

(14, 53894), (Start: 39 @54011 has 84 MA's), (77, 54104), (87, 54152), (93, 54167), (94, 54176), (96, 54182), (98, 54203), (99, 54215), (100, 54224), (102, 54242), (105, 54257), (107, 54263), (109, 54269), (111, 54281), (114, 54302), (124, 54353), (131, 54398), (134, 54422), (139, 54437), (146, 54494), (148, 54500),

Gene: Blizzard_87 Start: 55717, Stop: 56256, Start Num: 39

Candidate Starts for Blizzard_87:

(9, 55561), (Start: 39 @55717 has 84 MA's), (77, 55846), (86, 55888), (87, 55894), (93, 55909), (94, 55918), (96, 55924), (98, 55945), (102, 55984), (105, 55999), (107, 56005), (109, 56011), (114, 56044), (119, 56068), (124, 56095), (131, 56140), (139, 56179), (146, 56236), (148, 56242),

Gene: Boiiii_87 Start: 55719, Stop: 56258, Start Num: 39

Candidate Starts for Boiiii_87:

(9, 55563), (Start: 39 @55719 has 84 MA's), (77, 55848), (86, 55890), (87, 55896), (93, 55911), (94, 55920), (96, 55926), (98, 55947), (102, 55986), (105, 56001), (107, 56007), (109, 56013), (114, 56046), (119, 56070), (124, 56097), (131, 56142), (139, 56181), (146, 56238), (148, 56244),

Gene: Bryler_86 Start: 53452, Stop: 54183, Start Num: 6

Candidate Starts for Bryler_86:

(Start: 6 @53452 has 9 MA's), (27, 53560), (41, 53599), (45, 53626), (47, 53635), (64, 53713), (73, 53746), (77, 53773), (88, 53818), (103, 53914), (115, 53977), (119, 53989), (124, 54019), (127, 54034), (131, 54064), (139, 54103), (146, 54160), (148, 54166),

Gene: CREW_86 Start: 55520, Stop: 56059, Start Num: 39

Candidate Starts for CREW_86:

(9, 55364), (Start: 39 @55520 has 84 MA's), (77, 55649), (86, 55691), (87, 55697), (93, 55712), (94, 55721), (96, 55727), (98, 55748), (102, 55787), (105, 55802), (107, 55808), (109, 55814), (114, 55847), (119, 55871), (124, 55898), (131, 55943), (139, 55982), (146, 56039), (148, 56045),

Gene: Cain_94 Start: 56599, Stop: 57330, Start Num: 6

Candidate Starts for Cain_94:

(Start: 6 @56599 has 9 MA's), (27, 56707), (41, 56746), (45, 56773), (47, 56782), (64, 56860), (73, 56893), (77, 56920), (88, 56965), (103, 57061), (115, 57124), (119, 57136), (124, 57166), (127, 57181), (131, 57211), (139, 57250), (146, 57307), (148, 57313),

Gene: CallaLilly_88 Start: 55443, Stop: 55982, Start Num: 39

Candidate Starts for CallaLilly_88:

(9, 55287), (Start: 39 @55443 has 84 MA's), (77, 55572), (86, 55614), (87, 55620), (93, 55635), (94, 55644), (96, 55650), (98, 55671), (102, 55710), (105, 55725), (107, 55731), (109, 55737), (114, 55770), (119, 55794), (124, 55821), (131, 55866), (139, 55905), (146, 55962), (148, 55968),

Gene: Capricorn_87 Start: 55520, Stop: 56059, Start Num: 39

Candidate Starts for Capricorn_87:

(9, 55364), (Start: 39 @55520 has 84 MA's), (77, 55649), (86, 55691), (87, 55697), (93, 55712), (94, 55721), (96, 55727), (98, 55748), (102, 55787), (105, 55802), (107, 55808), (109, 55814), (114, 55847), (119, 55871), (124, 55898), (131, 55943), (139, 55982), (146, 56039), (148, 56045),

Gene: CaseJules_89 Start: 55717, Stop: 56256, Start Num: 39

Candidate Starts for CaseJules_89:

(9, 55561), (Start: 39 @55717 has 84 MA's), (77, 55846), (86, 55888), (87, 55894), (93, 55909), (94, 55918), (96, 55924), (98, 55945), (102, 55984), (105, 55999), (107, 56005), (109, 56011), (114, 56044), (119, 56068), (124, 56095), (131, 56140), (139, 56179), (146, 56236), (148, 56242),

Gene: CheetoDust_87 Start: 54906, Stop: 55457, Start Num: 39

Candidate Starts for CheetoDust_87:

(9, 54750), (Start: 39 @54906 has 84 MA's), (77, 55047), (86, 55089), (87, 55095), (93, 55110), (94, 55119), (96, 55125), (98, 55146), (100, 55167), (102, 55185), (105, 55200), (109, 55212), (111, 55224), (114, 55245), (119, 55269), (124, 55296), (131, 55341), (134, 55365), (139, 55380), (146, 55437), (148, 55443),

Gene: Clipper_94 Start: 56263, Stop: 56739, Start Num: 39

Candidate Starts for Clipper_94:

(14, 56143), (Start: 39 @56263 has 84 MA's), (52, 56296), (77, 56401), (87, 56449), (93, 56464), (95, 56476), (98, 56497), (100, 56518), (102, 56536), (105, 56551), (124, 56578), (131, 56623), (139, 56662), (146, 56719), (148, 56725),

Gene: Collard_77 Start: 51715, Stop: 52362, Start Num: 22

Candidate Starts for Collard_77:

(Start: 22 @51715 has 12 MA's), (27, 51733), (32, 51769), (50, 51829), (53, 51844), (73, 51931), (93, 52009), (108, 52111), (109, 52114), (132, 52249), (137, 52273), (142, 52315), (147, 52345),

Gene: CrimD_87 Start: 55556, Stop: 56107, Start Num: 39

Candidate Starts for CrimD_87:

(Start: 11 @55403 has 1 MA's), (14, 55430), (Start: 39 @55556 has 84 MA's), (77, 55697), (87, 55745), (93, 55760), (94, 55769), (96, 55775), (98, 55796), (100, 55817), (102, 55835), (105, 55850), (107, 55856), (109, 55862), (114, 55895), (119, 55919), (124, 55946), (131, 55991), (139, 56030), (146, 56087), (148, 56093),

Gene: Curiosium_95 Start: 56915, Stop: 57508, Start Num: 39

Candidate Starts for Curiosium_95:

(Start: 11 @56762 has 1 MA's), (14, 56789), (Start: 39 @56915 has 84 MA's), (53, 56993), (76, 57080), (77, 57098), (87, 57146), (93, 57161), (94, 57170), (98, 57197), (99, 57209), (100, 57218), (102, 57236), (114, 57296), (124, 57347), (125, 57350), (130, 57389), (131, 57392), (138, 57428), (146, 57488), (148, 57494),

Gene: Dadosky_80 Start: 52609, Stop: 53253, Start Num: 22

Candidate Starts for Dadosky_80:

(Start: 21 @52606 has 1 MA's), (Start: 22 @52609 has 12 MA's), (27, 52627), (50, 52723), (53, 52738), (57, 52756), (77, 52852), (95, 52915), (109, 53005), (116, 53053), (122, 53077), (123, 53080), (131, 53134), (133, 53155), (137, 53164), (142, 53206), (147, 53236),

Gene: Dalmuri_87 Start: 55520, Stop: 56059, Start Num: 39

Candidate Starts for Dalmuri_87:

(9, 55364), (Start: 39 @55520 has 84 MA's), (77, 55649), (86, 55691), (87, 55697), (93, 55712), (94, 55721), (96, 55727), (98, 55748), (102, 55787), (105, 55802), (107, 55808), (109, 55814), (114, 55847), (119, 55871), (124, 55898), (131, 55943), (139, 55982), (146, 56039), (148, 56045),

Gene: Dartin_87 Start: 56409, Stop: 57068, Start Num: 18

Candidate Starts for Dartin_87:

(Start: 17 @56406 has 1 MA's), (Start: 18 @56409 has 3 MA's), (31, 56475), (40, 56508), (49, 56529), (52, 56538), (68, 56595), (77, 56643), (87, 56691), (93, 56706), (94, 56715), (98, 56742), (100, 56763), (104, 56793), (113, 56829), (117, 56865), (121, 56886), (128, 56922), (130, 56946), (131, 56949), (145, 57042), (148, 57054),

Gene: Deby_87 Start: 56043, Stop: 56654, Start Num: 39

Candidate Starts for Deby_87:

(Start: 11 @55890 has 1 MA's), (14, 55917), (Start: 39 @56043 has 84 MA's), (53, 56139), (76, 56226), (77, 56244), (87, 56292), (93, 56307), (98, 56343), (100, 56364), (102, 56382), (105, 56397), (107, 56403), (109, 56409), (114, 56442), (119, 56466), (124, 56493), (131, 56538), (139, 56577), (146, 56634), (148, 56640),

Gene: Devera_93 Start: 56388, Stop: 56936, Start Num: 39

Candidate Starts for Devera_93:

(Start: 39 @56388 has 84 MA's), (53, 56421), (76, 56508), (77, 56526), (87, 56574), (93, 56589), (94, 56598), (96, 56604), (98, 56625), (100, 56646), (102, 56664), (105, 56679), (107, 56685), (109, 56691), (114, 56724), (124, 56775), (126, 56784), (131, 56820), (137, 56850), (146, 56916), (148, 56922),

Gene: Dole_90 Start: 56391, Stop: 56939, Start Num: 39

Candidate Starts for Dole_90:

(Start: 39 @56391 has 84 MA's), (53, 56424), (76, 56511), (77, 56529), (87, 56577), (93, 56592), (94, 56601), (96, 56607), (98, 56628), (100, 56649), (102, 56667), (105, 56682), (107, 56688), (109, 56694), (114, 56727), (124, 56778), (126, 56787), (131, 56823), (137, 56853), (146, 56919), (148, 56925),

Gene: DrHayes_87 Start: 55782, Stop: 56321, Start Num: 39

Candidate Starts for DrHayes_87:

(Start: 39 @55782 has 84 MA's), (56, 55830), (77, 55911), (87, 55959), (93, 55974), (94, 55983), (96, 55989), (98, 56010), (99, 56022), (100, 56031), (102, 56049), (105, 56064), (109, 56076), (111, 56088), (114, 56109), (120, 56142), (124, 56160), (125, 56163), (131, 56205), (134, 56229), (139,

56244), (146, 56301), (148, 56307),

Gene: Durfee_87 Start: 55717, Stop: 56256, Start Num: 39

Candidate Starts for Durfee_87:

(9, 55561), (Start: 39 @55717 has 84 MA's), (77, 55846), (86, 55888), (87, 55894), (93, 55909), (94, 55918), (96, 55924), (98, 55945), (102, 55984), (105, 55999), (107, 56005), (109, 56011), (114, 56044), (119, 56068), (124, 56095), (131, 56140), (139, 56179), (146, 56236), (148, 56242),

Gene: Edugator_76 Start: 53777, Stop: 54424, Start Num: 21

Candidate Starts for Edugator_76:

(Start: 21 @53777 has 1 MA's), (Start: 22 @53780 has 12 MA's), (27, 53798), (50, 53894), (53, 53909), (57, 53927), (77, 54023), (95, 54086), (109, 54176), (116, 54224), (122, 54248), (123, 54251), (131, 54305), (133, 54326), (137, 54335), (142, 54377), (147, 54407),

Gene: Efra2_94 Start: 56866, Stop: 57423, Start Num: 39

Candidate Starts for Efra2_94:

(Start: 39 @56866 has 84 MA's), (52, 56899), (71, 56971), (77, 57010), (86, 57052), (87, 57058), (93, 57073), (96, 57088), (98, 57109), (100, 57130), (102, 57148), (103, 57154), (104, 57160), (110, 57184), (114, 57208), (119, 57232), (130, 57301), (138, 57340), (141, 57370), (145, 57397), (148, 57409),

Gene: Emerson_89 Start: 55720, Stop: 56331, Start Num: 39

Candidate Starts for Emerson_89:

(Start: 11 @55567 has 1 MA's), (14, 55594), (Start: 39 @55720 has 84 MA's), (51, 55807), (76, 55903), (77, 55921), (87, 55969), (90, 55975), (93, 55984), (98, 56020), (100, 56041), (102, 56059), (105, 56074), (109, 56086), (114, 56119), (119, 56143), (124, 56170), (131, 56215), (139, 56254), (146, 56311), (148, 56317),

Gene: Feyre_82 Start: 55415, Stop: 56056, Start Num: 23

Candidate Starts for Feyre_82:

(8, 55322), (16, 55373), (Start: 23 @55415 has 9 MA's), (26, 55430), (27, 55436), (32, 55472), (35, 55487), (50, 55532), (93, 55709), (116, 55856), (142, 56009), (148, 56042),

Gene: Ganymede_87 Start: 55523, Stop: 56071, Start Num: 39

Candidate Starts for Ganymede_87:

(Start: 39 @55523 has 84 MA's), (53, 55556), (72, 55631), (76, 55643), (77, 55661), (87, 55709), (93, 55724), (94, 55733), (96, 55739), (98, 55760), (100, 55781), (102, 55799), (105, 55814), (107, 55820), (109, 55826), (114, 55859), (119, 55883), (124, 55910), (131, 55955), (139, 55994), (146, 56051), (148, 56057),

Gene: Gengar_81 Start: 54230, Stop: 54871, Start Num: 23

Candidate Starts for Gengar_81:

(1, 53843), (2, 53900), (8, 54137), (16, 54188), (Start: 23 @54230 has 9 MA's), (26, 54245), (32, 54287), (35, 54302), (50, 54347), (94, 54533), (116, 54671), (137, 54782), (142, 54824), (148, 54857),

Gene: Geraldini_89 Start: 55561, Stop: 56172, Start Num: 39

Candidate Starts for Geraldini_89:

(Start: 11 @55408 has 1 MA's), (14, 55435), (Start: 39 @55561 has 84 MA's), (51, 55648), (72, 55732), (76, 55744), (77, 55762), (87, 55810), (93, 55825), (96, 55840), (98, 55861), (100, 55882), (102, 55900), (105, 55915), (107, 55921), (109, 55927), (114, 55960), (119, 55984), (124, 56011), (131, 56056), (134, 56080), (139, 56095), (146, 56152), (148, 56158),

Gene: Guanica15_93 Start: 56558, Stop: 57112, Start Num: 39

Candidate Starts for Guanica15_93:

(Start: 39 @56558 has 84 MA's), (52, 56591), (76, 56681), (86, 56741), (87, 56747), (93, 56762), (96, 56777), (98, 56798), (100, 56819), (102, 56837), (103, 56843), (104, 56849), (110, 56873), (114, 56897), (119, 56921), (130, 56990), (138, 57029), (141, 57059), (145, 57086), (148, 57098),

Gene: Guillsminger_82 Start: 54078, Stop: 54719, Start Num: 23

Candidate Starts for Guillsminger_82:

(Start: 23 @54078 has 9 MA's), (26, 54093), (32, 54135), (35, 54150), (50, 54195), (57, 54225), (73, 54294), (93, 54372), (94, 54381), (109, 54471), (111, 54483), (116, 54519), (142, 54672), (147, 54702), (148, 54705),

Gene: HedwigODU_87 Start: 55559, Stop: 56098, Start Num: 39

Candidate Starts for HedwigODU_87:

(9, 55403), (Start: 39 @55559 has 84 MA's), (77, 55688), (86, 55730), (87, 55736), (93, 55751), (94, 55760), (96, 55766), (98, 55787), (102, 55826), (105, 55841), (107, 55847), (109, 55853), (111, 55865), (114, 55886), (124, 55937), (131, 55982), (139, 56021), (146, 56078), (148, 56084),

Gene: Heftyboy_79 Start: 53442, Stop: 54089, Start Num: 22

Candidate Starts for Heftyboy_79:

(Start: 22 @53442 has 12 MA's), (27, 53460), (32, 53496), (50, 53556), (53, 53571), (73, 53658), (93, 53736), (108, 53838), (109, 53841), (132, 53976), (137, 54000), (142, 54042), (147, 54072),

Gene: Homura_86 Start: 55520, Stop: 56059, Start Num: 39

Candidate Starts for Homura_86:

(9, 55364), (Start: 39 @55520 has 84 MA's), (77, 55649), (86, 55691), (87, 55697), (93, 55712), (94, 55721), (96, 55727), (98, 55748), (102, 55787), (105, 55802), (107, 55808), (109, 55814), (114, 55847), (119, 55871), (124, 55898), (131, 55943), (139, 55982), (146, 56039), (148, 56045),

Gene: Hurricane_86 Start: 54730, Stop: 55197, Start Num: 58

Candidate Starts for Hurricane_86:

(Start: 58 @54730 has 6 MA's), (65, 54763), (69, 54778), (78, 54826), (102, 54952), (104, 54964), (121, 55012), (124, 55030), (145, 55168), (147, 55177), (148, 55180),

Gene: Hyperbowlee_86 Start: 55717, Stop: 56256, Start Num: 39

Candidate Starts for Hyperbowlee_86:

(9, 55561), (Start: 39 @55717 has 84 MA's), (77, 55846), (86, 55888), (87, 55894), (93, 55909), (94, 55918), (96, 55924), (98, 55945), (102, 55984), (105, 55999), (107, 56005), (109, 56011), (114, 56044), (119, 56068), (124, 56095), (131, 56140), (139, 56179), (146, 56236), (148, 56242),

Gene: Illumine_91 Start: 56390, Stop: 56938, Start Num: 39

Candidate Starts for Illumine_91:

(Start: 39 @56390 has 84 MA's), (53, 56423), (76, 56510), (77, 56528), (87, 56576), (93, 56591), (94, 56600), (96, 56606), (98, 56627), (100, 56648), (102, 56666), (105, 56681), (107, 56687), (109, 56693), (114, 56726), (124, 56777), (126, 56786), (131, 56822), (137, 56852), (146, 56918), (148, 56924),

Gene: Inky_87 Start: 55520, Stop: 56059, Start Num: 39

Candidate Starts for Inky_87:

(9, 55364), (Start: 39 @55520 has 84 MA's), (77, 55649), (86, 55691), (87, 55697), (93, 55712), (94, 55721), (96, 55727), (98, 55748), (102, 55787), (105, 55802), (107, 55808), (109, 55814), (114, 55847), (119, 55871), (124, 55898), (131, 55943), (139, 55982), (146, 56039), (148, 56045),

Gene: InvictusManeo_77 Start: 51755, Stop: 52402, Start Num: 22

Candidate Starts for InvictusManeo_77:

(Start: 22 @51755 has 12 MA's), (27, 51773), (32, 51809), (50, 51869), (53, 51884), (57, 51902), (93, 52049), (97, 52070), (105, 52142), (109, 52154), (111, 52166), (113, 52175), (116, 52202), (131, 52283), (137, 52313), (142, 52355), (147, 52385),

Gene: JAWS_86 Start: 55506, Stop: 56045, Start Num: 39

Candidate Starts for JAWS_86:

(9, 55350), (Start: 39 @55506 has 84 MA's), (77, 55635), (86, 55677), (87, 55683), (93, 55698), (96, 55713), (98, 55734), (102, 55773), (105, 55788), (107, 55794), (109, 55800), (111, 55812), (114, 55833), (124, 55884), (131, 55929), (139, 55968), (146, 56025), (148, 56031),

Gene: Jarvi_87 Start: 55520, Stop: 56059, Start Num: 39

Candidate Starts for Jarvi_87:

(9, 55364), (Start: 39 @55520 has 84 MA's), (77, 55649), (86, 55691), (87, 55697), (93, 55712), (94, 55721), (96, 55727), (98, 55748), (102, 55787), (105, 55802), (107, 55808), (109, 55814), (114, 55847), (119, 55871), (124, 55898), (131, 55943), (139, 55982), (146, 56039), (148, 56045),

Gene: Jayhawk_89 Start: 55536, Stop: 56075, Start Num: 39

Candidate Starts for Jayhawk_89:

(Start: 39 @55536 has 84 MA's), (54, 55575), (77, 55665), (86, 55707), (87, 55713), (93, 55728), (94, 55737), (96, 55743), (98, 55764), (100, 55785), (102, 55803), (105, 55818), (107, 55824), (109, 55830), (114, 55863), (119, 55887), (124, 55914), (131, 55959), (139, 55998), (146, 56055), (148, 56061),

Gene: Jeckyll_87 Start: 55520, Stop: 56059, Start Num: 39

Candidate Starts for Jeckyll_87:

(9, 55364), (Start: 39 @55520 has 84 MA's), (77, 55649), (86, 55691), (87, 55697), (93, 55712), (94, 55721), (96, 55727), (98, 55748), (102, 55787), (105, 55802), (107, 55808), (109, 55814), (114, 55847), (119, 55871), (124, 55898), (131, 55943), (139, 55982), (146, 56039), (148, 56045),

Gene: Joy99_88 Start: 55649, Stop: 56188, Start Num: 39

Candidate Starts for Joy99_88:

(9, 55493), (Start: 39 @55649 has 84 MA's), (77, 55778), (86, 55820), (87, 55826), (93, 55841), (94, 55850), (96, 55856), (98, 55877), (102, 55916), (105, 55931), (107, 55937), (109, 55943), (114, 55976), (119, 56000), (124, 56027), (131, 56072), (139, 56111), (146, 56168), (148, 56174),

Gene: Keshu_88 Start: 55022, Stop: 55489, Start Num: 58

Candidate Starts for Keshu_88:

(Start: 58 @55022 has 6 MA's), (65, 55055), (69, 55070), (78, 55118), (102, 55244), (104, 55256), (121, 55304), (124, 55322), (145, 55460), (147, 55469), (148, 55472),

Gene: Kratio_80 Start: 52503, Stop: 53210, Start Num: 22

Candidate Starts for Kratio_80:

(Start: 21 @52500 has 1 MA's), (Start: 22 @52503 has 12 MA's), (27, 52521), (50, 52617), (53, 52632), (57, 52650), (77, 52746), (95, 52809), (109, 52899), (122, 52971), (123, 52974), (131, 53028), (137, 53058), (142, 53100), (147, 53130),

Gene: Krueger_91 Start: 55693, Stop: 56526, Start Num: 6

Candidate Starts for Krueger_91:

(Start: 5 @55687 has 1 MA's), (Start: 6 @55693 has 9 MA's), (10, 55735), (12, 55747), (20, 55804), (27, 55843), (47, 55978), (53, 56020), (73, 56089), (77, 56116), (96, 56188), (103, 56257), (115, 56320), (119, 56332), (124, 56362), (127, 56377), (131, 56407), (133, 56428), (134, 56431), (139, 56446), (144, 56497), (146, 56503), (148, 56509),

Gene: Larva_79 Start: 53481, Stop: 54125, Start Num: 22

Candidate Starts for Larva_79:

(Start: 21 @53478 has 1 MA's), (Start: 22 @53481 has 12 MA's), (27, 53499), (50, 53595), (53, 53610), (57, 53628), (77, 53724), (95, 53787), (109, 53877), (116, 53925), (122, 53949), (123, 53952), (131, 54006), (133, 54027), (137, 54036), (142, 54078), (147, 54108),

Gene: LastHope_93 Start: 56273, Stop: 56836, Start Num: 39

Candidate Starts for LastHope_93:

(Start: 39 @56273 has 84 MA's), (52, 56306), (72, 56381), (84, 56456), (87, 56471), (93, 56486), (94, 56495), (96, 56501), (98, 56522), (100, 56543), (102, 56561), (103, 56567), (104, 56573), (109, 56588), (110, 56597), (114, 56621), (119, 56645), (130, 56714), (131, 56717), (133, 56738), (137, 56747), (139, 56756), (141, 56783), (145, 56810),

Gene: LaterM_87 Start: 55885, Stop: 56478, Start Num: 39

Candidate Starts for LaterM_87:

(Start: 39 @55885 has 84 MA's), (53, 55963), (60, 55990), (77, 56068), (82, 56095), (87, 56116), (93, 56131), (96, 56146), (98, 56167), (99, 56179), (100, 56188), (105, 56221), (107, 56227), (109, 56233), (111, 56245), (120, 56299), (124, 56317), (125, 56320), (131, 56362), (139, 56401), (146, 56458), (148, 56464),

Gene: Leston_81 Start: 54195, Stop: 54836, Start Num: 23

Candidate Starts for Leston_81:

(Start: 23 @54195 has 9 MA's), (26, 54210), (32, 54252), (35, 54267), (50, 54312), (57, 54342), (73, 54411), (93, 54489), (109, 54588), (111, 54600), (116, 54636), (142, 54789), (148, 54822),

Gene: LindNT_85 Start: 55622, Stop: 56173, Start Num: 39

Candidate Starts for LindNT_85:

(3, 55286), (Start: 39 @55622 has 84 MA's), (53, 55655), (72, 55733), (76, 55745), (77, 55763), (87, 55811), (93, 55826), (94, 55835), (96, 55841), (98, 55862), (100, 55883), (102, 55901), (105, 55916), (107, 55922), (109, 55928), (114, 55961), (119, 55985), (124, 56012), (131, 56057), (139, 56096), (146, 56153), (148, 56159),

Gene: Llorens_87 Start: 55520, Stop: 56059, Start Num: 39

Candidate Starts for Llorens_87:

(9, 55364), (Start: 39 @55520 has 84 MA's), (77, 55649), (86, 55691), (87, 55697), (93, 55712), (94, 55721), (96, 55727), (98, 55748), (102, 55787), (105, 55802), (107, 55808), (109, 55814), (114, 55847), (119, 55871), (124, 55898), (131, 55943), (139, 55982), (146, 56039), (148, 56045),

Gene: Lunahalos_87 Start: 55520, Stop: 56059, Start Num: 39

Candidate Starts for Lunahalos_87:

(9, 55364), (Start: 39 @55520 has 84 MA's), (77, 55649), (86, 55691), (87, 55697), (93, 55712), (94, 55721), (96, 55727), (98, 55748), (102, 55787), (105, 55802), (107, 55808), (109, 55814), (114, 55847), (119, 55871), (124, 55898), (131, 55943), (139, 55982), (146, 56039), (148, 56045),

Gene: MacKat_84 Start: 51147, Stop: 51623, Start Num: 39

Candidate Starts for MacKat_84:

(14, 51027), (Start: 39 @51147 has 84 MA's), (52, 51180), (77, 51285), (87, 51333), (93, 51348), (95, 51360), (98, 51381), (100, 51402), (102, 51420), (105, 51435), (124, 51462), (131, 51507), (139, 51546), (146, 51603), (148, 51609),

Gene: MacnCheese_87 Start: 55279, Stop: 55746, Start Num: 58

Candidate Starts for MacnCheese_87:

(Start: 58 @55279 has 6 MA's), (69, 55330), (78, 55378), (84, 55408), (96, 55444), (98, 55465), (102, 55504), (104, 55516), (121, 55564), (132, 55630), (136, 55654), (145, 55720), (147, 55729),

Gene: McMater_87 Start: 56409, Stop: 57068, Start Num: 18

Candidate Starts for McMater_87:

(Start: 17 @56406 has 1 MA's), (Start: 18 @56409 has 3 MA's), (31, 56475), (40, 56508), (49, 56529), (52, 56538), (68, 56595), (77, 56643), (87, 56691), (93, 56706), (94, 56715), (98, 56742), (100, 56763), (104, 56793), (113, 56829), (117, 56865), (121, 56886), (128, 56922), (130, 56946), (131, 56949), (145, 57042), (148, 57054),

Gene: MeaningOfLife_89 Start: 56205, Stop: 56744, Start Num: 39

Candidate Starts for MeaningOfLife_89:

(Start: 39 @56205 has 84 MA's), (77, 56334), (86, 56376), (87, 56382), (93, 56397), (94, 56406), (96, 56412), (98, 56433), (100, 56454), (102, 56472), (105, 56487), (107, 56493), (109, 56499), (114, 56532), (119, 56556), (124, 56583), (131, 56628), (139, 56667), (146, 56724), (148, 56730),

Gene: Megsy_91 Start: 55851, Stop: 56402, Start Num: 39

Candidate Starts for Megsy_91:

(Start: 11 @55698 has 1 MA's), (14, 55725), (Start: 39 @55851 has 84 MA's), (72, 55962), (76, 55974), (77, 55992), (87, 56040), (93, 56055), (94, 56064), (98, 56091), (100, 56112), (102, 56130), (105, 56145), (107, 56151), (109, 56157), (114, 56190), (119, 56214), (124, 56241), (131, 56286), (139, 56325), (146, 56382), (148, 56388),

Gene: Miryou_83 Start: 56053, Stop: 56694, Start Num: 23

Candidate Starts for Miryou_83:

(Start: 23 @56053 has 9 MA's), (26, 56068), (27, 56074), (32, 56110), (35, 56125), (50, 56170), (57, 56200), (72, 56266), (73, 56269), (94, 56356), (116, 56494), (137, 56605), (142, 56647), (148, 56680),

Gene: Murucutumbu_87 Start: 56412, Stop: 56960, Start Num: 39

Candidate Starts for Murucutumbu_87:

(9, 56256), (Start: 39 @56412 has 84 MA's), (53, 56445), (73, 56523), (77, 56550), (87, 56598), (93, 56613), (94, 56622), (96, 56628), (98, 56649), (100, 56670), (102, 56688), (105, 56703), (107, 56709), (109, 56715), (111, 56727), (120, 56781), (124, 56799), (125, 56802), (131, 56844), (139, 56883), (146, 56940), (148, 56946),

Gene: Mynx_88 Start: 55828, Stop: 56367, Start Num: 39

Candidate Starts for Mynx_88:

(9, 55672), (Start: 39 @55828 has 84 MA's), (77, 55957), (86, 55999), (87, 56005), (93, 56020), (94, 56029), (96, 56035), (98, 56056), (100, 56077), (102, 56095), (105, 56110), (109, 56122), (111, 56134), (114, 56155), (119, 56179), (124, 56206), (131, 56251), (139, 56290), (146, 56347), (148, 56353),

Gene: Neighly_80 Start: 53480, Stop: 54124, Start Num: 22

Candidate Starts for Neighly_80:

(Start: 21 @53477 has 1 MA's), (Start: 22 @53480 has 12 MA's), (27, 53498), (50, 53594), (53, 53609), (57, 53627), (77, 53723), (95, 53786), (109, 53876), (116, 53924), (122, 53948), (123, 53951), (131, 54005), (133, 54026), (137, 54035), (142, 54077), (147, 54107),

Gene: Niklas_88 Start: 56449, Stop: 57108, Start Num: 18

Candidate Starts for Niklas_88:

(Start: 17 @56446 has 1 MA's), (Start: 18 @56449 has 3 MA's), (31, 56515), (40, 56548), (49, 56569), (52, 56578), (68, 56635), (77, 56683), (87, 56731), (93, 56746), (94, 56755), (98, 56782), (100, 56803), (104, 56833), (113, 56869), (117, 56905), (121, 56926), (128, 56962), (130, 56986), (131, 56989),

(140, 57049), (145, 57082), (148, 57094),

Gene: OkiRoe_82 Start: 55193, Stop: 55834, Start Num: 23

Candidate Starts for OkiRoe_82:

(1, 54806), (2, 54863), (8, 55100), (16, 55151), (Start: 23 @55193 has 9 MA's), (26, 55208), (32, 55250), (35, 55265), (50, 55310), (94, 55496), (101, 55553), (116, 55634), (130, 55712), (142, 55787), (147, 55817), (148, 55820),

Gene: Omnicron_84 Start: 56077, Stop: 56712, Start Num: 22

Candidate Starts for Omnicron_84:

(Start: 22 @56077 has 12 MA's), (27, 56098), (50, 56185), (53, 56200), (57, 56218), (101, 56431), (109, 56464), (147, 56695),

Gene: Padfoot_87 Start: 55717, Stop: 56256, Start Num: 39

Candidate Starts for Padfoot_87:

(9, 55561), (Start: 39 @55717 has 84 MA's), (77, 55846), (86, 55888), (87, 55894), (93, 55909), (94, 55918), (96, 55924), (98, 55945), (102, 55984), (105, 55999), (107, 56005), (109, 56011), (114, 56044), (119, 56068), (124, 56095), (131, 56140), (139, 56179), (146, 56236), (148, 56242),

Gene: Padpat_90 Start: 55720, Stop: 56331, Start Num: 39

Candidate Starts for Padpat_90:

(Start: 11 @55567 has 1 MA's), (14, 55594), (Start: 39 @55720 has 84 MA's), (51, 55807), (76, 55903), (77, 55921), (87, 55969), (90, 55975), (93, 55984), (98, 56020), (100, 56041), (102, 56059), (105, 56074), (109, 56086), (114, 56119), (119, 56143), (124, 56170), (131, 56215), (139, 56254), (146, 56311), (148, 56317),

Gene: Paola_81 Start: 54078, Stop: 54719, Start Num: 23

Candidate Starts for Paola_81:

(Start: 23 @54078 has 9 MA's), (26, 54093), (32, 54135), (35, 54150), (50, 54195), (57, 54225), (73, 54294), (93, 54372), (94, 54381), (109, 54471), (111, 54483), (116, 54519), (142, 54672), (147, 54702), (148, 54705),

Gene: Peanam_88 Start: 56428, Stop: 57087, Start Num: 18

Candidate Starts for Peanam_88:

(Start: 17 @56425 has 1 MA's), (Start: 18 @56428 has 3 MA's), (25, 56464), (28, 56479), (31, 56494), (40, 56527), (49, 56548), (52, 56557), (68, 56614), (77, 56662), (87, 56710), (93, 56725), (94, 56734), (98, 56761), (100, 56782), (104, 56812), (113, 56848), (117, 56884), (121, 56905), (128, 56941), (130, 56965), (145, 57061), (148, 57073),

Gene: Peel_87 Start: 55522, Stop: 56061, Start Num: 39

Candidate Starts for Peel_87:

(9, 55366), (Start: 39 @55522 has 84 MA's), (77, 55651), (86, 55693), (87, 55699), (93, 55714), (94, 55723), (96, 55729), (98, 55750), (102, 55789), (105, 55804), (107, 55810), (109, 55816), (114, 55849), (119, 55873), (124, 55900), (131, 55945), (139, 55984), (146, 56041), (148, 56047),

Gene: Pharb_86 Start: 54652, Stop: 55125, Start Num: 59

Candidate Starts for Pharb_86:

(Start: 59 @54652 has 2 MA's), (63, 54682), (69, 54703), (81, 54775), (84, 54784), (89, 54793), (93, 54805), (94, 54814), (96, 54820), (98, 54841), (102, 54880), (104, 54892), (109, 54907), (113, 54916), (114, 54928), (121, 54940), (124, 54958), (130, 54997), (138, 55039), (145, 55096), (147, 55105), (148, 55108),

Gene: PhelpsODU_84 Start: 52304, Stop: 53098, Start Num: 6

Candidate Starts for PhelpsODU_84:

(Start: 6 @52304 has 9 MA's), (10, 52346), (27, 52454), (28, 52457), (36, 52484), (43, 52526), (46, 52547), (51, 52583), (53, 52592), (62, 52625), (73, 52664), (94, 52757), (96, 52763), (98, 52784), (103, 52829), (106, 52841), (115, 52892), (124, 52934), (127, 52949), (131, 52979), (139, 53018), (146, 53075), (148, 53081),

Gene: Phrank_94 Start: 56586, Stop: 57317, Start Num: 6

Candidate Starts for Phrank_94:

(Start: 6 @56586 has 9 MA's), (27, 56694), (41, 56733), (45, 56760), (47, 56769), (64, 56847), (73, 56880), (77, 56907), (88, 56952), (103, 57048), (115, 57111), (119, 57123), (124, 57153), (127, 57168), (131, 57198), (139, 57237), (146, 57294), (148, 57300),

Gene: Piatt_86 Start: 55717, Stop: 56256, Start Num: 39

Candidate Starts for Piatt_86:

(9, 55561), (Start: 39 @55717 has 84 MA's), (77, 55846), (86, 55888), (87, 55894), (93, 55909), (94, 55918), (96, 55924), (98, 55945), (102, 55984), (105, 55999), (107, 56005), (109, 56011), (114, 56044), (119, 56068), (124, 56095), (131, 56140), (139, 56179), (146, 56236), (148, 56242),

Gene: Pixie_85 Start: 54434, Stop: 54901, Start Num: 58

Candidate Starts for Pixie_85:

(Start: 58 @54434 has 6 MA's), (65, 54467), (69, 54482), (78, 54530), (102, 54656), (104, 54668), (112, 54686), (121, 54716), (124, 54734), (145, 54872), (147, 54881), (148, 54884),

Gene: Pokerus_87 Start: 55526, Stop: 56065, Start Num: 39

Candidate Starts for Pokerus_87:

(Start: 39 @55526 has 84 MA's), (77, 55655), (86, 55697), (87, 55703), (93, 55718), (94, 55727), (96, 55733), (98, 55754), (102, 55793), (105, 55808), (109, 55820), (114, 55853), (119, 55877), (124, 55904), (131, 55949), (139, 55988), (146, 56045), (148, 56051),

Gene: Prithvi_89 Start: 55920, Stop: 56471, Start Num: 39

Candidate Starts for Prithvi_89:

(7, 55740), (9, 55764), (Start: 39 @55920 has 84 MA's), (53, 55953), (72, 56031), (76, 56043), (77, 56061), (87, 56109), (93, 56124), (94, 56133), (96, 56139), (98, 56160), (100, 56181), (102, 56199), (105, 56214), (107, 56220), (109, 56226), (114, 56259), (119, 56283), (124, 56310), (130, 56352), (131, 56355), (134, 56379), (139, 56394), (146, 56451), (148, 56457),

Gene: Psycho_78 Start: 52606, Stop: 53250, Start Num: 22

Candidate Starts for Psycho_78:

(Start: 21 @52603 has 1 MA's), (Start: 22 @52606 has 12 MA's), (27, 52624), (50, 52720), (53, 52735), (57, 52753), (77, 52849), (95, 52912), (109, 53002), (116, 53050), (122, 53074), (123, 53077), (131, 53131), (133, 53152), (137, 53161), (142, 53203), (147, 53233),

Gene: QuincyRose_85 Start: 55523, Stop: 56071, Start Num: 39

Candidate Starts for QuincyRose_85:

(Start: 39 @55523 has 84 MA's), (53, 55556), (72, 55631), (76, 55643), (77, 55661), (87, 55709), (93, 55724), (94, 55733), (96, 55739), (98, 55760), (100, 55781), (102, 55799), (105, 55814), (107, 55820), (109, 55826), (114, 55859), (119, 55883), (124, 55910), (131, 55955), (139, 55994), (146, 56051), (148, 56057),

Gene: Ramen_88 Start: 55275, Stop: 55814, Start Num: 39

Candidate Starts for Ramen_88:

(Start: 39 @55275 has 84 MA's), (54, 55314), (77, 55404), (86, 55446), (87, 55452), (93, 55467), (94, 55476), (96, 55482), (98, 55503), (100, 55524), (102, 55542), (105, 55557), (107, 55563), (114,

55602), (119, 55626), (124, 55653), (131, 55698), (139, 55737), (146, 55794), (148, 55800),

Gene: Rando14_81 Start: 54488, Stop: 55123, Start Num: 22

Candidate Starts for Rando14_81:

(Start: 22 @54488 has 12 MA's), (27, 54509), (50, 54596), (53, 54611), (57, 54629), (101, 54842), (109, 54875), (147, 55106),

Gene: Rapunzel97_89 Start: 55491, Stop: 56030, Start Num: 39

Candidate Starts for Rapunzel97_89:

(Start: 39 @55491 has 84 MA's), (54, 55530), (77, 55620), (86, 55662), (87, 55668), (93, 55683), (94, 55692), (96, 55698), (98, 55719), (100, 55740), (102, 55758), (105, 55773), (107, 55779), (109, 55785), (114, 55818), (119, 55842), (124, 55869), (131, 55914), (139, 55953), (146, 56010), (148, 56016),

Gene: Richo_87 Start: 56409, Stop: 57068, Start Num: 18

Candidate Starts for Richo_87:

(Start: 17 @56406 has 1 MA's), (Start: 18 @56409 has 3 MA's), (31, 56475), (40, 56508), (49, 56529), (52, 56538), (68, 56595), (77, 56643), (87, 56691), (93, 56706), (94, 56715), (98, 56742), (100, 56763), (104, 56793), (113, 56829), (117, 56865), (121, 56886), (128, 56922), (130, 56946), (131, 56949), (145, 57042), (148, 57054),

Gene: Rosmarinus_87 Start: 55508, Stop: 56047, Start Num: 39

Candidate Starts for Rosmarinus_87:

(9, 55352), (Start: 39 @55508 has 84 MA's), (72, 55607), (77, 55637), (86, 55679), (87, 55685), (93, 55700), (94, 55709), (96, 55715), (98, 55736), (102, 55775), (105, 55790), (107, 55796), (109, 55802), (114, 55835), (119, 55859), (124, 55886), (131, 55931), (139, 55970), (146, 56027), (148, 56033),

Gene: SamuelLPlaqson_87 Start: 55782, Stop: 56321, Start Num: 39

Candidate Starts for SamuelLPlaqson_87:

(Start: 39 @55782 has 84 MA's), (56, 55830), (77, 55911), (87, 55959), (93, 55974), (94, 55983), (96, 55989), (98, 56010), (99, 56022), (100, 56031), (102, 56049), (105, 56064), (109, 56076), (111, 56088), (114, 56109), (120, 56142), (124, 56160), (125, 56163), (131, 56205), (134, 56229), (139, 56244), (146, 56301), (148, 56307),

Gene: Shadow1_91 Start: 55827, Stop: 56666, Start Num: 5

Candidate Starts for Shadow1_91:

(Start: 5 @55827 has 1 MA's), (Start: 6 @55833 has 9 MA's), (10, 55875), (27, 55983), (47, 56118), (53, 56160), (73, 56229), (77, 56256), (96, 56328), (103, 56397), (115, 56460), (119, 56472), (124, 56502), (127, 56517), (131, 56547), (133, 56568), (134, 56571), (139, 56586), (144, 56637), (146, 56643), (148, 56649),

Gene: Shaobing_87 Start: 56496, Stop: 57149, Start Num: 18

Candidate Starts for Shaobing_87:

(Start: 17 @56493 has 1 MA's), (Start: 18 @56496 has 3 MA's), (25, 56532), (28, 56547), (31, 56562), (40, 56595), (49, 56616), (52, 56625), (77, 56721), (79, 56733), (91, 56781), (93, 56787), (98, 56823), (100, 56844), (104, 56874), (113, 56910), (117, 56946), (121, 56967), (128, 57003), (130, 57027), (131, 57030), (140, 57090), (145, 57123), (148, 57135),

Gene: ShedlockHolmes_88 Start: 54857, Stop: 55324, Start Num: 58

Candidate Starts for ShedlockHolmes_88:

(Start: 58 @54857 has 6 MA's), (65, 54890), (69, 54905), (78, 54953), (102, 55079), (104, 55091), (112, 55109), (121, 55139), (124, 55157), (145, 55295), (147, 55304), (148, 55307),

Gene: ShiaSurprise_88 Start: 55717, Stop: 56256, Start Num: 39

Candidate Starts for ShiaSurprise_88:

(9, 55561), (Start: 39 @55717 has 84 MA's), (77, 55846), (86, 55888), (87, 55894), (93, 55909), (94, 55918), (96, 55924), (98, 55945), (102, 55984), (105, 55999), (107, 56005), (109, 56011), (114, 56044), (119, 56068), (124, 56095), (131, 56140), (139, 56179), (146, 56236), (148, 56242),

Gene: Slimphazie_89 Start: 55947, Stop: 56486, Start Num: 39

Candidate Starts for Slimphazie_89:

(Start: 39 @55947 has 84 MA's), (54, 55986), (77, 56076), (86, 56118), (87, 56124), (93, 56139), (94, 56148), (96, 56154), (98, 56175), (100, 56196), (102, 56214), (105, 56229), (107, 56235), (109, 56241), (114, 56274), (119, 56298), (124, 56325), (131, 56370), (139, 56409), (146, 56466), (148, 56472),

Gene: SoSeph_79 Start: 53442, Stop: 54089, Start Num: 22

Candidate Starts for SoSeph_79:

(Start: 22 @53442 has 12 MA's), (27, 53460), (32, 53496), (50, 53556), (53, 53571), (73, 53658), (93, 53736), (108, 53838), (109, 53841), (132, 53976), (137, 54000), (142, 54042), (147, 54072),

Gene: Spock_87 Start: 55521, Stop: 56060, Start Num: 39

Candidate Starts for Spock_87:

(9, 55365), (Start: 39 @55521 has 84 MA's), (77, 55650), (86, 55692), (87, 55698), (93, 55713), (94, 55722), (96, 55728), (98, 55749), (102, 55788), (105, 55803), (107, 55809), (109, 55815), (114, 55848), (119, 55872), (124, 55899), (131, 55944), (139, 55983), (146, 56040), (148, 56046),

Gene: Stinson_88 Start: 55691, Stop: 56239, Start Num: 39

Candidate Starts for Stinson_88:

(Start: 39 @55691 has 84 MA's), (53, 55724), (73, 55802), (76, 55811), (77, 55829), (87, 55877), (93, 55892), (94, 55901), (96, 55907), (98, 55928), (100, 55949), (102, 55967), (105, 55982), (107, 55988), (109, 55994), (114, 56027), (119, 56051), (120, 56060), (131, 56123), (134, 56147), (135, 56150), (137, 56153), (146, 56219), (148, 56225),

Gene: Sulley_84 Start: 55116, Stop: 55655, Start Num: 39

Candidate Starts for Sulley_84:

(Start: 39 @55116 has 84 MA's), (72, 55215), (77, 55245), (87, 55293), (93, 55308), (94, 55317), (96, 55323), (98, 55344), (100, 55365), (102, 55383), (105, 55398), (109, 55410), (111, 55422), (114, 55443), (119, 55467), (124, 55494), (131, 55539), (134, 55563), (139, 55578), (146, 55635), (148, 55641),

Gene: Sunflower1121_91 Start: 55592, Stop: 56425, Start Num: 6

Candidate Starts for Sunflower1121_91:

(Start: 5 @55586 has 1 MA's), (Start: 6 @55592 has 9 MA's), (10, 55634), (27, 55742), (47, 55877), (53, 55919), (73, 55988), (77, 56015), (96, 56087), (103, 56156), (115, 56219), (119, 56231), (124, 56261), (127, 56276), (131, 56306), (133, 56327), (134, 56330), (139, 56345), (144, 56396), (146, 56402), (148, 56408),

Gene: Syra333_90 Start: 55739, Stop: 56482, Start Num: 11

Candidate Starts for Syra333_90:

(Start: 11 @55739 has 1 MA's), (13, 55745), (20, 55787), (34, 55856), (37, 55868), (42, 55895), (51, 55961), (53, 55970), (62, 56003), (67, 56018), (73, 56042), (94, 56141), (96, 56147), (98, 56168), (103, 56213), (115, 56276), (119, 56288), (124, 56318), (127, 56333), (131, 56363), (133, 56384), (134, 56387), (139, 56402), (144, 56453), (146, 56459), (148, 56465),

Gene: TBond007_82 Start: 54432, Stop: 54899, Start Num: 58

Candidate Starts for TBond007_82:

(Start: 58 @54432 has 6 MA's), (65, 54465), (69, 54480), (78, 54528), (102, 54654), (104, 54666), (112, 54684), (121, 54714), (124, 54732), (145, 54870), (147, 54879), (148, 54882),

Gene: TClif_87 Start: 55031, Stop: 55636, Start Num: 30

Candidate Starts for TClif_87:

(14, 54941), (Start: 30 @55031 has 1 MA's), (38, 55070), (55, 55124), (61, 55145), (66, 55172), (72, 55193), (80, 55241), (83, 55256), (88, 55274), (92, 55283), (103, 55358), (107, 55373), (109, 55379), (113, 55400), (114, 55412), (124, 55475), (131, 55520), (139, 55559), (144, 55610), (148, 55622),

Gene: Tachez_87 Start: 55365, Stop: 55904, Start Num: 39

Candidate Starts for Tachez_87:

(9, 55209), (Start: 39 @55365 has 84 MA's), (77, 55494), (86, 55536), (87, 55542), (93, 55557), (94, 55566), (96, 55572), (98, 55593), (102, 55632), (105, 55647), (107, 55653), (109, 55659), (114, 55692), (119, 55716), (124, 55743), (131, 55788), (139, 55827), (146, 55884), (148, 55890),

Gene: TaiwanKao_88 Start: 55563, Stop: 56111, Start Num: 39

Candidate Starts for TaiwanKao_88:

(Start: 11 @55410 has 1 MA's), (14, 55437), (Start: 39 @55563 has 84 MA's), (44, 55596), (72, 55671), (76, 55683), (77, 55701), (87, 55749), (93, 55764), (94, 55773), (96, 55779), (98, 55800), (99, 55812), (100, 55821), (102, 55839), (105, 55854), (107, 55860), (109, 55866), (114, 55899), (119, 55923), (124, 55950), (131, 55995), (139, 56034), (146, 56091), (148, 56097),

Gene: Thyatira_82 Start: 55790, Stop: 56431, Start Num: 23

Candidate Starts for Thyatira_82:

(Start: 23 @55790 has 9 MA's), (26, 55805), (27, 55811), (32, 55847), (35, 55862), (50, 55907), (93, 56084), (94, 56093), (101, 56150), (116, 56231), (130, 56309), (142, 56384), (143, 56396), (148, 56417),

Gene: Tierra_94 Start: 57212, Stop: 57943, Start Num: 6

Candidate Starts for Tierra_94:

(Start: 6 @57212 has 9 MA's), (27, 57320), (41, 57359), (45, 57386), (47, 57395), (64, 57473), (73, 57506), (77, 57533), (88, 57578), (103, 57674), (115, 57737), (119, 57749), (124, 57779), (127, 57794), (131, 57824), (139, 57863), (146, 57920), (148, 57926),

Gene: TingHuaYa_91 Start: 56631, Stop: 57164, Start Num: 52

Candidate Starts for TingHuaYa_91:

(Start: 39 @56598 has 84 MA's), (52, 56631), (72, 56706), (84, 56781), (87, 56796), (93, 56811), (94, 56820), (96, 56826), (98, 56847), (100, 56868), (102, 56886), (103, 56892), (104, 56898), (109, 56913), (113, 56934), (114, 56946), (130, 57042), (137, 57075), (141, 57111), (145, 57138),

Gene: TiniBug_86 Start: 55892, Stop: 56437, Start Num: 39

Candidate Starts for TiniBug_86:

(29, 55856), (Start: 39 @55892 has 84 MA's), (56, 55940), (76, 56006), (77, 56027), (84, 56060), (87, 56075), (93, 56090), (94, 56099), (96, 56105), (98, 56126), (99, 56138), (100, 56147), (102, 56165), (105, 56180), (109, 56192), (111, 56204), (114, 56225), (119, 56249), (124, 56276), (125, 56279), (131, 56321), (134, 56345), (139, 56360), (146, 56417), (148, 56423),

Gene: Tiri_87 Start: 55187, Stop: 55798, Start Num: 39

Candidate Starts for Tiri_87:

(4, 54917), (Start: 11 @55034 has 1 MA's), (14, 55061), (Start: 39 @55187 has 84 MA's), (53, 55283), (72, 55358), (76, 55370), (77, 55388), (87, 55436), (93, 55451), (94, 55460), (96, 55466), (98, 55487), (100, 55508), (102, 55526), (105, 55541), (107, 55547), (109, 55553), (111, 55565), (114, 55586),

(119, 55610), (124, 55637), (131, 55682), (139, 55721), (146, 55778), (148, 55784),

Gene: Topper_87 Start: 55520, Stop: 56059, Start Num: 39

Candidate Starts for Topper_87:

(9, 55364), (Start: 39 @55520 has 84 MA's), (77, 55649), (86, 55691), (87, 55697), (93, 55712), (94, 55721), (96, 55727), (98, 55748), (102, 55787), (105, 55802), (107, 55808), (109, 55814), (114, 55847), (119, 55871), (124, 55898), (131, 55943), (139, 55982), (146, 56039), (148, 56045),

Gene: TreyKay_89 Start: 55920, Stop: 56471, Start Num: 39

Candidate Starts for TreyKay_89:

(7, 55740), (9, 55764), (Start: 39 @55920 has 84 MA's), (53, 55953), (72, 56031), (76, 56043), (77, 56061), (87, 56109), (93, 56124), (94, 56133), (96, 56139), (98, 56160), (100, 56181), (102, 56199), (105, 56214), (107, 56220), (109, 56226), (114, 56259), (119, 56283), (124, 56310), (130, 56352), (131, 56355), (134, 56379), (139, 56394), (146, 56451), (148, 56457),

Gene: TribbleTrouble_88 Start: 56688, Stop: 57158, Start Num: 59

Candidate Starts for TribbleTrouble_88:

(Start: 59 @56688 has 2 MA's), (69, 56739), (70, 56742), (75, 56766), (76, 56769), (81, 56811), (84, 56820), (85, 56823), (89, 56829), (96, 56856), (98, 56877), (102, 56916), (104, 56928), (121, 56976), (129, 57021), (132, 57042), (145, 57132), (147, 57141),

Gene: TruffulaTree_89 Start: 55913, Stop: 56452, Start Num: 39

Candidate Starts for TruffulaTree_89:

(Start: 39 @55913 has 84 MA's), (54, 55952), (77, 56042), (86, 56084), (87, 56090), (93, 56105), (94, 56114), (96, 56120), (98, 56141), (100, 56162), (102, 56180), (105, 56195), (107, 56201), (109, 56207), (114, 56240), (119, 56264), (124, 56291), (131, 56336), (139, 56375), (146, 56432), (148, 56438),

Gene: Twitch_87 Start: 55522, Stop: 56061, Start Num: 39

Candidate Starts for Twitch_87:

(9, 55366), (Start: 39 @55522 has 84 MA's), (77, 55651), (86, 55693), (87, 55699), (93, 55714), (94, 55723), (96, 55729), (98, 55750), (102, 55789), (105, 55804), (107, 55810), (109, 55816), (114, 55849), (119, 55873), (124, 55900), (131, 55945), (139, 55984), (146, 56041), (148, 56047),

Gene: Unicorn_94 Start: 56932, Stop: 57726, Start Num: 6

Candidate Starts for Unicorn_94:

(Start: 6 @56932 has 9 MA's), (10, 56974), (27, 57082), (28, 57085), (36, 57112), (43, 57154), (46, 57175), (51, 57211), (53, 57220), (62, 57253), (73, 57292), (94, 57385), (96, 57391), (98, 57412), (103, 57457), (106, 57469), (115, 57520), (124, 57562), (127, 57577), (131, 57607), (139, 57646), (146, 57703), (148, 57709),

Gene: Urkel_87 Start: 55782, Stop: 56321, Start Num: 39

Candidate Starts for Urkel_87:

(Start: 39 @55782 has 84 MA's), (56, 55830), (77, 55911), (87, 55959), (93, 55974), (94, 55983), (96, 55989), (98, 56010), (99, 56022), (100, 56031), (102, 56049), (105, 56064), (109, 56076), (111, 56088), (114, 56109), (120, 56142), (124, 56160), (125, 56163), (131, 56205), (134, 56229), (139, 56244), (146, 56301), (148, 56307),

Gene: Validus_93 Start: 57272, Stop: 57934, Start Num: 17

Candidate Starts for Validus_93:

(Start: 17 @57272 has 1 MA's), (Start: 18 @57275 has 3 MA's), (24, 57302), (33, 57365), (34, 57371), (49, 57410), (52, 57419), (68, 57464), (72, 57482), (73, 57485), (74, 57491), (77, 57512), (87, 57557), (93, 57572), (96, 57587), (98, 57608), (100, 57629), (104, 57659), (110, 57683), (113, 57695), (114,

57707), (117, 57731), (128, 57788), (130, 57812), (137, 57845), (138, 57851), (141, 57881), (145, 57908), (148, 57920),

Gene: Veliki_88 Start: 55491, Stop: 56030, Start Num: 39

Candidate Starts for Veliki_88:

(9, 55335), (Start: 39 @55491 has 84 MA's), (77, 55620), (86, 55662), (87, 55668), (93, 55683), (94, 55692), (96, 55698), (98, 55719), (102, 55758), (105, 55773), (107, 55779), (109, 55785), (111, 55797), (114, 55818), (124, 55869), (131, 55914), (139, 55953), (146, 56010), (148, 56016),

Gene: ViviJ_84 Start: 53804, Stop: 54451, Start Num: 22

Candidate Starts for ViviJ_84:

(Start: 22 @53804 has 12 MA's), (27, 53822), (32, 53858), (50, 53918), (53, 53933), (73, 54020), (93, 54098), (108, 54200), (109, 54203), (132, 54338), (137, 54362), (142, 54404), (147, 54434),

Gene: Waterfoul_81 Start: 53860, Stop: 54501, Start Num: 23

Candidate Starts for Waterfoul_81:

(Start: 23 @53860 has 9 MA's), (26, 53875), (27, 53881), (32, 53917), (35, 53932), (50, 53977), (93, 54154), (116, 54301), (131, 54382), (137, 54412), (142, 54454), (147, 54484), (148, 54487),

Gene: Ximenita_93 Start: 56440, Stop: 57225, Start Num: 6

Candidate Starts for Ximenita_93:

(Start: 6 @56440 has 9 MA's), (15, 56521), (19, 56536), (20, 56539), (42, 56647), (51, 56713), (53, 56722), (62, 56755), (67, 56770), (73, 56794), (80, 56839), (94, 56887), (96, 56893), (98, 56914), (103, 56959), (115, 57022), (119, 57034), (124, 57064), (127, 57079), (131, 57109), (133, 57130), (134, 57133), (139, 57148), (146, 57205), (148, 57211),

Gene: YoureAdopted_86 Start: 55308, Stop: 55856, Start Num: 39

Candidate Starts for YoureAdopted_86:

(Start: 39 @55308 has 84 MA's), (53, 55341), (72, 55416), (76, 55428), (77, 55446), (87, 55494), (93, 55509), (94, 55518), (96, 55524), (98, 55545), (100, 55566), (102, 55584), (105, 55599), (107, 55605), (109, 55611), (114, 55644), (119, 55668), (124, 55695), (131, 55740), (139, 55779), (146, 55836), (148, 55842),

Gene: Yunkel11_92 Start: 56143, Stop: 56694, Start Num: 39

Candidate Starts for Yunkel11_92:

(Start: 39 @56143 has 84 MA's), (52, 56176), (71, 56245), (76, 56263), (86, 56323), (87, 56329), (93, 56344), (96, 56359), (98, 56380), (100, 56401), (102, 56419), (103, 56425), (104, 56431), (110, 56455), (114, 56479), (119, 56503), (130, 56572), (138, 56611), (141, 56641), (145, 56668), (148, 56680),

Gene: Zabiza_83 Start: 51864, Stop: 52403, Start Num: 39

Candidate Starts for Zabiza_83:

(9, 51708), (Start: 39 @51864 has 84 MA's), (77, 51993), (86, 52035), (87, 52041), (93, 52056), (94, 52065), (96, 52071), (98, 52092), (102, 52131), (105, 52146), (107, 52152), (109, 52158), (111, 52170), (114, 52191), (124, 52242), (131, 52287), (139, 52326), (146, 52383), (148, 52389),

Gene: Zavala_89 Start: 55773, Stop: 56321, Start Num: 39

Candidate Starts for Zavala_89:

(Start: 39 @55773 has 84 MA's), (53, 55806), (72, 55881), (76, 55893), (77, 55911), (87, 55959), (93, 55974), (94, 55983), (96, 55989), (98, 56010), (100, 56031), (102, 56049), (105, 56064), (107, 56070), (109, 56076), (114, 56109), (119, 56133), (124, 56160), (131, 56205), (139, 56244), (146, 56301), (148, 56307),