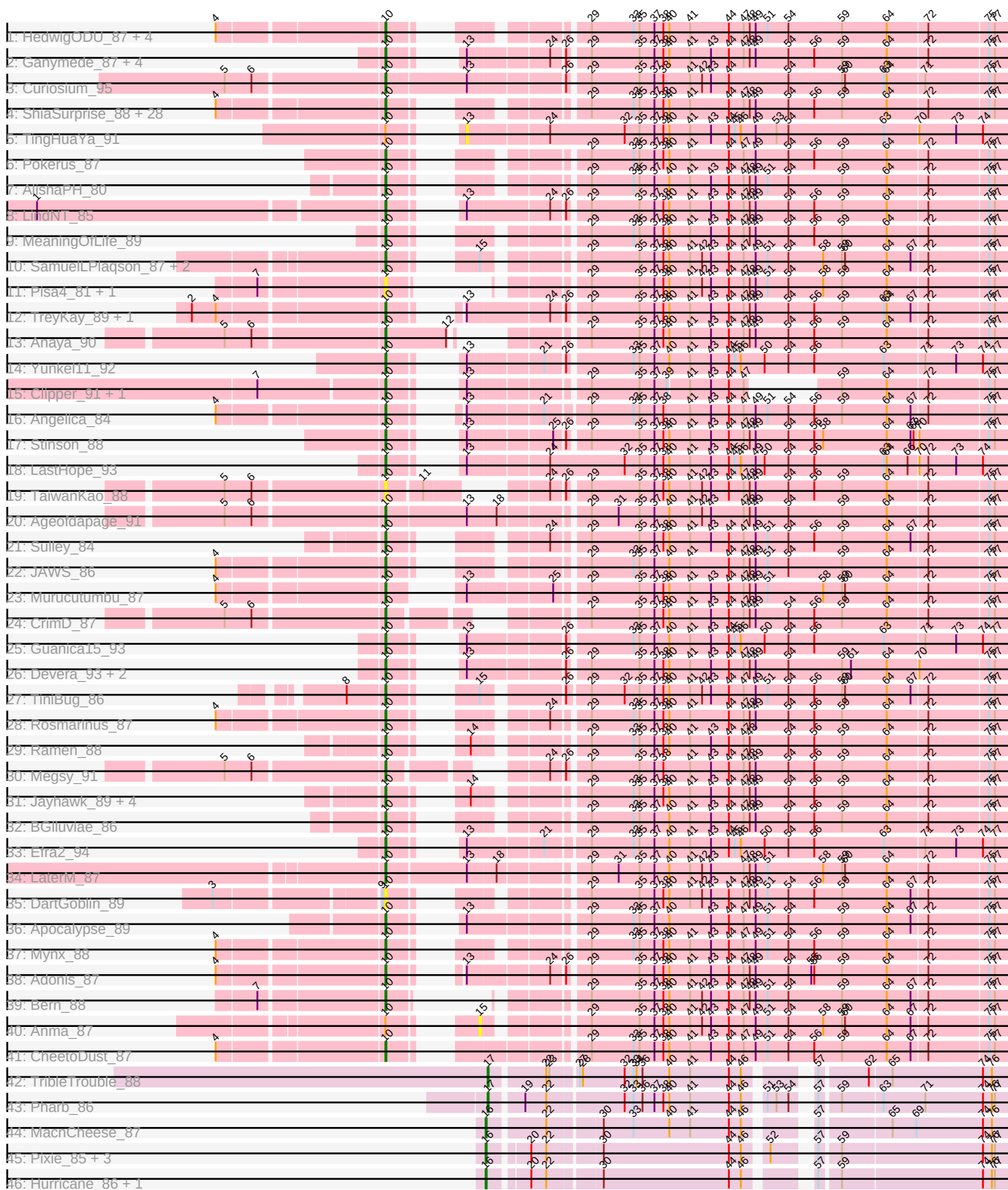




Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly 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 280294 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280294 has 97 members, 6 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 : Curiosium_95
- Track 4 : ShiaSurprise_88, BEEST_87, Homura_86, CallaLilly_87, Lunahalos_87, 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, Boiii_87, Asayake_87, Belladonna_87, Atiba_88, Blizzard_87, Inky_87
- Track 5 : TingHuaYa_91
- Track 6 : Pokerus_87
- Track 7 : AlishaPH_80
- Track 8 : LindNT_85
- Track 9 : MeaningOfLife_89
- Track 10 : SamuelLPlaqson_87, DrHayes_87, Urkel_87
- Track 11 : Pisa4_81, Pisa1_87
- Track 12 : TreyKay_89, Prithvi_89
- Track 13 : Anaya_90
- Track 14 : Yunkel11_92
- Track 15 : Clipper_91, MacKat_83
- Track 16 : Angelica_84
- Track 17 : Stinson_88
- Track 18 : LastHope_93
- Track 19 : TaiwanKao_88
- Track 20 : Ageofdapage_91
- Track 21 : Sulley_84
- Track 22 : JAWS_86
- Track 23 : Murucutumbu_87
- Track 24 : CrimD_87
- Track 25 : Guanica15_93
- Track 26 : Devera_93, Illumine_91, Dole_90
- Track 27 : TiniBug_86
- Track 28 : Rosmarinus_87
- Track 29 : Ramen_88
- Track 30 : Megsy_91
- Track 31 : Jayhawk_89, Rapunzel97_89, BarrelRoll_87, TruffulaTree_89, Slimphazie_89

- Track 32 : BGlluviae_86
- Track 33 : Efra2_94
- Track 34 : LaterM_87
- Track 35 : DartGoblin_89
- Track 36 : Apocalypse_89
- Track 37 : Mynx_88
- Track 38 : Adonis_87
- Track 39 : Bern_88
- Track 40 : Anma_87
- Track 41 : CheetoDust_87
- Track 42 : TribbleTrouble_88
- Track 43 : Pharb_86
- Track 44 : MacnCheese_87
- Track 45 : Pixie_85, TBond007_82, ShedlockHolmes_88, Lea83_86
- Track 46 : Hurricane_86, Keshu_88

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

The start number called the most often in the published annotations is 10, it was called in 82 of the 91 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, BGlluviae_86, BaghaKamala_86, BarrelRoll_87, Beezoo_90, Belladonna_87, Bern_88, Blizzard_87, Boiiii_87, CREW_86, CallaLilly_87, Capricorn_87, CaseJules_89, CheetoDust_87, Clipper_91, CrimD_87, Curiosium_95, Dalmuri_87, DartGoblin_89, Devera_93, Dole_90, DrHayes_87, Durfee_87, Efra2_94, Ganymede_87, 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_83, MeaningOfLife_89, Megsy_91, Murucutumbu_87, Mynx_88, Padfoot_87, Peel_87, Piatt_86, Pisa1_87, Pisa4_81, Pokerus_87, Prithvi_89, QuincyRose_85, Ramen_88, Rapunzel97_89, Rosmarinus_87, SamuelLPlagson_87, ShiaSurprise_88, Slimphazie_89, Spock_87, Stinson_88, Sulley_84, Tachez_87, TaiwanKao_88, TiniBug_86, 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:

- Anma_87, TingHuaYa_91,

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

- Hurricane_86, Keshu_88, Lea83_86, MacnCheese_87, Pharb_86, Pixie_85, ShedlockHolmes_88, TBond007_82, TribbleTrouble_88,

Summary by start number:

Start 10:

- Found in 88 of 97 (90.7%) of genes in pham
- Manual Annotations of this start: 82 of 91

- Called 97.7% of time when present
- Phage (with cluster) where this start called: ActinUp_88 (K1), Adephagia_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), Belladonna_87 (K1), Bern_88 (K1), Blizzard_87 (K1), Boiii_87 (K1), CREW_86 (K1), CallaLilly_87 (K1), Capricorn_87 (K1), CaseJules_89 (K1), CheetoDust_87 (K1), Clipper_91 (K1), CrimD_87 (K1), Curiosium_95 (K1), Dalmuri_87 (K1), DartGoblin_89 (K1), Devera_93 (K1), Dole_90 (K1), DrHayes_87 (K1), Durfee_87 (K1), Efra2_94 (K1), Ganymede_87 (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_83 (K1), MeaningOfLife_89 (K1), Megsy_91 (K1), Murucutumbu_87 (K1), Mynx_88 (K1), Padfoot_87 (K1), Peel_87 (K1), Piatt_86 (K1), Pisa1_87 (K1), Pisa4_81 (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), 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 13:

- Found in 26 of 97 (26.8%) of genes in pham
- No Manual Annotations of this start.
- Called 3.8% of time when present
- Phage (with cluster) where this start called: TingHuaYa_91 (K1),

Start 15:

- Found in 5 of 97 (5.2%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Anma_87 (K1),

Start 16:

- Found in 7 of 97 (7.2%) of genes in pham
- Manual Annotations of this start: 7 of 91
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hurricane_86 (K3), Keshu_88 (K3), Lea83_86 (K3), MacnCheese_87 (K3), Pixie_85 (K3), ShedlockHolmes_88 (K3), TBond007_82 (K3),

Start 17:

- Found in 2 of 97 (2.1%) of genes in pham
- Manual Annotations of this start: 2 of 91
- 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 2 clusters represented in this pham: K3, K1,

Info for manual annotations of cluster K1:

- Start number 10 was manually annotated 82 times for cluster K1.

Info for manual annotations of cluster K3:

- Start number 16 was manually annotated 7 times for cluster K3.
- Start number 17 was manually annotated 2 times for cluster K3.

Gene Information:

Gene: ActinUp_88 Start: 55559, Stop: 56098, Start Num: 10

Candidate Starts for ActinUp_88:

(4, 55403), (Start: 10 @55559 has 82 MA's), (29, 55688), (33, 55730), (35, 55736), (37, 55751), (38, 55760), (40, 55766), (41, 55787), (44, 55826), (47, 55841), (48, 55847), (49, 55853), (51, 55865), (54, 55886), (59, 55937), (64, 55982), (72, 56021), (75, 56078), (77, 56084),

Gene: Adephagia_86 Start: 55402, Stop: 55941, Start Num: 10

Candidate Starts for Adephagia_86:

(4, 55246), (Start: 10 @55402 has 82 MA's), (29, 55531), (33, 55573), (35, 55579), (37, 55594), (38, 55603), (40, 55609), (41, 55630), (44, 55669), (47, 55684), (48, 55690), (49, 55696), (51, 55708), (54, 55729), (59, 55780), (64, 55825), (72, 55864), (75, 55921), (77, 55927),

Gene: Adonis_87 Start: 55591, Stop: 56139, Start Num: 10

Candidate Starts for Adonis_87:

(4, 55435), (Start: 10 @55591 has 82 MA's), (13, 55624), (24, 55699), (26, 55711), (29, 55729), (35, 55777), (37, 55792), (38, 55801), (40, 55807), (41, 55828), (43, 55849), (44, 55867), (47, 55882), (48, 55888), (49, 55894), (54, 55927), (55, 55948), (56, 55951), (59, 55978), (64, 56023), (72, 56062), (75, 56119), (77, 56125),

Gene: Ageofdapage_91 Start: 56356, Stop: 56949, Start Num: 10

Candidate Starts for Ageofdapage_91:

(5, 56203), (6, 56230), (Start: 10 @56356 has 82 MA's), (13, 56434), (18, 56461), (29, 56539), (31, 56566), (35, 56587), (37, 56602), (40, 56617), (41, 56638), (42, 56650), (43, 56659), (47, 56692), (48, 56698), (49, 56704), (54, 56737), (59, 56788), (64, 56833), (72, 56872), (75, 56929), (77, 56935),

Gene: AlishaPH_80 Start: 52788, Stop: 53327, Start Num: 10

Candidate Starts for AlishaPH_80:

(Start: 10 @52788 has 82 MA's), (29, 52917), (33, 52959), (35, 52965), (37, 52980), (40, 52995), (41, 53016), (43, 53037), (44, 53055), (47, 53070), (48, 53076), (49, 53082), (51, 53094), (54, 53115), (59, 53166), (64, 53211), (72, 53250), (75, 53307), (77, 53313),

Gene: Anaya_90 Start: 56620, Stop: 57162, Start Num: 10

Candidate Starts for Anaya_90:

(5, 56467), (6, 56494), (Start: 10 @56620 has 82 MA's), (12, 56680), (29, 56752), (35, 56800), (37, 56815), (38, 56824), (40, 56830), (41, 56851), (43, 56872), (44, 56890), (47, 56905), (48, 56911), (49, 56917), (54, 56950), (56, 56974), (59, 57001), (64, 57046), (72, 57085), (75, 57142), (77, 57148),

Gene: Angelica_84 Start: 54828, Stop: 55379, Start Num: 10

Candidate Starts for Angelica_84:

(4, 54672), (Start: 10 @54828 has 82 MA's), (13, 54861), (21, 54930), (29, 54969), (33, 55011), (35, 55017), (37, 55032), (38, 55041), (41, 55068), (43, 55089), (44, 55107), (47, 55122), (49, 55134), (51, 55146), (54, 55167), (56, 55191), (59, 55218), (64, 55263), (67, 55287), (72, 55302), (75, 55359), (77,

55365),

Gene: Anma_87 Start: 55830, Stop: 56321, Start Num: 15

Candidate Starts for Anma_87:

(Start: 10 @55782 has 82 MA's), (15, 55830), (29, 55911), (35, 55959), (37, 55974), (38, 55983), (40, 55989), (41, 56010), (42, 56022), (43, 56031), (44, 56049), (47, 56064), (49, 56076), (51, 56088), (54, 56109), (58, 56142), (59, 56160), (60, 56163), (64, 56205), (67, 56229), (72, 56244), (75, 56301), (77, 56307),

Gene: Apocalypse_89 Start: 55750, Stop: 56301, Start Num: 10

Candidate Starts for Apocalypse_89:

(Start: 10 @55750 has 82 MA's), (13, 55783), (29, 55891), (33, 55933), (35, 55939), (37, 55954), (40, 55969), (43, 56011), (44, 56029), (47, 56044), (49, 56056), (51, 56068), (54, 56089), (59, 56140), (64, 56185), (67, 56209), (72, 56224), (75, 56281), (77, 56287),

Gene: Asayake_87 Start: 55717, Stop: 56256, Start Num: 10

Candidate Starts for Asayake_87:

(4, 55561), (Start: 10 @55717 has 82 MA's), (29, 55846), (33, 55888), (35, 55894), (37, 55909), (38, 55918), (40, 55924), (41, 55945), (44, 55984), (47, 55999), (48, 56005), (49, 56011), (54, 56044), (56, 56068), (59, 56095), (64, 56140), (72, 56179), (75, 56236), (77, 56242),

Gene: Atiba_88 Start: 55365, Stop: 55904, Start Num: 10

Candidate Starts for Atiba_88:

(4, 55209), (Start: 10 @55365 has 82 MA's), (29, 55494), (33, 55536), (35, 55542), (37, 55557), (38, 55566), (40, 55572), (41, 55593), (44, 55632), (47, 55647), (48, 55653), (49, 55659), (54, 55692), (56, 55716), (59, 55743), (64, 55788), (72, 55827), (75, 55884), (77, 55890),

Gene: BEEST_87 Start: 55717, Stop: 56256, Start Num: 10

Candidate Starts for BEEST_87:

(4, 55561), (Start: 10 @55717 has 82 MA's), (29, 55846), (33, 55888), (35, 55894), (37, 55909), (38, 55918), (40, 55924), (41, 55945), (44, 55984), (47, 55999), (48, 56005), (49, 56011), (54, 56044), (56, 56068), (59, 56095), (64, 56140), (72, 56179), (75, 56236), (77, 56242),

Gene: BGlluviae_86 Start: 55097, Stop: 55636, Start Num: 10

Candidate Starts for BGlluviae_86:

(Start: 10 @55097 has 82 MA's), (29, 55226), (33, 55268), (35, 55274), (37, 55289), (40, 55304), (41, 55325), (43, 55346), (44, 55364), (47, 55379), (48, 55385), (49, 55391), (54, 55424), (56, 55448), (59, 55475), (64, 55520), (72, 55559), (75, 55616), (77, 55622),

Gene: BaghaKamala_86 Start: 54945, Stop: 55484, Start Num: 10

Candidate Starts for BaghaKamala_86:

(4, 54789), (Start: 10 @54945 has 82 MA's), (29, 55074), (33, 55116), (35, 55122), (37, 55137), (38, 55146), (40, 55152), (41, 55173), (44, 55212), (47, 55227), (48, 55233), (49, 55239), (54, 55272), (56, 55296), (59, 55323), (64, 55368), (72, 55407), (75, 55464), (77, 55470),

Gene: BarrelRoll_87 Start: 55476, Stop: 56015, Start Num: 10

Candidate Starts for BarrelRoll_87:

(Start: 10 @55476 has 82 MA's), (14, 55515), (29, 55605), (33, 55647), (35, 55653), (37, 55668), (38, 55677), (40, 55683), (41, 55704), (43, 55725), (44, 55743), (47, 55758), (48, 55764), (49, 55770), (54, 55803), (56, 55827), (59, 55854), (64, 55899), (72, 55938), (75, 55995), (77, 56001),

Gene: Beezoo_90 Start: 56297, Stop: 56845, Start Num: 10

Candidate Starts for Beezoo_90:

(Start: 10 @56297 has 82 MA's), (13, 56330), (24, 56405), (26, 56417), (29, 56435), (35, 56483), (37, 56498), (38, 56507), (40, 56513), (41, 56534), (43, 56555), (44, 56573), (47, 56588), (48, 56594), (49, 56600), (54, 56633), (56, 56657), (59, 56684), (64, 56729), (72, 56768), (75, 56825), (77, 56831),

Gene: Belladonna_87 Start: 55520, Stop: 56059, Start Num: 10

Candidate Starts for Belladonna_87:

(4, 55364), (Start: 10 @55520 has 82 MA's), (29, 55649), (33, 55691), (35, 55697), (37, 55712), (38, 55721), (40, 55727), (41, 55748), (44, 55787), (47, 55802), (48, 55808), (49, 55814), (54, 55847), (56, 55871), (59, 55898), (64, 55943), (72, 55982), (75, 56039), (77, 56045),

Gene: Bern_88 Start: 54011, Stop: 54514, Start Num: 10

Candidate Starts for Bern_88:

(7, 53894), (Start: 10 @54011 has 82 MA's), (29, 54104), (35, 54152), (37, 54167), (38, 54176), (40, 54182), (41, 54203), (42, 54215), (43, 54224), (44, 54242), (47, 54257), (48, 54263), (49, 54269), (51, 54281), (54, 54302), (59, 54353), (64, 54398), (67, 54422), (72, 54437), (75, 54494), (77, 54500),

Gene: Blizzard_87 Start: 55717, Stop: 56256, Start Num: 10

Candidate Starts for Blizzard_87:

(4, 55561), (Start: 10 @55717 has 82 MA's), (29, 55846), (33, 55888), (35, 55894), (37, 55909), (38, 55918), (40, 55924), (41, 55945), (44, 55984), (47, 55999), (48, 56005), (49, 56011), (54, 56044), (56, 56068), (59, 56095), (64, 56140), (72, 56179), (75, 56236), (77, 56242),

Gene: Boiiii_87 Start: 55719, Stop: 56258, Start Num: 10

Candidate Starts for Boiiii_87:

(4, 55563), (Start: 10 @55719 has 82 MA's), (29, 55848), (33, 55890), (35, 55896), (37, 55911), (38, 55920), (40, 55926), (41, 55947), (44, 55986), (47, 56001), (48, 56007), (49, 56013), (54, 56046), (56, 56070), (59, 56097), (64, 56142), (72, 56181), (75, 56238), (77, 56244),

Gene: CREW_86 Start: 55520, Stop: 56059, Start Num: 10

Candidate Starts for CREW_86:

(4, 55364), (Start: 10 @55520 has 82 MA's), (29, 55649), (33, 55691), (35, 55697), (37, 55712), (38, 55721), (40, 55727), (41, 55748), (44, 55787), (47, 55802), (48, 55808), (49, 55814), (54, 55847), (56, 55871), (59, 55898), (64, 55943), (72, 55982), (75, 56039), (77, 56045),

Gene: CallaLilly_87 Start: 55443, Stop: 55982, Start Num: 10

Candidate Starts for CallaLilly_87:

(4, 55287), (Start: 10 @55443 has 82 MA's), (29, 55572), (33, 55614), (35, 55620), (37, 55635), (38, 55644), (40, 55650), (41, 55671), (44, 55710), (47, 55725), (48, 55731), (49, 55737), (54, 55770), (56, 55794), (59, 55821), (64, 55866), (72, 55905), (75, 55962), (77, 55968),

Gene: Capricorn_87 Start: 55520, Stop: 56059, Start Num: 10

Candidate Starts for Capricorn_87:

(4, 55364), (Start: 10 @55520 has 82 MA's), (29, 55649), (33, 55691), (35, 55697), (37, 55712), (38, 55721), (40, 55727), (41, 55748), (44, 55787), (47, 55802), (48, 55808), (49, 55814), (54, 55847), (56, 55871), (59, 55898), (64, 55943), (72, 55982), (75, 56039), (77, 56045),

Gene: CaseJules_89 Start: 55717, Stop: 56256, Start Num: 10

Candidate Starts for CaseJules_89:

(4, 55561), (Start: 10 @55717 has 82 MA's), (29, 55846), (33, 55888), (35, 55894), (37, 55909), (38, 55918), (40, 55924), (41, 55945), (44, 55984), (47, 55999), (48, 56005), (49, 56011), (54, 56044), (56, 56068), (59, 56095), (64, 56140), (72, 56179), (75, 56236), (77, 56242),

Gene: CheetoDust_87 Start: 54906, Stop: 55457, Start Num: 10

Candidate Starts for CheetoDust_87:

(4, 54750), (Start: 10 @54906 has 82 MA's), (29, 55047), (33, 55089), (35, 55095), (37, 55110), (38, 55119), (40, 55125), (41, 55146), (43, 55167), (44, 55185), (47, 55200), (49, 55212), (51, 55224), (54, 55245), (56, 55269), (59, 55296), (64, 55341), (67, 55365), (72, 55380), (75, 55437), (77, 55443),

Gene: Clipper_91 Start: 56263, Stop: 56739, Start Num: 10

Candidate Starts for Clipper_91:

(7, 56143), (Start: 10 @56263 has 82 MA's), (13, 56296), (29, 56401), (35, 56449), (37, 56464), (39, 56476), (41, 56497), (43, 56518), (44, 56536), (47, 56551), (59, 56578), (64, 56623), (72, 56662), (75, 56719), (77, 56725),

Gene: CrimD_87 Start: 55556, Stop: 56107, Start Num: 10

Candidate Starts for CrimD_87:

(5, 55403), (6, 55430), (Start: 10 @55556 has 82 MA's), (29, 55697), (35, 55745), (37, 55760), (38, 55769), (40, 55775), (41, 55796), (43, 55817), (44, 55835), (47, 55850), (48, 55856), (49, 55862), (54, 55895), (56, 55919), (59, 55946), (64, 55991), (72, 56030), (75, 56087), (77, 56093),

Gene: Curiosium_95 Start: 56915, Stop: 57508, Start Num: 10

Candidate Starts for Curiosium_95:

(5, 56762), (6, 56789), (Start: 10 @56915 has 82 MA's), (13, 56993), (26, 57080), (29, 57098), (35, 57146), (37, 57161), (38, 57170), (41, 57197), (42, 57209), (43, 57218), (44, 57236), (54, 57296), (59, 57347), (60, 57350), (63, 57389), (64, 57392), (71, 57428), (75, 57488), (77, 57494),

Gene: Dalmuri_87 Start: 55520, Stop: 56059, Start Num: 10

Candidate Starts for Dalmuri_87:

(4, 55364), (Start: 10 @55520 has 82 MA's), (29, 55649), (33, 55691), (35, 55697), (37, 55712), (38, 55721), (40, 55727), (41, 55748), (44, 55787), (47, 55802), (48, 55808), (49, 55814), (54, 55847), (56, 55871), (59, 55898), (64, 55943), (72, 55982), (75, 56039), (77, 56045),

Gene: DartGoblin_89 Start: 55630, Stop: 56169, Start Num: 10

Candidate Starts for DartGoblin_89:

(3, 55477), (9, 55627), (Start: 10 @55630 has 82 MA's), (29, 55759), (35, 55807), (37, 55822), (38, 55831), (40, 55837), (41, 55858), (42, 55870), (43, 55879), (44, 55897), (47, 55912), (48, 55918), (49, 55924), (51, 55936), (54, 55957), (56, 55981), (59, 56008), (64, 56053), (67, 56077), (72, 56092), (75, 56149), (77, 56155),

Gene: Devera_93 Start: 56388, Stop: 56936, Start Num: 10

Candidate Starts for Devera_93:

(Start: 10 @56388 has 82 MA's), (13, 56421), (26, 56508), (29, 56526), (35, 56574), (37, 56589), (38, 56598), (40, 56604), (41, 56625), (43, 56646), (44, 56664), (47, 56679), (48, 56685), (49, 56691), (54, 56724), (59, 56775), (61, 56784), (64, 56820), (70, 56850), (75, 56916), (77, 56922),

Gene: Dole_90 Start: 56391, Stop: 56939, Start Num: 10

Candidate Starts for Dole_90:

(Start: 10 @56391 has 82 MA's), (13, 56424), (26, 56511), (29, 56529), (35, 56577), (37, 56592), (38, 56601), (40, 56607), (41, 56628), (43, 56649), (44, 56667), (47, 56682), (48, 56688), (49, 56694), (54, 56727), (59, 56778), (61, 56787), (64, 56823), (70, 56853), (75, 56919), (77, 56925),

Gene: DrHayes_87 Start: 55782, Stop: 56321, Start Num: 10

Candidate Starts for DrHayes_87:

(Start: 10 @55782 has 82 MA's), (15, 55830), (29, 55911), (35, 55959), (37, 55974), (38, 55983), (40, 55989), (41, 56010), (42, 56022), (43, 56031), (44, 56049), (47, 56064), (49, 56076), (51, 56088), (54, 56109), (58, 56142), (59, 56160), (60, 56163), (64, 56205), (67, 56229), (72, 56244), (75, 56301), (77,

56307),

Gene: Durfee_87 Start: 55717, Stop: 56256, Start Num: 10

Candidate Starts for Durfee_87:

(4, 55561), (Start: 10 @55717 has 82 MA's), (29, 55846), (33, 55888), (35, 55894), (37, 55909), (38, 55918), (40, 55924), (41, 55945), (44, 55984), (47, 55999), (48, 56005), (49, 56011), (54, 56044), (56, 56068), (59, 56095), (64, 56140), (72, 56179), (75, 56236), (77, 56242),

Gene: Efra2_94 Start: 56866, Stop: 57423, Start Num: 10

Candidate Starts for Efra2_94:

(Start: 10 @56866 has 82 MA's), (13, 56899), (21, 56971), (29, 57010), (33, 57052), (35, 57058), (37, 57073), (40, 57088), (41, 57109), (43, 57130), (44, 57148), (45, 57154), (46, 57160), (50, 57184), (54, 57208), (56, 57232), (63, 57301), (71, 57340), (73, 57370), (74, 57397), (77, 57409),

Gene: Ganymede_87 Start: 55523, Stop: 56071, Start Num: 10

Candidate Starts for Ganymede_87:

(Start: 10 @55523 has 82 MA's), (13, 55556), (24, 55631), (26, 55643), (29, 55661), (35, 55709), (37, 55724), (38, 55733), (40, 55739), (41, 55760), (43, 55781), (44, 55799), (47, 55814), (48, 55820), (49, 55826), (54, 55859), (56, 55883), (59, 55910), (64, 55955), (72, 55994), (75, 56051), (77, 56057),

Gene: Guanica15_93 Start: 56558, Stop: 57112, Start Num: 10

Candidate Starts for Guanica15_93:

(Start: 10 @56558 has 82 MA's), (13, 56591), (26, 56681), (33, 56741), (35, 56747), (37, 56762), (40, 56777), (41, 56798), (43, 56819), (44, 56837), (45, 56843), (46, 56849), (50, 56873), (54, 56897), (56, 56921), (63, 56990), (71, 57029), (73, 57059), (74, 57086), (77, 57098),

Gene: HedwigODU_87 Start: 55559, Stop: 56098, Start Num: 10

Candidate Starts for HedwigODU_87:

(4, 55403), (Start: 10 @55559 has 82 MA's), (29, 55688), (33, 55730), (35, 55736), (37, 55751), (38, 55760), (40, 55766), (41, 55787), (44, 55826), (47, 55841), (48, 55847), (49, 55853), (51, 55865), (54, 55886), (59, 55937), (64, 55982), (72, 56021), (75, 56078), (77, 56084),

Gene: Homura_86 Start: 55520, Stop: 56059, Start Num: 10

Candidate Starts for Homura_86:

(4, 55364), (Start: 10 @55520 has 82 MA's), (29, 55649), (33, 55691), (35, 55697), (37, 55712), (38, 55721), (40, 55727), (41, 55748), (44, 55787), (47, 55802), (48, 55808), (49, 55814), (54, 55847), (56, 55871), (59, 55898), (64, 55943), (72, 55982), (75, 56039), (77, 56045),

Gene: Hurricane_86 Start: 54730, Stop: 55197, Start Num: 16

Candidate Starts for Hurricane_86:

(Start: 16 @54730 has 7 MA's), (20, 54763), (22, 54778), (30, 54826), (44, 54952), (46, 54964), (57, 55012), (59, 55030), (74, 55168), (76, 55177), (77, 55180),

Gene: Hyperbowlee_86 Start: 55717, Stop: 56256, Start Num: 10

Candidate Starts for Hyperbowlee_86:

(4, 55561), (Start: 10 @55717 has 82 MA's), (29, 55846), (33, 55888), (35, 55894), (37, 55909), (38, 55918), (40, 55924), (41, 55945), (44, 55984), (47, 55999), (48, 56005), (49, 56011), (54, 56044), (56, 56068), (59, 56095), (64, 56140), (72, 56179), (75, 56236), (77, 56242),

Gene: Illumine_91 Start: 56390, Stop: 56938, Start Num: 10

Candidate Starts for Illumine_91:

(Start: 10 @56390 has 82 MA's), (13, 56423), (26, 56510), (29, 56528), (35, 56576), (37, 56591), (38, 56600), (40, 56606), (41, 56627), (43, 56648), (44, 56666), (47, 56681), (48, 56687), (49, 56693), (54,

56726), (59, 56777), (61, 56786), (64, 56822), (70, 56852), (75, 56918), (77, 56924),

Gene: Inky_87 Start: 55520, Stop: 56059, Start Num: 10

Candidate Starts for Inky_87:

(4, 55364), (Start: 10 @55520 has 82 MA's), (29, 55649), (33, 55691), (35, 55697), (37, 55712), (38, 55721), (40, 55727), (41, 55748), (44, 55787), (47, 55802), (48, 55808), (49, 55814), (54, 55847), (56, 55871), (59, 55898), (64, 55943), (72, 55982), (75, 56039), (77, 56045),

Gene: JAWS_86 Start: 55506, Stop: 56045, Start Num: 10

Candidate Starts for JAWS_86:

(4, 55350), (Start: 10 @55506 has 82 MA's), (29, 55635), (33, 55677), (35, 55683), (37, 55698), (40, 55713), (41, 55734), (44, 55773), (47, 55788), (48, 55794), (49, 55800), (51, 55812), (54, 55833), (59, 55884), (64, 55929), (72, 55968), (75, 56025), (77, 56031),

Gene: Jarvi_87 Start: 55520, Stop: 56059, Start Num: 10

Candidate Starts for Jarvi_87:

(4, 55364), (Start: 10 @55520 has 82 MA's), (29, 55649), (33, 55691), (35, 55697), (37, 55712), (38, 55721), (40, 55727), (41, 55748), (44, 55787), (47, 55802), (48, 55808), (49, 55814), (54, 55847), (56, 55871), (59, 55898), (64, 55943), (72, 55982), (75, 56039), (77, 56045),

Gene: Jayhawk_89 Start: 55536, Stop: 56075, Start Num: 10

Candidate Starts for Jayhawk_89:

(Start: 10 @55536 has 82 MA's), (14, 55575), (29, 55665), (33, 55707), (35, 55713), (37, 55728), (38, 55737), (40, 55743), (41, 55764), (43, 55785), (44, 55803), (47, 55818), (48, 55824), (49, 55830), (54, 55863), (56, 55887), (59, 55914), (64, 55959), (72, 55998), (75, 56055), (77, 56061),

Gene: Jeckyll_87 Start: 55520, Stop: 56059, Start Num: 10

Candidate Starts for Jeckyll_87:

(4, 55364), (Start: 10 @55520 has 82 MA's), (29, 55649), (33, 55691), (35, 55697), (37, 55712), (38, 55721), (40, 55727), (41, 55748), (44, 55787), (47, 55802), (48, 55808), (49, 55814), (54, 55847), (56, 55871), (59, 55898), (64, 55943), (72, 55982), (75, 56039), (77, 56045),

Gene: Joy99_88 Start: 55649, Stop: 56188, Start Num: 10

Candidate Starts for Joy99_88:

(4, 55493), (Start: 10 @55649 has 82 MA's), (29, 55778), (33, 55820), (35, 55826), (37, 55841), (38, 55850), (40, 55856), (41, 55877), (44, 55916), (47, 55931), (48, 55937), (49, 55943), (54, 55976), (56, 56000), (59, 56027), (64, 56072), (72, 56111), (75, 56168), (77, 56174),

Gene: Keshu_88 Start: 55022, Stop: 55489, Start Num: 16

Candidate Starts for Keshu_88:

(Start: 16 @55022 has 7 MA's), (20, 55055), (22, 55070), (30, 55118), (44, 55244), (46, 55256), (57, 55304), (59, 55322), (74, 55460), (76, 55469), (77, 55472),

Gene: LastHope_93 Start: 56273, Stop: 56836, Start Num: 10

Candidate Starts for LastHope_93:

(Start: 10 @56273 has 82 MA's), (13, 56306), (24, 56381), (32, 56456), (35, 56471), (37, 56486), (38, 56495), (40, 56501), (41, 56522), (43, 56543), (44, 56561), (45, 56567), (46, 56573), (49, 56588), (50, 56597), (54, 56621), (56, 56645), (63, 56714), (64, 56717), (66, 56738), (70, 56747), (72, 56756), (73, 56783), (74, 56810),

Gene: LaterM_87 Start: 55885, Stop: 56478, Start Num: 10

Candidate Starts for LaterM_87:

(Start: 10 @55885 has 82 MA's), (13, 55963), (18, 55990), (29, 56068), (31, 56095), (35, 56116), (37, 56131), (40, 56146), (41, 56167), (42, 56179), (43, 56188), (47, 56221), (48, 56227), (49, 56233), (51, 56245), (58, 56299), (59, 56317), (60, 56320), (64, 56362), (72, 56401), (75, 56458), (77, 56464),

Gene: Lea83_86 Start: 54851, Stop: 55318, Start Num: 16

Candidate Starts for Lea83_86:

(Start: 16 @54851 has 7 MA's), (20, 54884), (22, 54899), (30, 54947), (44, 55073), (46, 55085), (52, 55103), (57, 55133), (59, 55151), (74, 55289), (76, 55298), (77, 55301),

Gene: LindNT_85 Start: 55622, Stop: 56173, Start Num: 10

Candidate Starts for LindNT_85:

(1, 55286), (Start: 10 @55622 has 82 MA's), (13, 55655), (24, 55733), (26, 55745), (29, 55763), (35, 55811), (37, 55826), (38, 55835), (40, 55841), (41, 55862), (43, 55883), (44, 55901), (47, 55916), (48, 55922), (49, 55928), (54, 55961), (56, 55985), (59, 56012), (64, 56057), (72, 56096), (75, 56153), (77, 56159),

Gene: Llorens_87 Start: 55520, Stop: 56059, Start Num: 10

Candidate Starts for Llorens_87:

(4, 55364), (Start: 10 @55520 has 82 MA's), (29, 55649), (33, 55691), (35, 55697), (37, 55712), (38, 55721), (40, 55727), (41, 55748), (44, 55787), (47, 55802), (48, 55808), (49, 55814), (54, 55847), (56, 55871), (59, 55898), (64, 55943), (72, 55982), (75, 56039), (77, 56045),

Gene: Lunahalos_87 Start: 55520, Stop: 56059, Start Num: 10

Candidate Starts for Lunahalos_87:

(4, 55364), (Start: 10 @55520 has 82 MA's), (29, 55649), (33, 55691), (35, 55697), (37, 55712), (38, 55721), (40, 55727), (41, 55748), (44, 55787), (47, 55802), (48, 55808), (49, 55814), (54, 55847), (56, 55871), (59, 55898), (64, 55943), (72, 55982), (75, 56039), (77, 56045),

Gene: MacKat_83 Start: 51147, Stop: 51623, Start Num: 10

Candidate Starts for MacKat_83:

(7, 51027), (Start: 10 @51147 has 82 MA's), (13, 51180), (29, 51285), (35, 51333), (37, 51348), (39, 51360), (41, 51381), (43, 51402), (44, 51420), (47, 51435), (59, 51462), (64, 51507), (72, 51546), (75, 51603), (77, 51609),

Gene: MacnCheese_87 Start: 55279, Stop: 55746, Start Num: 16

Candidate Starts for MacnCheese_87:

(Start: 16 @55279 has 7 MA's), (22, 55330), (30, 55378), (33, 55408), (40, 55444), (41, 55465), (44, 55504), (46, 55516), (57, 55564), (65, 55630), (69, 55654), (74, 55720), (76, 55729),

Gene: MeaningOfLife_89 Start: 56205, Stop: 56744, Start Num: 10

Candidate Starts for MeaningOfLife_89:

(Start: 10 @56205 has 82 MA's), (29, 56334), (33, 56376), (35, 56382), (37, 56397), (38, 56406), (40, 56412), (41, 56433), (43, 56454), (44, 56472), (47, 56487), (48, 56493), (49, 56499), (54, 56532), (56, 56556), (59, 56583), (64, 56628), (72, 56667), (75, 56724), (77, 56730),

Gene: Megsy_91 Start: 55851, Stop: 56402, Start Num: 10

Candidate Starts for Megsy_91:

(5, 55698), (6, 55725), (Start: 10 @55851 has 82 MA's), (24, 55962), (26, 55974), (29, 55992), (35, 56040), (37, 56055), (38, 56064), (41, 56091), (43, 56112), (44, 56130), (47, 56145), (48, 56151), (49, 56157), (54, 56190), (56, 56214), (59, 56241), (64, 56286), (72, 56325), (75, 56382), (77, 56388),

Gene: Murucutumbu_87 Start: 56412, Stop: 56960, Start Num: 10

Candidate Starts for Murucutumbu_87:

(4, 56256), (Start: 10 @56412 has 82 MA's), (13, 56445), (25, 56523), (29, 56550), (35, 56598), (37, 56613), (38, 56622), (40, 56628), (41, 56649), (43, 56670), (44, 56688), (47, 56703), (48, 56709), (49, 56715), (51, 56727), (58, 56781), (59, 56799), (60, 56802), (64, 56844), (72, 56883), (75, 56940), (77, 56946),

Gene: Mynx_88 Start: 55828, Stop: 56367, Start Num: 10

Candidate Starts for Mynx_88:

(4, 55672), (Start: 10 @55828 has 82 MA's), (29, 55957), (33, 55999), (35, 56005), (37, 56020), (38, 56029), (40, 56035), (41, 56056), (43, 56077), (44, 56095), (47, 56110), (49, 56122), (51, 56134), (54, 56155), (56, 56179), (59, 56206), (64, 56251), (72, 56290), (75, 56347), (77, 56353),

Gene: Padfoot_87 Start: 55717, Stop: 56256, Start Num: 10

Candidate Starts for Padfoot_87:

(4, 55561), (Start: 10 @55717 has 82 MA's), (29, 55846), (33, 55888), (35, 55894), (37, 55909), (38, 55918), (40, 55924), (41, 55945), (44, 55984), (47, 55999), (48, 56005), (49, 56011), (54, 56044), (56, 56068), (59, 56095), (64, 56140), (72, 56179), (75, 56236), (77, 56242),

Gene: Peel_87 Start: 55522, Stop: 56061, Start Num: 10

Candidate Starts for Peel_87:

(4, 55366), (Start: 10 @55522 has 82 MA's), (29, 55651), (33, 55693), (35, 55699), (37, 55714), (38, 55723), (40, 55729), (41, 55750), (44, 55789), (47, 55804), (48, 55810), (49, 55816), (54, 55849), (56, 55873), (59, 55900), (64, 55945), (72, 55984), (75, 56041), (77, 56047),

Gene: Pharb_86 Start: 54652, Stop: 55125, Start Num: 17

Candidate Starts for Pharb_86:

(Start: 17 @54652 has 2 MA's), (19, 54682), (22, 54703), (32, 54775), (33, 54784), (36, 54793), (37, 54805), (38, 54814), (40, 54820), (41, 54841), (44, 54880), (46, 54892), (51, 54907), (53, 54916), (54, 54928), (57, 54940), (59, 54958), (63, 54997), (71, 55039), (74, 55096), (76, 55105), (77, 55108),

Gene: Piatt_86 Start: 55717, Stop: 56256, Start Num: 10

Candidate Starts for Piatt_86:

(4, 55561), (Start: 10 @55717 has 82 MA's), (29, 55846), (33, 55888), (35, 55894), (37, 55909), (38, 55918), (40, 55924), (41, 55945), (44, 55984), (47, 55999), (48, 56005), (49, 56011), (54, 56044), (56, 56068), (59, 56095), (64, 56140), (72, 56179), (75, 56236), (77, 56242),

Gene: Pisa1_87 Start: 55884, Stop: 56387, Start Num: 10

Candidate Starts for Pisa1_87:

(7, 55767), (Start: 10 @55884 has 82 MA's), (29, 55977), (35, 56025), (37, 56040), (38, 56049), (40, 56055), (41, 56076), (42, 56088), (43, 56097), (44, 56115), (47, 56130), (48, 56136), (49, 56142), (51, 56154), (54, 56175), (58, 56208), (59, 56226), (64, 56271), (72, 56310), (75, 56367), (77, 56373),

Gene: Pisa4_81 Start: 51253, Stop: 51756, Start Num: 10

Candidate Starts for Pisa4_81:

(7, 51136), (Start: 10 @51253 has 82 MA's), (29, 51346), (35, 51394), (37, 51409), (38, 51418), (40, 51424), (41, 51445), (42, 51457), (43, 51466), (44, 51484), (47, 51499), (48, 51505), (49, 51511), (51, 51523), (54, 51544), (58, 51577), (59, 51595), (64, 51640), (72, 51679), (75, 51736), (77, 51742),

Gene: Pixie_85 Start: 54434, Stop: 54901, Start Num: 16

Candidate Starts for Pixie_85:

(Start: 16 @54434 has 7 MA's), (20, 54467), (22, 54482), (30, 54530), (44, 54656), (46, 54668), (52, 54686), (57, 54716), (59, 54734), (74, 54872), (76, 54881), (77, 54884),

Gene: Pokerus_87 Start: 55526, Stop: 56065, Start Num: 10

Candidate Starts for Pokerus_87:

(Start: 10 @55526 has 82 MA's), (29, 55655), (33, 55697), (35, 55703), (37, 55718), (38, 55727), (40, 55733), (41, 55754), (44, 55793), (47, 55808), (49, 55820), (54, 55853), (56, 55877), (59, 55904), (64, 55949), (72, 55988), (75, 56045), (77, 56051),

Gene: Prithvi_89 Start: 55920, Stop: 56471, Start Num: 10

Candidate Starts for Prithvi_89:

(2, 55740), (4, 55764), (Start: 10 @55920 has 82 MA's), (13, 55953), (24, 56031), (26, 56043), (29, 56061), (35, 56109), (37, 56124), (38, 56133), (40, 56139), (41, 56160), (43, 56181), (44, 56199), (47, 56214), (48, 56220), (49, 56226), (54, 56259), (56, 56283), (59, 56310), (63, 56352), (64, 56355), (67, 56379), (72, 56394), (75, 56451), (77, 56457),

Gene: QuincyRose_85 Start: 55523, Stop: 56071, Start Num: 10

Candidate Starts for QuincyRose_85:

(Start: 10 @55523 has 82 MA's), (13, 55556), (24, 55631), (26, 55643), (29, 55661), (35, 55709), (37, 55724), (38, 55733), (40, 55739), (41, 55760), (43, 55781), (44, 55799), (47, 55814), (48, 55820), (49, 55826), (54, 55859), (56, 55883), (59, 55910), (64, 55955), (72, 55994), (75, 56051), (77, 56057),

Gene: Ramen_88 Start: 55275, Stop: 55814, Start Num: 10

Candidate Starts for Ramen_88:

(Start: 10 @55275 has 82 MA's), (14, 55314), (29, 55404), (33, 55446), (35, 55452), (37, 55467), (38, 55476), (40, 55482), (41, 55503), (43, 55524), (44, 55542), (47, 55557), (48, 55563), (54, 55602), (56, 55626), (59, 55653), (64, 55698), (72, 55737), (75, 55794), (77, 55800),

Gene: Rapunzel97_89 Start: 55491, Stop: 56030, Start Num: 10

Candidate Starts for Rapunzel97_89:

(Start: 10 @55491 has 82 MA's), (14, 55530), (29, 55620), (33, 55662), (35, 55668), (37, 55683), (38, 55692), (40, 55698), (41, 55719), (43, 55740), (44, 55758), (47, 55773), (48, 55779), (49, 55785), (54, 55818), (56, 55842), (59, 55869), (64, 55914), (72, 55953), (75, 56010), (77, 56016),

Gene: Rosmarinus_87 Start: 55508, Stop: 56047, Start Num: 10

Candidate Starts for Rosmarinus_87:

(4, 55352), (Start: 10 @55508 has 82 MA's), (24, 55607), (29, 55637), (33, 55679), (35, 55685), (37, 55700), (38, 55709), (40, 55715), (41, 55736), (44, 55775), (47, 55790), (48, 55796), (49, 55802), (54, 55835), (56, 55859), (59, 55886), (64, 55931), (72, 55970), (75, 56027), (77, 56033),

Gene: SamuelLPlaqson_87 Start: 55782, Stop: 56321, Start Num: 10

Candidate Starts for SamuelLPlaqson_87:

(Start: 10 @55782 has 82 MA's), (15, 55830), (29, 55911), (35, 55959), (37, 55974), (38, 55983), (40, 55989), (41, 56010), (42, 56022), (43, 56031), (44, 56049), (47, 56064), (49, 56076), (51, 56088), (54, 56109), (58, 56142), (59, 56160), (60, 56163), (64, 56205), (67, 56229), (72, 56244), (75, 56301), (77, 56307),

Gene: ShedlockHolmes_88 Start: 54857, Stop: 55324, Start Num: 16

Candidate Starts for ShedlockHolmes_88:

(Start: 16 @54857 has 7 MA's), (20, 54890), (22, 54905), (30, 54953), (44, 55079), (46, 55091), (52, 55109), (57, 55139), (59, 55157), (74, 55295), (76, 55304), (77, 55307),

Gene: ShiaSurprise_88 Start: 55717, Stop: 56256, Start Num: 10

Candidate Starts for ShiaSurprise_88:

(4, 55561), (Start: 10 @55717 has 82 MA's), (29, 55846), (33, 55888), (35, 55894), (37, 55909), (38, 55918), (40, 55924), (41, 55945), (44, 55984), (47, 55999), (48, 56005), (49, 56011), (54, 56044), (56, 56068), (59, 56095), (64, 56140), (72, 56179), (75, 56236), (77, 56242),

Gene: Slimphazie_89 Start: 55947, Stop: 56486, Start Num: 10

Candidate Starts for Slimphazie_89:

(Start: 10 @55947 has 82 MA's), (14, 55986), (29, 56076), (33, 56118), (35, 56124), (37, 56139), (38, 56148), (40, 56154), (41, 56175), (43, 56196), (44, 56214), (47, 56229), (48, 56235), (49, 56241), (54, 56274), (56, 56298), (59, 56325), (64, 56370), (72, 56409), (75, 56466), (77, 56472),

Gene: Spock_87 Start: 55521, Stop: 56060, Start Num: 10

Candidate Starts for Spock_87:

(4, 55365), (Start: 10 @55521 has 82 MA's), (29, 55650), (33, 55692), (35, 55698), (37, 55713), (38, 55722), (40, 55728), (41, 55749), (44, 55788), (47, 55803), (48, 55809), (49, 55815), (54, 55848), (56, 55872), (59, 55899), (64, 55944), (72, 55983), (75, 56040), (77, 56046),

Gene: Stinson_88 Start: 55691, Stop: 56239, Start Num: 10

Candidate Starts for Stinson_88:

(Start: 10 @55691 has 82 MA's), (13, 55724), (25, 55802), (26, 55811), (29, 55829), (35, 55877), (37, 55892), (38, 55901), (40, 55907), (41, 55928), (43, 55949), (44, 55967), (47, 55982), (48, 55988), (49, 55994), (54, 56027), (56, 56051), (58, 56060), (64, 56123), (67, 56147), (68, 56150), (70, 56153), (75, 56219), (77, 56225),

Gene: Sulley_84 Start: 55116, Stop: 55655, Start Num: 10

Candidate Starts for Sulley_84:

(Start: 10 @55116 has 82 MA's), (24, 55215), (29, 55245), (35, 55293), (37, 55308), (38, 55317), (40, 55323), (41, 55344), (43, 55365), (44, 55383), (47, 55398), (49, 55410), (51, 55422), (54, 55443), (56, 55467), (59, 55494), (64, 55539), (67, 55563), (72, 55578), (75, 55635), (77, 55641),

Gene: TBond007_82 Start: 54432, Stop: 54899, Start Num: 16

Candidate Starts for TBond007_82:

(Start: 16 @54432 has 7 MA's), (20, 54465), (22, 54480), (30, 54528), (44, 54654), (46, 54666), (52, 54684), (57, 54714), (59, 54732), (74, 54870), (76, 54879), (77, 54882),

Gene: Tachez_87 Start: 55365, Stop: 55904, Start Num: 10

Candidate Starts for Tachez_87:

(4, 55209), (Start: 10 @55365 has 82 MA's), (29, 55494), (33, 55536), (35, 55542), (37, 55557), (38, 55566), (40, 55572), (41, 55593), (44, 55632), (47, 55647), (48, 55653), (49, 55659), (54, 55692), (56, 55716), (59, 55743), (64, 55788), (72, 55827), (75, 55884), (77, 55890),

Gene: TaiwanKao_88 Start: 55563, Stop: 56111, Start Num: 10

Candidate Starts for TaiwanKao_88:

(5, 55410), (6, 55437), (Start: 10 @55563 has 82 MA's), (11, 55596), (24, 55671), (26, 55683), (29, 55701), (35, 55749), (37, 55764), (38, 55773), (40, 55779), (41, 55800), (42, 55812), (43, 55821), (44, 55839), (47, 55854), (48, 55860), (49, 55866), (54, 55899), (56, 55923), (59, 55950), (64, 55995), (72, 56034), (75, 56091), (77, 56097),

Gene: TingHuaYa_91 Start: 56631, Stop: 57164, Start Num: 13

Candidate Starts for TingHuaYa_91:

(Start: 10 @56598 has 82 MA's), (13, 56631), (24, 56706), (32, 56781), (35, 56796), (37, 56811), (38, 56820), (40, 56826), (41, 56847), (43, 56868), (44, 56886), (45, 56892), (46, 56898), (49, 56913), (53, 56934), (54, 56946), (63, 57042), (70, 57075), (73, 57111), (74, 57138),

Gene: TiniBug_86 Start: 55892, Stop: 56437, Start Num: 10

Candidate Starts for TiniBug_86:

(8, 55856), (Start: 10 @55892 has 82 MA's), (15, 55940), (26, 56006), (29, 56027), (32, 56060), (35, 56075), (37, 56090), (38, 56099), (40, 56105), (41, 56126), (42, 56138), (43, 56147), (44, 56165), (47, 56180), (49, 56192), (51, 56204), (54, 56225), (56, 56249), (59, 56276), (60, 56279), (64, 56321), (67, 56345), (72, 56360), (75, 56417), (77, 56423),

Gene: Topper_87 Start: 55520, Stop: 56059, Start Num: 10

Candidate Starts for Topper_87:

(4, 55364), (Start: 10 @55520 has 82 MA's), (29, 55649), (33, 55691), (35, 55697), (37, 55712), (38, 55721), (40, 55727), (41, 55748), (44, 55787), (47, 55802), (48, 55808), (49, 55814), (54, 55847), (56, 55871), (59, 55898), (64, 55943), (72, 55982), (75, 56039), (77, 56045),

Gene: TreyKay_89 Start: 55920, Stop: 56471, Start Num: 10

Candidate Starts for TreyKay_89:

(2, 55740), (4, 55764), (Start: 10 @55920 has 82 MA's), (13, 55953), (24, 56031), (26, 56043), (29, 56061), (35, 56109), (37, 56124), (38, 56133), (40, 56139), (41, 56160), (43, 56181), (44, 56199), (47, 56214), (48, 56220), (49, 56226), (54, 56259), (56, 56283), (59, 56310), (63, 56352), (64, 56355), (67, 56379), (72, 56394), (75, 56451), (77, 56457),

Gene: TribbleTrouble_88 Start: 56688, Stop: 57158, Start Num: 17

Candidate Starts for TribbleTrouble_88:

(Start: 17 @56688 has 2 MA's), (22, 56739), (23, 56742), (27, 56766), (28, 56769), (32, 56811), (33, 56820), (34, 56823), (36, 56829), (40, 56856), (41, 56877), (44, 56916), (46, 56928), (57, 56976), (62, 57021), (65, 57042), (74, 57132), (76, 57141),

Gene: TruffulaTree_89 Start: 55913, Stop: 56452, Start Num: 10

Candidate Starts for TruffulaTree_89:

(Start: 10 @55913 has 82 MA's), (14, 55952), (29, 56042), (33, 56084), (35, 56090), (37, 56105), (38, 56114), (40, 56120), (41, 56141), (43, 56162), (44, 56180), (47, 56195), (48, 56201), (49, 56207), (54, 56240), (56, 56264), (59, 56291), (64, 56336), (72, 56375), (75, 56432), (77, 56438),

Gene: Twitch_87 Start: 55522, Stop: 56061, Start Num: 10

Candidate Starts for Twitch_87:

(4, 55366), (Start: 10 @55522 has 82 MA's), (29, 55651), (33, 55693), (35, 55699), (37, 55714), (38, 55723), (40, 55729), (41, 55750), (44, 55789), (47, 55804), (48, 55810), (49, 55816), (54, 55849), (56, 55873), (59, 55900), (64, 55945), (72, 55984), (75, 56041), (77, 56047),

Gene: Urkel_87 Start: 55782, Stop: 56321, Start Num: 10

Candidate Starts for Urkel_87:

(Start: 10 @55782 has 82 MA's), (15, 55830), (29, 55911), (35, 55959), (37, 55974), (38, 55983), (40, 55989), (41, 56010), (42, 56022), (43, 56031), (44, 56049), (47, 56064), (49, 56076), (51, 56088), (54, 56109), (58, 56142), (59, 56160), (60, 56163), (64, 56205), (67, 56229), (72, 56244), (75, 56301), (77, 56307),

Gene: Veliki_88 Start: 55491, Stop: 56030, Start Num: 10

Candidate Starts for Veliki_88:

(4, 55335), (Start: 10 @55491 has 82 MA's), (29, 55620), (33, 55662), (35, 55668), (37, 55683), (38, 55692), (40, 55698), (41, 55719), (44, 55758), (47, 55773), (48, 55779), (49, 55785), (51, 55797), (54, 55818), (59, 55869), (64, 55914), (72, 55953), (75, 56010), (77, 56016),

Gene: YoureAdopted_86 Start: 55308, Stop: 55856, Start Num: 10

Candidate Starts for YoureAdopted_86:

(Start: 10 @55308 has 82 MA's), (13, 55341), (24, 55416), (26, 55428), (29, 55446), (35, 55494), (37, 55509), (38, 55518), (40, 55524), (41, 55545), (43, 55566), (44, 55584), (47, 55599), (48, 55605), (49,

55611), (54, 55644), (56, 55668), (59, 55695), (64, 55740), (72, 55779), (75, 55836), (77, 55842),

Gene: Yunkel11_92 Start: 56143, Stop: 56694, Start Num: 10

Candidate Starts for Yunkel11_92:

(Start: 10 @56143 has 82 MA's), (13, 56176), (21, 56245), (26, 56263), (33, 56323), (35, 56329), (37, 56344), (40, 56359), (41, 56380), (43, 56401), (44, 56419), (45, 56425), (46, 56431), (50, 56455), (54, 56479), (56, 56503), (63, 56572), (71, 56611), (73, 56641), (74, 56668), (77, 56680),

Gene: Zabiza_83 Start: 51864, Stop: 52403, Start Num: 10

Candidate Starts for Zabiza_83:

(4, 51708), (Start: 10 @51864 has 82 MA's), (29, 51993), (33, 52035), (35, 52041), (37, 52056), (38, 52065), (40, 52071), (41, 52092), (44, 52131), (47, 52146), (48, 52152), (49, 52158), (51, 52170), (54, 52191), (59, 52242), (64, 52287), (72, 52326), (75, 52383), (77, 52389),

Gene: Zavala_89 Start: 55773, Stop: 56321, Start Num: 10

Candidate Starts for Zavala_89:

(Start: 10 @55773 has 82 MA's), (13, 55806), (24, 55881), (26, 55893), (29, 55911), (35, 55959), (37, 55974), (38, 55983), (40, 55989), (41, 56010), (43, 56031), (44, 56049), (47, 56064), (48, 56070), (49, 56076), (54, 56109), (56, 56133), (59, 56160), (64, 56205), (72, 56244), (75, 56301), (77, 56307),