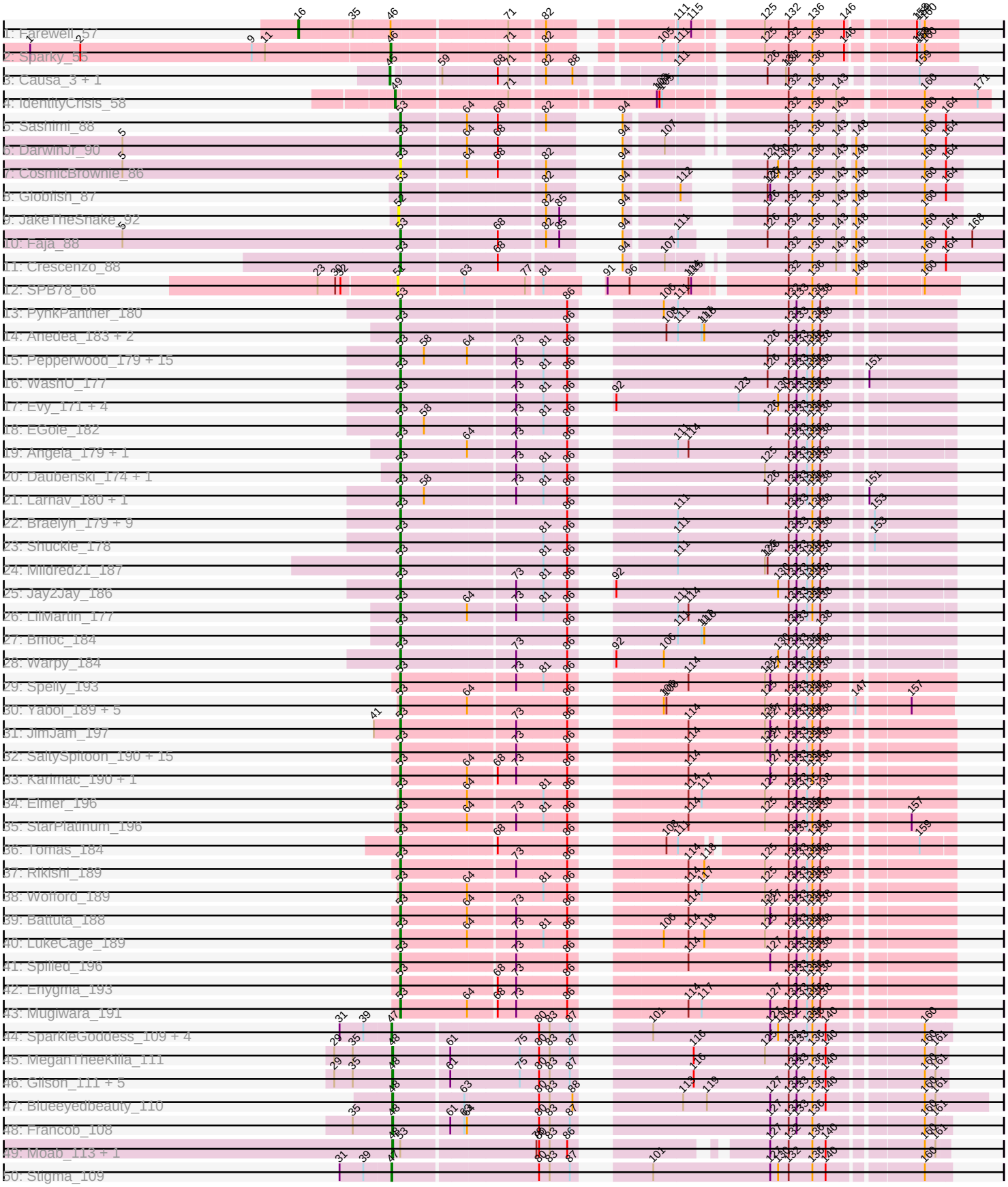
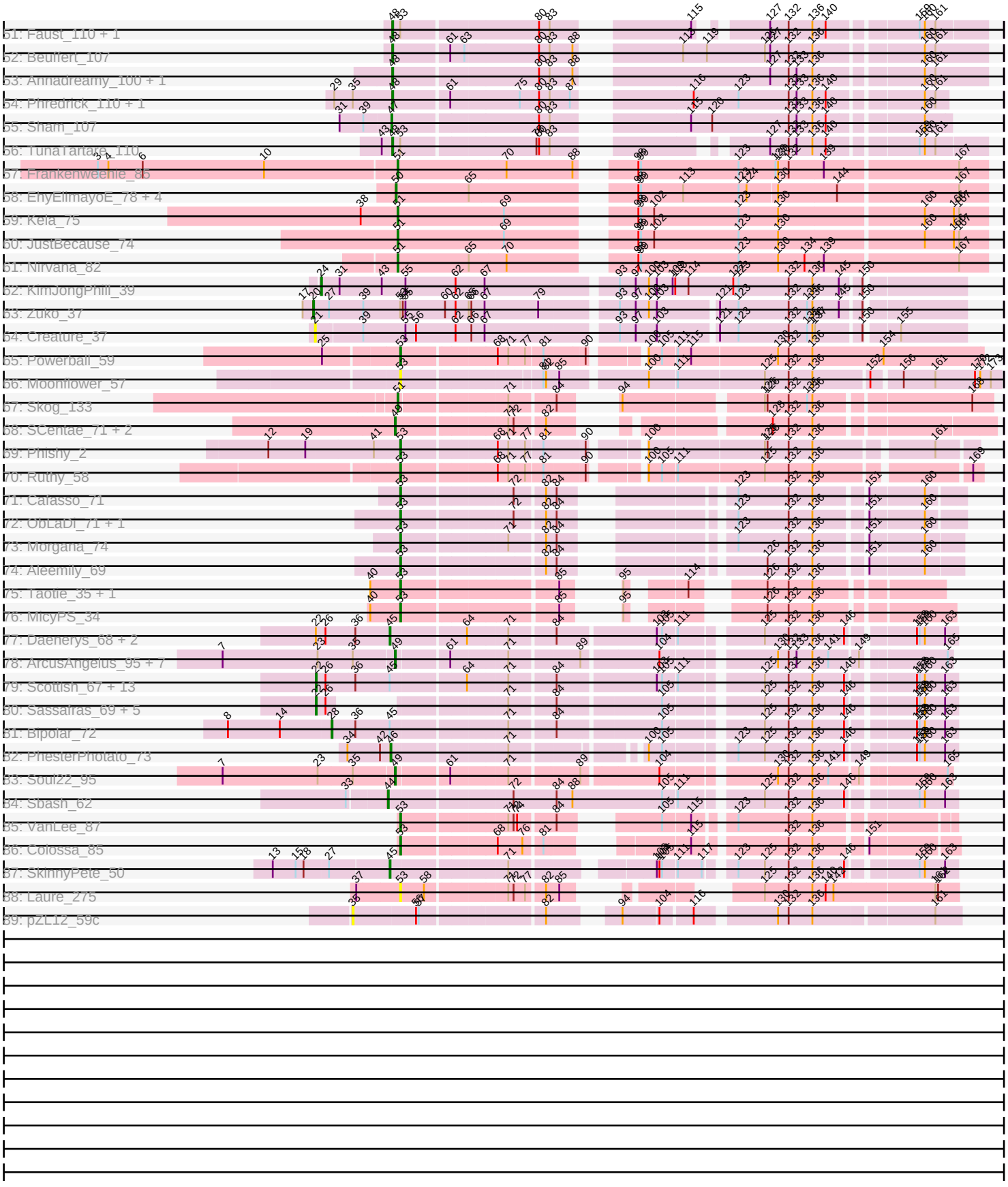
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1: Farewell_57
2: Sparky_55
3: Causa_3 + 1
4: IdentityCrisis_58
5: Sashimi_88
6: DarwinJr_90
7: CosmicBrownie_86
8: Globfish_87
9: JakeTheSnake_92
10: Faja_88
11: Crescenzo_88
12: SPB78_66
13: PynkPanther_180
14: Anedea_183 + 2
15: Pepperwood_179 + 15
16: WashO_177
17: Evy_171 + 4
18: EGole_182
19: Angela_179 + 1
20: Daubenski_174 + 1
21: Larnav_180 + 1
22: Braelyn_179 + 9
23: Shuckle_178
24: Mildred21_187
25: Jay2Jay_186
26: LilMartin_177
27: Bmoc_184
28: Warpy_184
29: Spelly_193
30: Yabor_189 + 5
31: JimJam_197
32: SaltySpitoon_190 + 15
33: Kanmac_190 + 1
34: Elmer_196
35: StarPlatinum_196
36: Tomas_184
37: Rikishi_189
38: Wofford_189
39: Battuta_188
40: LukeCage_189
41: Spilled_196
42: Enygma_193
43: Mugiwara_191
44: SparkleGoddess_109 + 4
45: MeganTheeKilla_111
46: Glison_111 + 5
47: Blueeyedbeauty_110
48: Francob_108
49: Moab_113 + 1
50: Stigma_109

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51: Faust_110 + 1
52: Beuffert_107
53: Annadreamy_100 + 1
54: Phredrick_110 + 1
55: Sham_107
56: TunaTartare_110
57: Frankenweenie_85
58: EhyEllmayoE_78 + 4
59: Kela_75
60: JustBecause_74
61: Nirvana_82
62: KimJongPhill_39
63: Zuko_37
64: Creature_37
65: Powerball_59
66: Moonflower_57
67: Skog_133
68: SCentae_71 + 2
69: Phishy_2
70: Ruthy_58
71: Calasso_71
72: ObLaDi_71 + 1
73: Morgana_74
74: Aleemily_69
75: Taotie_35 + 1
76: MicyPS_34
77: Daenerys_68 + 2
78: ArcusAngelus_95 + 7
79: Scottish_67 + 13
80: Sassafras_69 + 5
81: Bipolar_72
82: PhesterPhotato_73
83: Soul22_95
84: Sbash_62
85: VanLee_87
86: Colossa_85
87: SkinnyPete_50
88: Laure_275
89: pZL12_59c

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 347284 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347284 has 192 members, 15 are drafts.

Phages represented in each track:
- Track 1 : Farewell_57
- Track 2 : Sparky_55
- Track 3 : Causa_3, StAugustine_3
- Track 4 : IdentityCrisis_58
- Track 5 : Sashimi_88
- Track 6 : DarwinJr_90
- Track 7 : CosmicBrownie_86
- Track 8 : Globfish_87
- Track 9 : JakeTheSnake_92
- Track 10 : Faja_88
- Track 11 : Crescenzo_88
- Track 12 : SPB78_66
- Track 13 : PynkPanther_180
- Track 14 : Anedea_183, LilSaint_176, Riptide_176
- Track 15 : Pepperwood_179, Leo04_182, Cross_180, Coogler_179, Cursive_179, Teutsch_179, Samisti12_182, BlueOtter_179, Watermoore_179, Sushi23_181, Peebs_178, Tribute_178, Scheme_183, Lululemon_179, PacManQ_179, HangryHippo_179
- Track 16 : WashU_177
- Track 17 : Evy_171, Targaryen_179, WhereRU_180, Davielle_181, Persimmon_181
- Track 18 : EGole_182
- Track 19 : Angela_179, MulchMansion_178
- Track 20 : Daubenski_174, Cadmus_175
- Track 21 : Larnav_180, ArianaSWT_181
- Track 22 : Braelyn_179, Bartholomune_179, Navo_177, Squillium_181, PinkiePie_178, FreddyDRoo_179, NootNoot_177, Eliot67_180, Paradiddles_174, Liandry_179
- Track 23 : Shuckle_178
- Track 24 : Mildred21_187
- Track 25 : Jay2Jay_186
- Track 26 : LilMartin_177
- Track 27 : Bmoc_184
- Track 28 : Warpy_184
- Track 29 : Spelly_193
- Track 30 : Yaboi_189, Sollertia_186, Stanimal_185, BoomerJR_185, AngryGiraffe_184, Genie2_185
- Track 31 : JimJam_197

• Track 32 : SaltySpitoon_190, Bordeaux_189, Daisy123_191, Amabiko_194, Jollison_187, Quaran19_190, KentuckyRacer_195, IchabodCrane_186, Birchlyn_189, Tuesday_197, MindFlayer_183, PumpkinSpice_192, AcciDwight_198, Wipeout_182, Starbow_188, Gibbi_197
• Track 33 : Karimac_190, Brizzy_190
• Track 34 : Elmer_196
• Track 35 : StarPlatinum_196
• Track 36 : Tomas_184
• Track 37 : Rikishi_189
• Track 38 : Wofford_189
• Track 39 : Battuta_188
• Track 40 : LukeCage_189
• Track 41 : Spilled_196
• Track 42 : Enygma_193
• Track 43 : Mugiwara_191
• Track 44 : SparkleGoddess_109, Belfort_111, Comrade_108, Karp_107, Westy_113
• Track 45 : MeganTheeKilla_111
• Track 46 : Gilson_111, Maupel_111, Emma1919_112, DeluluLabubu_113, Jada_112, Forrest_116
• Track 47 : Blueeyedbeauty_110
• Track 48 : Francob_108
• Track 49 : Moab_113, Patelgo_114
• Track 50 : Stigma_109
• Track 51 : Faust_110, SeresaTree_110
• Track 52 : Beuffert_107
• Track 53 : Annadreamy_100, Limpid_109
• Track 54 : Phredrick_110, Kenrey_114
• Track 55 : Sham_107
• Track 56 : TunaTartare_110
• Track 57 : Frankenweenie_85
• Track 58 : EhyElimayoE_78, Quantum_77, Kradal_78, Sarkar_78, Satis_78
• Track 59 : Kela_75
• Track 60 : JustBecause_74
• Track 61 : Nirvana_82
• Track 62 : KimJongPhill_39
• Track 63 : Zuko_37
• Track 64 : Creature_37
• Track 65 : Powerball_59
• Track 66 : Moonflower_57
• Track 67 : Skog_133
• Track 68 : SCentae_71, CherryTomatoes_73, Pupper_72
• Track 69 : Phishy_2
• Track 70 : Ruthy_58
• Track 71 : Cafasso_71
• Track 72 : ObLaDi_71, ModicumRichard_71
• Track 73 : Morgana_74
• Track 74 : Aleemily_69
• Track 75 : Taotie_35, PSonyx_37
• Track 76 : MicyPS_34
• Track 77 : Daenerys_68, Fruitloop_65, Deb65_63
• Track 78 : ArcusAngelus_95, Nitzel_88, Che8_101, Cheesepuff_99, Rita_95, MinionDave_93, OwlsT2W_93, Chevrolet_99

• Track 79 : Scottish_67, SiSi_68, JoeyJr_69, OldBen_66, Nimbo_62, PHappiness_69, KingMidas_68, Doomslug_80, Leperchaun_66, Polka14_72, Empress_67, Geralt_63, DaddyRickover_70, RitaG_69
• Track 80 : Sassafras_69, Doomphist_71, Poenanya_71, Inventum_66, RedBird_69, Dorothy_69
• Track 81 : Bipolar_72
• Track 82 : PhesterPhotato_73
• Track 83 : Soul22_95
• Track 84 : Sbash_62
• Track 85 : VanLee_87
• Track 86 : Colossa_85
• Track 87 : SkinnyPete_50
• Track 88 : Laure_275
• Track 89 : pZL12_59c

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

The start number called the most often in the published annotations is 53, it was called in 98 of the 177 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AcciDwight_198, Aleemily_69, Amabiko_194, Anedea_183, Angela_179, AngryGiraffe_184, ArianaSWT_181, Bartholomune_179, Battuta_188, Birchlyn_189, BlueOtter_179, Bmoc_184, BoomerJR_185, Bordeaux_189, Braelyn_179, Brizzy_190, Cadmus_175, Cafasso_71, Colossa_85, Coogler_179, CosmicBrownie_86, Crescenzo_88, Cross_180, Cursive_179, Daisy123_191, DarwinJr_90, Daubenski_174, Davielle_181, EGole_182, Eliot67_180, Elmer_196, Enygma_193, Evy_171, Faja_88, FreddyDRoo_179, Genie2_185, Gibbi_197, Globfish_87, HangryHippo_179, IchabodCrane_186, Jay2Jay_186, JimJam_197, Jollison_187, Karimac_190, KentuckyRacer_195, Larnav_180, Laure_275, Leo04_182, Liandry_179, LilMartin_177, LilSaint_176, LukeCage_189, Lululemon_179, MicyPS_34, Mildred21_187, MindFlayer_183, ModicumRichard_71, Moonflower_57, Morgana_74, Mugiwara_191, MulchMansion_178, Navo_177, NootNoot_177, ObLaDi_71, PSonyx_37, PacManQ_179, Paradiddles_174, Peebs_178, Pepperwood_179, Persimmon_181, Phishy_2, PinkiePie_178, Powerball_59, PumpkinSpice_192, PynkPanther_180, Quaran19_190, Rikishi_189, Riptide_176, Ruthy_58, SaltySpitoon_190, Samisti12_182, Sashimi_88, Scheme_183, Shuckle_178, Sollertia_186, Spelly_193, Spilled_196, Squillium_181, Stanimal_185, StarPlatinum_196, Starbow_188, Sushi23_181, Taotie_35, Targaryen_179, Teutsch_179, Tomas_184, Tribute_178, Tuesday_197, VanLee_87, Warpy_184, WashU_177, Watermoore_179, WhereRU_180, Wipeout_182, Wofford_189, Yaboi_189,

Genes that have the "Most Annotated" start but do not call it:
• Faust_110, Moab_113, Patelgo_114, SeresaTree_110, TunaTartare_110, Zuko_37,

Genes that do not have the "Most Annotated" start:
• Annadreamy_100, ArcusAngelus_95, Belfort_111, Beuffert_107, Bipolar_72, Blueeyedbeauty_110, Causa_3, Che8_101, Cheesepuff_99, CherryTomatoes_73, Chevrolet_99, Comrade_108, Creature_37, DaddyRickover_70, Daenerys_68,

Deb65_63, DeluluLabubu_113, Doomphist_71, Doomslug_80, Dorothy_69, EhyElimayoE_78, Emma1919_112, Empress_67, Farewell_57, Forrest_116, Francob_108, Frankenweenie_85, Fruitloop_65, Geralt_63, Gilson_111, IdentityCrisis_58, Inventum_66, Jada_112, JakeTheSnake_92, JoeyJr_69, JustBecause_74, Karp_107, Kela_75, Kenrey_114, KimJongPhill_39, KingMidas_68, Kradal_78, Leperchaun_66, Limpid_109, Maupel_111, MeganTheeKilla_111, MinionDave_93, Nimbo_62, Nirvana_82, Nitzel_88, OldBen_66, OwlsT2W_93, PHappiness_69, PhesterPhotato_73, Phredrick_110, Poenanya_71, Polka14_72, Pupper_72, Quantum_77, RedBird_69, RitaG_69, Rita_95, SCentae_71, SPB78_66, Sarkar_78, Sassafras_69, Satis_78, Sbash_62, Scottish_67, Sham_107, SiSi_68, SkinnyPete_50, Skog_133, Soul22_95, SparkleGoddess_109, Sparky_55, StAugustine_3, Stigma_109, Westy_113, pZL12_59c,

Summary by start number:

Start 16:
• Found in 1 of 192 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 177
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Farewell_57 (AF),

Start 20:
• Found in 1 of 192 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 177
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Zuko_37 (BR),

Start 21:
• Found in 1 of 192 (0.5%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Creature_37 (BR),

Start 22:
• Found in 23 of 192 (12.0%) of genes in pham
• Manual Annotations of this start: 19 of 177
• Called 87.0% of time when present
• Phage (with cluster) where this start called: DaddyRickover_70 (F1), Doomphist_71 (F1), Doomslug_80 (F), Dorothy_69 (F1), Empress_67 (F1), Geralt_63 (F1), Inventum_66 (F1), JoeyJr_69 (F1), KingMidas_68 (F1), Leperchaun_66 (F1), Nimbo_62 (F1), OldBen_66 (F1), PHappiness_69 (F1), Poenanya_71 (F1), Polka14_72 (F1), RedBird_69 (F1), RitaG_69 (F1), Sassafras_69 (F1), Scottish_67 (F1), SiSi_68 (F1),

Start 24:
• Found in 1 of 192 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 177
• Called 100.0% of time when present
• Phage (with cluster) where this start called: KimJongPhill_39 (BR),

Start 28:
• Found in 1 of 192 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 177

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bipolar_72 (F1),

Start 35:
• Found in 21 of 192 (10.9%) of genes in pham
• No Manual Annotations of this start.
• Called 4.8% of time when present
• Phage (with cluster) where this start called: pZL12_59c (singleton),

Start 44:
• Found in 1 of 192 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 177
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sbash_62 (I2),

Start 45:
• Found in 21 of 192 (10.9%) of genes in pham
• Manual Annotations of this start: 6 of 177
• Called 28.6% of time when present
• Phage (with cluster) where this start called: Causa_3 (AI), Daenerys_68 (F1), Deb65_63 (F1), Fruitloop_65 (F1), SkinnyPete_50 (N), StAugustine_3 (AI),

Start 46:
• Found in 3 of 192 (1.6%) of genes in pham
• Manual Annotations of this start: 2 of 177
• Called 66.7% of time when present
• Phage (with cluster) where this start called: PhesterPhotato_73 (F1), Sparky_55 (AF),

Start 47:
• Found in 7 of 192 (3.6%) of genes in pham
• Manual Annotations of this start: 7 of 177
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Belfort_111 (BK1), Comrade_108 (BK1), Karp_107 (BK1), Sham_107 (BK1), SparkleGoddess_109 (BK1), Stigma_109 (BK1), Westy_113 (BK1),

Start 48:
• Found in 19 of 192 (9.9%) of genes in pham
• Manual Annotations of this start: 17 of 177
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Annadreamy_100 (BK1), Beuffert_107 (BK1), Blueeyedbeauty_110 (BK1), DeluluLabubu_113 (BK1), Emma1919_112 (BK1), Faust_110 (BK1), Forrest_116 (BK1), Francob_108 (BK1), Gilson_111 (BK1), Jada_112 (BK1), Kenrey_114 (BK1), Limpid_109 (BK1), Maupel_111 (BK1), MeganTheeKilla_111 (BK1), Moab_113 (BK1), Patelgo_114 (BK1), Phredrick_110 (BK1), SeresaTree_110 (BK1), TunaTartare_110 (BK1),

Start 49:
• Found in 13 of 192 (6.8%) of genes in pham
• Manual Annotations of this start: 13 of 177
• Called 100.0% of time when present

• Phage (with cluster) where this start called: ArcusAngelus_95 (F1), Che8_101 (F1), Cheesepuff_99 (F1), CherryTomatoes_73 (DO), Chevrolet_99 (F1), IdentityCrisis_58 (AJ), MinionDave_93 (F1), Nitzel_88 (F1), OwlsT2W_93 (F1), Pupper_72 (DO), Rita_95 (F1), SCentae_71 (DO), Soul22_95 (F2),

Start 50:
• Found in 5 of 192 (2.6%) of genes in pham
• Manual Annotations of this start: 5 of 177
• Called 100.0% of time when present
• Phage (with cluster) where this start called: EhyElimayoE_78 (BM), Kradal_78 (BM), Quantum_77 (BM), Sarkar_78 (BM), Satis_78 (BM),

Start 51:
• Found in 6 of 192 (3.1%) of genes in pham
• Manual Annotations of this start: 5 of 177
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Frankenweenie_85 (BM), JustBecause_74 (BM), Kela_75 (BM), Nirvana_82 (BM), SPB78_66 (BA), Skog_133 (DO),

Start 52:
• Found in 1 of 192 (0.5%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: JakeTheSnake_92 (AY),

Start 53:
• Found in 112 of 192 (58.3%) of genes in pham
• Manual Annotations of this start: 98 of 177
• Called 94.6% of time when present
• Phage (with cluster) where this start called: AcciDwight_198 (BE2), Aleemily_69 (DZ), Amabiko_194 (BE2), Anedea_183 (BE1), Angela_179 (BE1), AngryGiraffe_184 (BE2), ArianaSWT_181 (BE1), Bartholomune_179 (BE1), Battuta_188 (BE2), Birchlyn_189 (BE2), BlueOtter_179 (BE1), Bmoc_184 (BE1), BoomerJR_185 (BE2), Bordeaux_189 (BE2), Braelyn_179 (BE1), Brizzy_190 (BE2), Cadmus_175 (BE1), Cafasso_71 (DZ), Colossa_85 (KA), Coogler_179 (BE1), CosmicBrownie_86 (AY), Crescenzo_88 (AY), Cross_180 (BE1), Cursive_179 (BE1), Daisy123_191 (BE2), DarwinJr_90 (AY), Daubenski_174 (BE1), Davielle_181 (BE1), EGole_182 (BE1), Eliot67_180 (BE1), Elmer_196 (BE2), Enygma_193 (BE2), Evy_171 (BE1), Faja_88 (AY), FreddyDRoo_179 (BE1), Genie2_185 (BE2), Gibbi_197 (BE2), Globfish_87 (AY), HangryHippo_179 (BE1), IchabodCrane_186 (BE2), Jay2Jay_186 (BE1), JimJam_197 (BE2), Jollison_187 (BE2), Karimac_190 (BE2), KentuckyRacer_195 (BE2), Larnav_180 (BE1), Laure_275 (UNK), Leo04_182 (BE1), Liandry_179 (BE1), LilMartin_177 (BE1), LilSaint_176 (BE1), LukeCage_189 (BE2), Lululemon_179 (BE1), MicyPS_34 (EQ), Mildred21_187 (BE1), MindFlayer_183 (BE2), ModicumRichard_71 (DZ), Moonflower_57 (DB), Morgana_74 (DZ), Mugiwara_191 (BE2), MulchMansion_178 (BE1), Navo_177 (BE1), NootNoot_177 (BE1), ObLaDi_71 (DZ), PSonyx_37 (EQ), PacManQ_179 (BE1), Paradiddles_174 (BE1), Peebs_178 (BE1), Pepperwood_179 (BE1), Persimmon_181 (BE1), Phishy_2 (DT), PinkiePie_178 (BE1), Powerball_59 (CZ4), PumpkinSpice_192 (BE2), PynkPanther_180 (BE1), Quaran19_190 (BE2), Rikishi_189 (BE2), Riptide_176 (BE1), Ruthy_58 (DW), SaltySpitoon_190 (BE2), Samisti12_182 (BE1), Sashimi_88 (AY), Scheme_183 (BE1), Shuckle_178 (BE1), Sollertia_186 (BE2), Spelly_193

(BE2), Spilled_196 (BE2), Squillium_181 (BE1), Stanimal_185 (BE2), StarPlatinum_196 (BE2), Starbow_188 (BE2), Sushi23_181 (BE1), Taotie_35 (EQ), Targaryen_179 (BE1), Teutsch_179 (BE1), Tomas_184 (BE2), Tribute_178 (BE1), Tuesday_197 (BE2), VanLee_87 (KA), Warpy_184 (BE1), WashU_177 (BE1), Watermoore_179 (BE1), WhereRU_180 (BE1), Wipeout_182 (BE2), Wofford_189 (BE2), Yaboi_189 (BE2),

Summary by clusters:

There are 25 clusters represented in this pham: DO, singleton, BA, BM, DB, CZ4, DZ, BR, DW, DT, F, I2, AF, AI, AJ, KA, N, BK1, AY, UNK, EQ, F1, F2, BE2, BE1,

Info for manual annotations of cluster AF:
•Start number 16 was manually annotated 1 time for cluster AF.
•Start number 46 was manually annotated 1 time for cluster AF.

Info for manual annotations of cluster AI:
•Start number 45 was manually annotated 2 times for cluster AI.

Info for manual annotations of cluster AJ:
•Start number 49 was manually annotated 1 time for cluster AJ.

Info for manual annotations of cluster AY:
•Start number 53 was manually annotated 5 times for cluster AY.

Info for manual annotations of cluster BE1:
•Start number 53 was manually annotated 48 times for cluster BE1.

Info for manual annotations of cluster BE2:
•Start number 53 was manually annotated 33 times for cluster BE2.

Info for manual annotations of cluster BK1:
•Start number 47 was manually annotated 7 times for cluster BK1.
•Start number 48 was manually annotated 17 times for cluster BK1.

Info for manual annotations of cluster BM:
•Start number 50 was manually annotated 5 times for cluster BM.
•Start number 51 was manually annotated 4 times for cluster BM.

Info for manual annotations of cluster BR:
•Start number 20 was manually annotated 1 time for cluster BR.
•Start number 24 was manually annotated 1 time for cluster BR.

Info for manual annotations of cluster CZ4:
•Start number 53 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DO:
•Start number 49 was manually annotated 3 times for cluster DO.
•Start number 51 was manually annotated 1 time for cluster DO.

Info for manual annotations of cluster DT:

•Start number 53 was manually annotated 1 time for cluster DT.

Info for manual annotations of cluster DW:
•Start number 53 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster DZ:
•Start number 53 was manually annotated 5 times for cluster DZ.

Info for manual annotations of cluster EQ:
•Start number 53 was manually annotated 2 times for cluster EQ.

Info for manual annotations of cluster F1:
•Start number 22 was manually annotated 19 times for cluster F1.
•Start number 28 was manually annotated 1 time for cluster F1.
•Start number 45 was manually annotated 3 times for cluster F1.
•Start number 46 was manually annotated 1 time for cluster F1.
•Start number 49 was manually annotated 8 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 49 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster I2:
•Start number 44 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster KA:
•Start number 53 was manually annotated 2 times for cluster KA.

Info for manual annotations of cluster N:
•Start number 45 was manually annotated 1 time for cluster N.

Gene Information:

Gene: AcciDwight_198 Start: 96931, Stop: 97488, Start Num: 53
Candidate Starts for AcciDwight_198:
(Start: 53 @96931 has 98 MA's), (73, 97054), (86, 97108), (114, 97201), (125, 97288), (127, 97294), (132, 97315), (133, 97324), (135, 97336), (136, 97342), (138, 97351),

Gene: Aleemily_69 Start: 45785, Stop: 46318, Start Num: 53
Candidate Starts for Aleemily_69:
(Start: 53 @45785 has 98 MA's), (82, 45932), (84, 45941), (126, 46115), (132, 46139), (136, 46166), (151, 46217), (160, 46277),

Gene: Amabiko_194 Start: 96749, Stop: 97306, Start Num: 53
Candidate Starts for Amabiko_194:
(Start: 53 @96749 has 98 MA's), (73, 96872), (86, 96926), (114, 97019), (125, 97106), (127, 97112), (132, 97133), (133, 97142), (135, 97154), (136, 97160), (138, 97169),

Gene: Anedea_183 Start: 95656, Stop: 96213, Start Num: 53
Candidate Starts for Anedea_183:

(Start: 53 @95656 has 98 MA's), (86, 95833), (108, 95902), (111, 95914), (117, 95941), (118, 95944), (132, 96040), (133, 96049), (136, 96067), (138, 96076),

Gene: Angela_179 Start: 95320, Stop: 95874, Start Num: 53
Candidate Starts for Angela_179:
(Start: 53 @95320 has 98 MA's), (64, 95395), (73, 95443), (86, 95497), (111, 95578), (114, 95590), (132, 95704), (133, 95713), (135, 95725), (136, 95731), (138, 95740),

Gene: AngryGiraffe_184 Start: 95590, Stop: 96144, Start Num: 53
Candidate Starts for AngryGiraffe_184:
(Start: 53 @95590 has 98 MA's), (64, 95665), (86, 95767), (106, 95833), (108, 95836), (125, 95947), (132, 95974), (133, 95983), (135, 95995), (136, 96001), (138, 96010), (147, 96043), (157, 96097),

Gene: Annadreamy_100 Start: 67632, Stop: 68237, Start Num: 48
Candidate Starts for Annadreamy_100:
(Start: 48 @67632 has 17 MA's), (80, 67788), (83, 67800), (88, 67824), (127, 68007), (132, 68028), (133, 68037), (136, 68055), (160, 68166), (161, 68178),

Gene: ArcusAngelus_95 Start: 53408, Stop: 53965, Start Num: 49
Candidate Starts for ArcusAngelus_95:
(7, 53216), (23, 53324), (35, 53363), (Start: 49 @53408 has 13 MA's), (61, 53462), (71, 53522), (89, 53594), (104, 53675), (130, 53789), (132, 53801), (133, 53810), (136, 53828), (141, 53846), (149, 53876), (165, 53960),

Gene: ArianaSWT_181 Start: 96336, Stop: 96893, Start Num: 53
Candidate Starts for ArianaSWT_181:
(Start: 53 @96336 has 98 MA's), (58, 96363), (73, 96459), (81, 96489), (86, 96513), (126, 96696), (132, 96720), (133, 96729), (135, 96741), (136, 96747), (138, 96756), (151, 96798),

Gene: Bartholomune_179 Start: 95153, Stop: 95710, Start Num: 53
Candidate Starts for Bartholomune_179:
(Start: 53 @95153 has 98 MA's), (86, 95330), (111, 95411), (132, 95537), (133, 95546), (136, 95564), (138, 95573), (153, 95621),

Gene: Battuta_188 Start: 96065, Stop: 96622, Start Num: 53
Candidate Starts for Battuta_188:
(Start: 53 @96065 has 98 MA's), (64, 96140), (73, 96188), (86, 96242), (114, 96335), (125, 96422), (127, 96428), (132, 96449), (133, 96458), (135, 96470), (136, 96476), (138, 96485),

Gene: Belfort_111 Start: 73479, Stop: 74042, Start Num: 47
Candidate Starts for Belfort_111:
(31, 73422), (39, 73449), (Start: 47 @73479 has 7 MA's), (80, 73635), (83, 73647), (87, 73668), (101, 73722), (127, 73854), (130, 73863), (132, 73875), (135, 73896), (136, 73902), (140, 73917), (160, 74013),

Gene: Beuffert_107 Start: 72453, Stop: 73058, Start Num: 48
Candidate Starts for Beuffert_107:
(Start: 48 @72453 has 17 MA's), (61, 72513), (63, 72528), (80, 72609), (83, 72621), (88, 72645), (113, 72729), (119, 72756), (125, 72822), (127, 72828), (132, 72849), (136, 72876), (160, 72987), (161, 72999),

Gene: Bipolar_72 Start: 44668, Stop: 45300, Start Num: 28
Candidate Starts for Bipolar_72:

(8, 44554), (14, 44611), (Start: 28 @44668 has 1 MA's), (36, 44695), (Start: 45 @44734 has 6 MA's), (71, 44854), (84, 44899), (105, 45004), (125, 45100), (132, 45127), (136, 45154), (146, 45190), (158, 45256), (159, 45259), (160, 45265), (163, 45286),

Gene: Birchlyn_189 Start: 93997, Stop: 94554, Start Num: 53
Candidate Starts for Birchlyn_189:
(Start: 53 @93997 has 98 MA's), (73, 94120), (86, 94174), (114, 94267), (125, 94354), (127, 94360), (132, 94381), (133, 94390), (135, 94402), (136, 94408), (138, 94417),

Gene: BlueOtter_179 Start: 96373, Stop: 96930, Start Num: 53
Candidate Starts for BlueOtter_179:
(Start: 53 @96373 has 98 MA's), (58, 96400), (64, 96448), (73, 96496), (81, 96526), (86, 96550), (126, 96733), (132, 96757), (133, 96766), (135, 96778), (136, 96784), (138, 96793),

Gene: Blueeyedbeauty_110 Start: 71549, Stop: 72154, Start Num: 48
Candidate Starts for Blueeyedbeauty_110:
(Start: 48 @71549 has 17 MA's), (63, 71624), (80, 71705), (83, 71717), (88, 71741), (113, 71825), (119, 71852), (127, 71924), (132, 71945), (133, 71954), (136, 71972), (140, 71987), (160, 72083), (161, 72095),

Gene: Bmoc_184 Start: 96405, Stop: 96962, Start Num: 53
Candidate Starts for Bmoc_184:
(Start: 53 @96405 has 98 MA's), (86, 96582), (111, 96663), (117, 96690), (118, 96693), (132, 96789), (133, 96798), (138, 96825),

Gene: BoomerJR_185 Start: 96024, Stop: 96578, Start Num: 53
Candidate Starts for BoomerJR_185:
(Start: 53 @96024 has 98 MA's), (64, 96099), (86, 96201), (106, 96267), (108, 96270), (125, 96381), (132, 96408), (133, 96417), (135, 96429), (136, 96435), (138, 96444), (147, 96477), (157, 96531),

Gene: Bordeaux_189 Start: 96647, Stop: 97204, Start Num: 53
Candidate Starts for Bordeaux_189:
(Start: 53 @96647 has 98 MA's), (73, 96770), (86, 96824), (114, 96917), (125, 97004), (127, 97010), (132, 97031), (133, 97040), (135, 97052), (136, 97058), (138, 97067),

Gene: Braelyn_179 Start: 96152, Stop: 96709, Start Num: 53
Candidate Starts for Braelyn_179:
(Start: 53 @96152 has 98 MA's), (86, 96329), (111, 96410), (132, 96536), (133, 96545), (136, 96563), (138, 96572), (153, 96620),

Gene: Brizzy_190 Start: 97193, Stop: 97750, Start Num: 53
Candidate Starts for Brizzy_190:
(Start: 53 @97193 has 98 MA's), (64, 97268), (68, 97295), (73, 97316), (86, 97370), (114, 97463), (127, 97556), (132, 97577), (133, 97586), (135, 97598), (136, 97604), (138, 97613),

Gene: Cadmus_175 Start: 95641, Stop: 96198, Start Num: 53
Candidate Starts for Cadmus_175:
(Start: 53 @95641 has 98 MA's), (73, 95764), (81, 95794), (86, 95818), (125, 95998), (132, 96025), (133, 96034), (135, 96046), (136, 96052), (138, 96061),

Gene: Cafasso_71 Start: 46457, Stop: 46990, Start Num: 53
Candidate Starts for Cafasso_71:

(Start: 53 @46457 has 98 MA's), (72, 46574), (82, 46604), (84, 46613), (123, 46754), (132, 46811), (136, 46838), (151, 46889), (160, 46949),

Gene: Causa_3 Start: 1052, Stop: 1630, Start Num: 45
Candidate Starts for Causa_3:
(Start: 45 @1052 has 6 MA's), (59, 1097), (68, 1154), (71, 1166), (82, 1202), (88, 1229), (111, 1325), (126, 1412), (131, 1433), (132, 1436), (136, 1463), (159, 1565),

Gene: Che8_101 Start: 54031, Stop: 54588, Start Num: 49
Candidate Starts for Che8_101:
(7, 53839), (23, 53947), (35, 53986), (Start: 49 @54031 has 13 MA's), (61, 54085), (71, 54145), (89, 54217), (104, 54298), (130, 54412), (132, 54424), (133, 54433), (136, 54451), (141, 54469), (149, 54499), (165, 54583),

Gene: Cheesepuff_99 Start: 52216, Stop: 52773, Start Num: 49
Candidate Starts for Cheesepuff_99:
(7, 52024), (23, 52132), (35, 52171), (Start: 49 @52216 has 13 MA's), (61, 52270), (71, 52330), (89, 52402), (104, 52483), (130, 52597), (132, 52609), (133, 52618), (136, 52636), (141, 52654), (149, 52684), (165, 52768),

Gene: CherryTomatoes_73 Start: 25264, Stop: 25827, Start Num: 49
Candidate Starts for CherryTomatoes_73:
(Start: 49 @25264 has 13 MA's), (71, 25381), (72, 25387), (82, 25417), (128, 25594), (132, 25612), (136, 25639),

Gene: Chevrolet_99 Start: 53409, Stop: 53966, Start Num: 49
Candidate Starts for Chevrolet_99:
(7, 53217), (23, 53325), (35, 53364), (Start: 49 @53409 has 13 MA's), (61, 53463), (71, 53523), (89, 53595), (104, 53676), (130, 53790), (132, 53802), (133, 53811), (136, 53829), (141, 53847), (149, 53877), (165, 53961),

Gene: Colossa_85 Start: 47469, Stop: 47990, Start Num: 53
Candidate Starts for Colossa_85:
(Start: 53 @47469 has 98 MA's), (68, 47568), (76, 47595), (81, 47613), (115, 47724), (132, 47817), (136, 47844), (151, 47895),

Gene: Comrade_108 Start: 72796, Stop: 73359, Start Num: 47
Candidate Starts for Comrade_108:
(31, 72739), (39, 72766), (Start: 47 @72796 has 7 MA's), (80, 72952), (83, 72964), (87, 72985), (101, 73039), (127, 73171), (130, 73180), (132, 73192), (135, 73213), (136, 73219), (140, 73234), (160, 73330),

Gene: Coogler_179 Start: 97042, Stop: 97599, Start Num: 53
Candidate Starts for Coogler_179:
(Start: 53 @97042 has 98 MA's), (58, 97069), (64, 97117), (73, 97165), (81, 97195), (86, 97219), (126, 97402), (132, 97426), (133, 97435), (135, 97447), (136, 97453), (138, 97462),

Gene: CosmicBrownie_86 Start: 47611, Stop: 48096, Start Num: 53
Candidate Starts for CosmicBrownie_86:
(5, 47296), (Start: 53 @47611 has 98 MA's), (64, 47680), (68, 47710), (82, 47758), (94, 47788), (126, 47893), (130, 47905), (132, 47917), (136, 47944), (143, 47971), (148, 47986), (160, 48055), (164, 48079),

Gene: Creature_37 Start: 32712, Stop: 32017, Start Num: 21
Candidate Starts for Creature_37:
(21, 32712), (39, 32661), (55, 32613), (56, 32601), (62, 32556), (66, 32538), (67, 32523), (93, 32385), (97, 32367), (103, 32343), (121, 32280), (123, 32259), (132, 32202), (135, 32181), (136, 32175), (137, 32172), (150, 32124), (155, 32091),

Gene: Crescenzo_88 Start: 50179, Stop: 50736, Start Num: 53
Candidate Starts for Crescenzo_88:
(Start: 53 @50179 has 98 MA's), (68, 50278), (94, 50356), (107, 50395), (132, 50509), (136, 50536), (143, 50563), (148, 50578), (160, 50647), (164, 50671),

Gene: Cross_180 Start: 97018, Stop: 97575, Start Num: 53
Candidate Starts for Cross_180:
(Start: 53 @97018 has 98 MA's), (58, 97045), (64, 97093), (73, 97141), (81, 97171), (86, 97195), (126, 97378), (132, 97402), (133, 97411), (135, 97423), (136, 97429), (138, 97438),

Gene: Cursive_179 Start: 95227, Stop: 95784, Start Num: 53
Candidate Starts for Cursive_179:
(Start: 53 @95227 has 98 MA's), (58, 95254), (64, 95302), (73, 95350), (81, 95380), (86, 95404), (126, 95587), (132, 95611), (133, 95620), (135, 95632), (136, 95638), (138, 95647),

Gene: DaddyRickover_70 Start: 44130, Stop: 44783, Start Num: 22
Candidate Starts for DaddyRickover_70:
(Start: 22 @44130 has 19 MA's), (26, 44139), (36, 44172), (Start: 45 @44211 has 6 MA's), (64, 44289), (71, 44331), (84, 44376), (103, 44481), (105, 44487), (111, 44502), (125, 44583), (132, 44610), (136, 44637), (146, 44673), (158, 44739), (159, 44742), (160, 44748), (163, 44769),

Gene: Daenerys_68 Start: 44330, Stop: 44902, Start Num: 45
Candidate Starts for Daenerys_68:
(Start: 22 @44249 has 19 MA's), (26, 44258), (36, 44291), (Start: 45 @44330 has 6 MA's), (64, 44408), (71, 44450), (84, 44495), (103, 44600), (105, 44606), (111, 44621), (125, 44702), (132, 44729), (136, 44756), (146, 44792), (158, 44858), (159, 44861), (160, 44867), (163, 44888),

Gene: Daisy123_191 Start: 97135, Stop: 97692, Start Num: 53
Candidate Starts for Daisy123_191:
(Start: 53 @97135 has 98 MA's), (73, 97258), (86, 97312), (114, 97405), (125, 97492), (127, 97498), (132, 97519), (133, 97528), (135, 97540), (136, 97546), (138, 97555),

Gene: DarwinJr_90 Start: 50293, Stop: 50850, Start Num: 53
Candidate Starts for DarwinJr_90:
(5, 49978), (Start: 53 @50293 has 98 MA's), (64, 50362), (68, 50392), (94, 50470), (107, 50509), (132, 50623), (136, 50650), (143, 50677), (148, 50692), (160, 50761), (164, 50785),

Gene: Daubenski_174 Start: 96878, Stop: 97435, Start Num: 53
Candidate Starts for Daubenski_174:
(Start: 53 @96878 has 98 MA's), (73, 97001), (81, 97031), (86, 97055), (125, 97235), (132, 97262), (133, 97271), (135, 97283), (136, 97289), (138, 97298),

Gene: Davielle_181 Start: 96302, Stop: 96859, Start Num: 53
Candidate Starts for Davielle_181:
(Start: 53 @96302 has 98 MA's), (73, 96425), (81, 96455), (86, 96479), (92, 96494), (123, 96629), (130, 96674), (132, 96686), (133, 96695), (135, 96707), (136, 96713), (138, 96722),

Gene: Deb65_63 Start: 42050, Stop: 42622, Start Num: 45
Candidate Starts for Deb65_63:
(Start: 22 @41969 has 19 MA's), (26, 41978), (36, 42011), (Start: 45 @42050 has 6 MA's), (64, 42128), (71, 42170), (84, 42215), (103, 42320), (105, 42326), (111, 42341), (125, 42422), (132, 42449), (136, 42476), (146, 42512), (158, 42578), (159, 42581), (160, 42587), (163, 42608),

Gene: DeluluLababu_113 Start: 72925, Stop: 73485, Start Num: 48
Candidate Starts for DeluluLababu_113:
(29, 72859), (35, 72880), (Start: 48 @72925 has 17 MA's), (61, 72985), (75, 73060), (80, 73081), (83, 73093), (87, 73114), (116, 73213), (132, 73321), (133, 73330), (136, 73348), (140, 73363), (160, 73459), (161, 73471),

Gene: Doomphist_71 Start: 44678, Stop: 45256, Start Num: 22
Candidate Starts for Doomphist_71:
(Start: 22 @44678 has 19 MA's), (26, 44687), (71, 44810), (84, 44855), (105, 44960), (125, 45056), (132, 45083), (136, 45110), (146, 45146), (158, 45212), (159, 45215), (160, 45221), (163, 45242),

Gene: Doomslug_80 Start: 44059, Stop: 44712, Start Num: 22
Candidate Starts for Doomslug_80:
(Start: 22 @44059 has 19 MA's), (26, 44068), (36, 44101), (Start: 45 @44140 has 6 MA's), (64, 44218), (71, 44260), (84, 44305), (103, 44410), (105, 44416), (111, 44431), (125, 44512), (132, 44539), (136, 44566), (146, 44602), (158, 44668), (159, 44671), (160, 44677), (163, 44698),

Gene: Dorothy_69 Start: 43304, Stop: 43882, Start Num: 22
Candidate Starts for Dorothy_69:
(Start: 22 @43304 has 19 MA's), (26, 43313), (71, 43436), (84, 43481), (105, 43586), (125, 43682), (132, 43709), (136, 43736), (146, 43772), (158, 43838), (159, 43841), (160, 43847), (163, 43868),

Gene: EGole_182 Start: 98035, Stop: 98592, Start Num: 53
Candidate Starts for EGole_182:
(Start: 53 @98035 has 98 MA's), (58, 98062), (73, 98158), (81, 98188), (86, 98212), (126, 98395), (132, 98419), (133, 98428), (135, 98440), (136, 98446), (138, 98455),

Gene: EhyElimayoE_78 Start: 57043, Stop: 56420, Start Num: 50
Candidate Starts for EhyElimayoE_78:
(Start: 50 @57043 has 5 MA's), (65, 56962), (98, 56806), (99, 56803), (113, 56755), (123, 56692), (124, 56683), (130, 56650), (144, 56584), (167, 56452),

Gene: Eliot67_180 Start: 95189, Stop: 95746, Start Num: 53
Candidate Starts for Eliot67_180:
(Start: 53 @95189 has 98 MA's), (86, 95366), (111, 95447), (132, 95573), (133, 95582), (136, 95600), (138, 95609), (153, 95657),

Gene: Elmer_196 Start: 99545, Stop: 100102, Start Num: 53
Candidate Starts for Elmer_196:
(Start: 53 @99545 has 98 MA's), (64, 99620), (81, 99698), (86, 99722), (114, 99815), (117, 99830), (125, 99902), (132, 99929), (133, 99938), (135, 99950), (138, 99965),

Gene: Emma1919_112 Start: 72256, Stop: 72816, Start Num: 48
Candidate Starts for Emma1919_112:
(29, 72190), (35, 72211), (Start: 48 @72256 has 17 MA's), (61, 72316), (75, 72391), (80, 72412), (83, 72424), (87, 72445), (116, 72544), (132, 72652), (133, 72661), (136, 72679), (140, 72694), (160, 72790), (161, 72802),

Gene: Empress_67 Start: 43413, Stop: 44066, Start Num: 22
Candidate Starts for Empress_67:
(Start: 22 @43413 has 19 MA's), (26, 43422), (36, 43455), (Start: 45 @43494 has 6 MA's), (64, 43572), (71, 43614), (84, 43659), (103, 43764), (105, 43770), (111, 43785), (125, 43866), (132, 43893), (136, 43920), (146, 43956), (158, 44022), (159, 44025), (160, 44031), (163, 44052),

Gene: Enygma_193 Start: 98898, Stop: 99455, Start Num: 53
Candidate Starts for Enygma_193:
(Start: 53 @98898 has 98 MA's), (68, 99000), (73, 99021), (86, 99075), (132, 99282), (133, 99291), (135, 99303), (136, 99309), (138, 99318),

Gene: Evy_171 Start: 96433, Stop: 96990, Start Num: 53
Candidate Starts for Evy_171:
(Start: 53 @96433 has 98 MA's), (73, 96556), (81, 96586), (86, 96610), (92, 96625), (123, 96760), (130, 96805), (132, 96817), (133, 96826), (135, 96838), (136, 96844), (138, 96853),

Gene: Faja_88 Start: 49167, Stop: 49709, Start Num: 53
Candidate Starts for Faja_88:
(5, 48852), (Start: 53 @49167 has 98 MA's), (68, 49266), (82, 49314), (85, 49326), (94, 49344), (111, 49395), (126, 49458), (132, 49482), (136, 49509), (143, 49536), (148, 49551), (160, 49620), (164, 49644), (168, 49674),

Gene: Farewell_57 Start: 38417, Stop: 39061, Start Num: 16
Candidate Starts for Farewell_57:
(Start: 16 @38417 has 1 MA's), (35, 38474), (Start: 46 @38513 has 2 MA's), (71, 38633), (82, 38669), (111, 38780), (115, 38795), (125, 38861), (132, 38888), (136, 38915), (146, 38951), (158, 39017), (159, 39020), (160, 39026),

Gene: Faust_110 Start: 73136, Stop: 73705, Start Num: 48
Candidate Starts for Faust_110:
(Start: 48 @73136 has 17 MA's), (Start: 53 @73145 has 98 MA's), (80, 73292), (83, 73304), (115, 73421), (127, 73478), (132, 73499), (136, 73526), (140, 73541), (159, 73631), (160, 73637), (161, 73649),

Gene: Forrest_116 Start: 74569, Stop: 75129, Start Num: 48
Candidate Starts for Forrest_116:
(29, 74503), (35, 74524), (Start: 48 @74569 has 17 MA's), (61, 74629), (75, 74704), (80, 74725), (83, 74737), (87, 74758), (116, 74857), (132, 74965), (133, 74974), (136, 74992), (140, 75007), (160, 75103), (161, 75115),

Gene: Francob_108 Start: 72289, Stop: 72852, Start Num: 48
Candidate Starts for Francob_108:
(35, 72244), (Start: 48 @72289 has 17 MA's), (61, 72349), (63, 72364), (64, 72367), (80, 72445), (83, 72457), (87, 72478), (127, 72664), (132, 72685), (133, 72694), (136, 72712), (160, 72823), (161, 72835),

Gene: Frankenweenie_85 Start: 60895, Stop: 60269, Start Num: 51
Candidate Starts for Frankenweenie_85:
(3, 61231), (4, 61219), (6, 61180), (10, 61042), (Start: 51 @60895 has 5 MA's), (70, 60772), (88, 60697), (98, 60658), (99, 60655), (123, 60544), (129, 60502), (130, 60499), (132, 60487), (139, 60448), (167, 60301),

Gene: FreddyDRoo_179 Start: 95189, Stop: 95746, Start Num: 53
Candidate Starts for FreddyDRoo_179:
(Start: 53 @95189 has 98 MA's), (86, 95366), (111, 95447), (132, 95573), (133, 95582), (136, 95600), (138, 95609), (153, 95657),

Gene: Fruitloop_65 Start: 43885, Stop: 44457, Start Num: 45
Candidate Starts for Fruitloop_65:
(Start: 22 @43804 has 19 MA's), (26, 43813), (36, 43846), (Start: 45 @43885 has 6 MA's), (64, 43963), (71, 44005), (84, 44050), (103, 44155), (105, 44161), (111, 44176), (125, 44257), (132, 44284), (136, 44311), (146, 44347), (158, 44413), (159, 44416), (160, 44422), (163, 44443),

Gene: Genie2_185 Start: 96138, Stop: 96692, Start Num: 53
Candidate Starts for Genie2_185:
(Start: 53 @96138 has 98 MA's), (64, 96213), (86, 96315), (106, 96381), (108, 96384), (125, 96495), (132, 96522), (133, 96531), (135, 96543), (136, 96549), (138, 96558), (147, 96591), (157, 96645),

Gene: Geralt_63 Start: 41968, Stop: 42621, Start Num: 22
Candidate Starts for Geralt_63:
(Start: 22 @41968 has 19 MA's), (26, 41977), (36, 42010), (Start: 45 @42049 has 6 MA's), (64, 42127), (71, 42169), (84, 42214), (103, 42319), (105, 42325), (111, 42340), (125, 42421), (132, 42448), (136, 42475), (146, 42511), (158, 42577), (159, 42580), (160, 42586), (163, 42607),

Gene: Gibbi_197 Start: 96935, Stop: 97492, Start Num: 53
Candidate Starts for Gibbi_197:
(Start: 53 @96935 has 98 MA's), (73, 97058), (86, 97112), (114, 97205), (125, 97292), (127, 97298), (132, 97319), (133, 97328), (135, 97340), (136, 97346), (138, 97355),

Gene: Gilson_111 Start: 72218, Stop: 72778, Start Num: 48
Candidate Starts for Gilson_111:
(29, 72152), (35, 72173), (Start: 48 @72218 has 17 MA's), (61, 72278), (75, 72353), (80, 72374), (83, 72386), (87, 72407), (116, 72506), (132, 72614), (133, 72623), (136, 72641), (140, 72656), (160, 72752), (161, 72764),

Gene: Globfish_87 Start: 47967, Stop: 48452, Start Num: 53
Candidate Starts for Globfish_87:
(Start: 53 @47967 has 98 MA's), (82, 48114), (94, 48144), (112, 48198), (126, 48249), (127, 48252), (132, 48273), (136, 48300), (143, 48327), (148, 48342), (160, 48411), (164, 48435),

Gene: HangryHippo_179 Start: 96373, Stop: 96930, Start Num: 53
Candidate Starts for HangryHippo_179:
(Start: 53 @96373 has 98 MA's), (58, 96400), (64, 96448), (73, 96496), (81, 96526), (86, 96550), (126, 96733), (132, 96757), (133, 96766), (135, 96778), (136, 96784), (138, 96793),

Gene: IchabodCrane_186 Start: 96450, Stop: 97007, Start Num: 53
Candidate Starts for IchabodCrane_186:
(Start: 53 @96450 has 98 MA's), (73, 96573), (86, 96627), (114, 96720), (125, 96807), (127, 96813), (132, 96834), (133, 96843), (135, 96855), (136, 96861), (138, 96870),

Gene: IdentityCrisis_58 Start: 35961, Stop: 36560, Start Num: 49
Candidate Starts for IdentityCrisis_58:
(Start: 49 @35961 has 13 MA's), (71, 36075), (103, 36216), (104, 36219), (105, 36222), (132, 36345), (136, 36372), (143, 36399), (160, 36486), (171, 36546),

Gene: Inventum_66 Start: 43502, Stop: 44080, Start Num: 22
Candidate Starts for Inventum_66:
(Start: 22 @43502 has 19 MA's), (26, 43511), (71, 43634), (84, 43679), (105, 43784), (125, 43880), (132, 43907), (136, 43934), (146, 43970), (158, 44036), (159, 44039), (160, 44045), (163, 44066),

Gene: Jada_112 Start: 73499, Stop: 74059, Start Num: 48
Candidate Starts for Jada_112:
(29, 73433), (35, 73454), (Start: 48 @73499 has 17 MA's), (61, 73559), (75, 73634), (80, 73655), (83, 73667), (87, 73688), (116, 73787), (132, 73895), (133, 73904), (136, 73922), (140, 73937), (160, 74033), (161, 74045),

Gene: JakeTheSnake_92 Start: 51112, Stop: 51597, Start Num: 52
Candidate Starts for JakeTheSnake_92:
(52, 51112), (82, 51259), (85, 51271), (94, 51289), (126, 51394), (132, 51418), (136, 51445), (143, 51472), (148, 51487), (160, 51556),

Gene: Jay2Jay_186 Start: 97179, Stop: 97733, Start Num: 53
Candidate Starts for Jay2Jay_186:
(Start: 53 @97179 has 98 MA's), (73, 97302), (81, 97332), (86, 97356), (92, 97371), (130, 97551), (132, 97563), (133, 97572), (135, 97584), (136, 97590), (138, 97599),

Gene: JimJam_197 Start: 98371, Stop: 98928, Start Num: 53
Candidate Starts for JimJam_197:
(41, 98341), (Start: 53 @98371 has 98 MA's), (73, 98494), (86, 98548), (114, 98641), (125, 98728), (127, 98734), (132, 98755), (133, 98764), (135, 98776), (136, 98782), (138, 98791),

Gene: JoeyJr_69 Start: 44417, Stop: 45070, Start Num: 22
Candidate Starts for JoeyJr_69:
(Start: 22 @44417 has 19 MA's), (26, 44426), (36, 44459), (Start: 45 @44498 has 6 MA's), (64, 44576), (71, 44618), (84, 44663), (103, 44768), (105, 44774), (111, 44789), (125, 44870), (132, 44897), (136, 44924), (146, 44960), (158, 45026), (159, 45029), (160, 45035), (163, 45056),

Gene: Jollison_187 Start: 96581, Stop: 97138, Start Num: 53
Candidate Starts for Jollison_187:
(Start: 53 @96581 has 98 MA's), (73, 96704), (86, 96758), (114, 96851), (125, 96938), (127, 96944), (132, 96965), (133, 96974), (135, 96986), (136, 96992), (138, 97001),

Gene: JustBecause_74 Start: 54987, Stop: 54361, Start Num: 51
Candidate Starts for JustBecause_74:
(Start: 51 @54987 has 5 MA's), (69, 54867), (98, 54750), (99, 54747), (102, 54732), (123, 54636), (130, 54591), (160, 54432), (166, 54399), (167, 54393),

Gene: Karimac_190 Start: 96775, Stop: 97332, Start Num: 53
Candidate Starts for Karimac_190:
(Start: 53 @96775 has 98 MA's), (64, 96850), (68, 96877), (73, 96898), (86, 96952), (114, 97045), (127, 97138), (132, 97159), (133, 97168), (135, 97180), (136, 97186), (138, 97195),

Gene: Karp_107 Start: 72767, Stop: 73330, Start Num: 47
Candidate Starts for Karp_107:
(31, 72710), (39, 72737), (Start: 47 @72767 has 7 MA's), (80, 72923), (83, 72935), (87, 72956), (101, 73010), (127, 73142), (130, 73151), (132, 73163), (135, 73184), (136, 73190), (140, 73205), (160, 73301),

Gene: Kela_75 Start: 54852, Stop: 54226, Start Num: 51
Candidate Starts for Kela_75:
(38, 54894), (Start: 51 @54852 has 5 MA's), (69, 54732), (98, 54615), (99, 54612), (102, 54597), (123, 54501), (130, 54456), (160, 54297), (166, 54264), (167, 54258),

Gene: Kenrey_114 Start: 73258, Stop: 73818, Start Num: 48
Candidate Starts for Kenrey_114:
(29, 73192), (35, 73213), (Start: 48 @73258 has 17 MA's), (61, 73318), (75, 73393), (80, 73414), (83, 73426), (87, 73447), (116, 73546), (123, 73597), (132, 73654), (133, 73663), (136, 73681), (140, 73696), (160, 73792), (161, 73804),

Gene: KentuckyRacer_195 Start: 98117, Stop: 98674, Start Num: 53
Candidate Starts for KentuckyRacer_195:
(Start: 53 @98117 has 98 MA's), (73, 98240), (86, 98294), (114, 98387), (125, 98474), (127, 98480), (132, 98501), (133, 98510), (135, 98522), (136, 98528), (138, 98537),

Gene: KimJongPhill_39 Start: 34284, Stop: 33583, Start Num: 24
Candidate Starts for KimJongPhill_39:
(Start: 24 @34284 has 1 MA's), (31, 34263), (43, 34215), (55, 34188), (62, 34131), (67, 34098), (93, 33960), (97, 33942), (100, 33927), (103, 33918), (109, 33900), (110, 33897), (114, 33882), (122, 33831), (123, 33825), (132, 33768), (136, 33741), (145, 33711), (150, 33690),

Gene: KingMidas_68 Start: 43829, Stop: 44482, Start Num: 22
Candidate Starts for KingMidas_68:
(Start: 22 @43829 has 19 MA's), (26, 43838), (36, 43871), (Start: 45 @43910 has 6 MA's), (64, 43988), (71, 44030), (84, 44075), (103, 44180), (105, 44186), (111, 44201), (125, 44282), (132, 44309), (136, 44336), (146, 44372), (158, 44438), (159, 44441), (160, 44447), (163, 44468),

Gene: Kradal_78 Start: 57043, Stop: 56420, Start Num: 50
Candidate Starts for Kradal_78:
(Start: 50 @57043 has 5 MA's), (65, 56962), (98, 56806), (99, 56803), (113, 56755), (123, 56692), (124, 56683), (130, 56650), (144, 56584), (167, 56452),

Gene: Larnav_180 Start: 96992, Stop: 97549, Start Num: 53
Candidate Starts for Larnav_180:
(Start: 53 @96992 has 98 MA's), (58, 97019), (73, 97115), (81, 97145), (86, 97169), (126, 97352), (132, 97376), (133, 97385), (135, 97397), (136, 97403), (138, 97412), (151, 97454),

Gene: Laure_275 Start: 153371, Stop: 153868, Start Num: 53
Candidate Starts for Laure_275:
(37, 153323), (Start: 53 @153371 has 98 MA's), (58, 153398), (71, 153482), (72, 153488), (77, 153500), (82, 153518), (85, 153530), (125, 153653), (132, 153680), (136, 153707), (140, 153722), (142, 153731), (161, 153842), (162, 153845),

Gene: Leo04_182 Start: 97383, Stop: 97940, Start Num: 53
Candidate Starts for Leo04_182:
(Start: 53 @97383 has 98 MA's), (58, 97410), (64, 97458), (73, 97506), (81, 97536), (86, 97560), (126, 97743), (132, 97767), (133, 97776), (135, 97788), (136, 97794), (138, 97803),

Gene: Leperchaun_66 Start: 43647, Stop: 44300, Start Num: 22
Candidate Starts for Leperchaun_66:
(Start: 22 @43647 has 19 MA's), (26, 43656), (36, 43689), (Start: 45 @43728 has 6 MA's), (64, 43806), (71, 43848), (84, 43893), (103, 43998), (105, 44004), (111, 44019), (125, 44100), (132, 44127), (136,

44154), (146, 44190), (158, 44256), (159, 44259), (160, 44265), (163, 44286),

Gene: Liandry_179 Start: 95896, Stop: 96453, Start Num: 53
Candidate Starts for Liandry_179:
(Start: 53 @95896 has 98 MA's), (86, 96073), (111, 96154), (132, 96280), (133, 96289), (136, 96307), (138, 96316), (153, 96364),

Gene: LilMartin_177 Start: 94939, Stop: 95493, Start Num: 53
Candidate Starts for LilMartin_177:
(Start: 53 @94939 has 98 MA's), (64, 95014), (73, 95062), (81, 95092), (86, 95116), (111, 95197), (114, 95209), (132, 95323), (133, 95332), (135, 95344), (136, 95350), (138, 95359),

Gene: LilSaint_176 Start: 94818, Stop: 95375, Start Num: 53
Candidate Starts for LilSaint_176:
(Start: 53 @94818 has 98 MA's), (86, 94995), (108, 95064), (111, 95076), (117, 95103), (118, 95106), (132, 95202), (133, 95211), (136, 95229), (138, 95238),

Gene: Limpid_109 Start: 72875, Stop: 73480, Start Num: 48
Candidate Starts for Limpid_109:
(Start: 48 @72875 has 17 MA's), (80, 73031), (83, 73043), (88, 73067), (127, 73250), (132, 73271), (133, 73280), (136, 73298), (160, 73409), (161, 73421),

Gene: LukeCage_189 Start: 97535, Stop: 98092, Start Num: 53
Candidate Starts for LukeCage_189:
(Start: 53 @97535 has 98 MA's), (64, 97610), (73, 97658), (81, 97688), (86, 97712), (106, 97778), (114, 97805), (118, 97823), (125, 97892), (132, 97919), (133, 97928), (135, 97940), (136, 97946), (138, 97955),

Gene: Lululemon_179 Start: 95754, Stop: 96311, Start Num: 53
Candidate Starts for Lululemon_179:
(Start: 53 @95754 has 98 MA's), (58, 95781), (64, 95829), (73, 95877), (81, 95907), (86, 95931), (126, 96114), (132, 96138), (133, 96147), (135, 96159), (136, 96165), (138, 96174),

Gene: Maupel_111 Start: 72218, Stop: 72778, Start Num: 48
Candidate Starts for Maupel_111:
(29, 72152), (35, 72173), (Start: 48 @72218 has 17 MA's), (61, 72278), (75, 72353), (80, 72374), (83, 72386), (87, 72407), (116, 72506), (132, 72614), (133, 72623), (136, 72641), (140, 72656), (160, 72752), (161, 72764),

Gene: MeganTheeKilla_111 Start: 72424, Stop: 72984, Start Num: 48
Candidate Starts for MeganTheeKilla_111:
(29, 72358), (35, 72379), (Start: 48 @72424 has 17 MA's), (61, 72484), (75, 72559), (80, 72580), (83, 72592), (87, 72613), (116, 72712), (125, 72793), (132, 72820), (133, 72829), (136, 72847), (140, 72862), (160, 72958), (161, 72970),

Gene: MicyPS_34 Start: 31790, Stop: 31314, Start Num: 53
Candidate Starts for MicyPS_34:
(40, 31823), (Start: 53 @31790 has 98 MA's), (85, 31631), (95, 31613), (126, 31508), (132, 31484), (136, 31457),

Gene: Mildred21_187 Start: 95214, Stop: 95771, Start Num: 53
Candidate Starts for Mildred21_187:

(Start: 53 @95214 has 98 MA's), (81, 95367), (86, 95391), (111, 95472), (125, 95571), (126, 95574), (132, 95598), (133, 95607), (135, 95619), (136, 95625), (138, 95634),

Gene: MindFlayer_183 Start: 95966, Stop: 96523, Start Num: 53
Candidate Starts for MindFlayer_183:
(Start: 53 @95966 has 98 MA's), (73, 96089), (86, 96143), (114, 96236), (125, 96323), (127, 96329), (132, 96350), (133, 96359), (135, 96371), (136, 96377), (138, 96386),

Gene: MinionDave_93 Start: 52864, Stop: 53421, Start Num: 49
Candidate Starts for MinionDave_93:
(7, 52672), (23, 52780), (35, 52819), (Start: 49 @52864 has 13 MA's), (61, 52918), (71, 52978), (89, 53050), (104, 53131), (130, 53245), (132, 53257), (133, 53266), (136, 53284), (141, 53302), (149, 53332), (165, 53416),

Gene: Moab_113 Start: 74949, Stop: 75476, Start Num: 48
Candidate Starts for Moab_113:
(Start: 48 @74949 has 17 MA's), (Start: 53 @74958 has 98 MA's), (78, 75102), (80, 75105), (83, 75117), (86, 75135), (127, 75291), (132, 75312), (136, 75339), (140, 75354), (160, 75450), (161, 75462),

Gene: ModicumRichard_71 Start: 46606, Stop: 47139, Start Num: 53
Candidate Starts for ModicumRichard_71:
(Start: 53 @46606 has 98 MA's), (72, 46723), (82, 46753), (84, 46762), (123, 46903), (132, 46960), (136, 46987), (151, 47038), (160, 47098),

Gene: Moonflower_57 Start: 40406, Stop: 41035, Start Num: 53
Candidate Starts for Moonflower_57:
(Start: 53 @40406 has 98 MA's), (81, 40550), (82, 40553), (85, 40565), (100, 40655), (111, 40685), (125, 40781), (132, 40808), (136, 40835), (152, 40895), (156, 40925), (161, 40961), (170, 41006), (172, 41012), (173, 41024),

Gene: Morgana_74 Start: 47769, Stop: 48302, Start Num: 53
Candidate Starts for Morgana_74:
(Start: 53 @47769 has 98 MA's), (71, 47880), (82, 47916), (84, 47925), (123, 48066), (132, 48123), (136, 48150), (151, 48201), (160, 48261),

Gene: Mugiwara_191 Start: 97750, Stop: 98307, Start Num: 53
Candidate Starts for Mugiwara_191:
(Start: 53 @97750 has 98 MA's), (64, 97825), (68, 97852), (73, 97873), (86, 97927), (114, 98020), (117, 98035), (127, 98113), (132, 98134), (133, 98143), (135, 98155), (136, 98161), (138, 98170),

Gene: MulchMansion_178 Start: 95582, Stop: 96136, Start Num: 53
Candidate Starts for MulchMansion_178:
(Start: 53 @95582 has 98 MA's), (64, 95657), (73, 95705), (86, 95759), (111, 95840), (114, 95852), (132, 95966), (133, 95975), (135, 95987), (136, 95993), (138, 96002),

Gene: Navo_177 Start: 95533, Stop: 96090, Start Num: 53
Candidate Starts for Navo_177:
(Start: 53 @95533 has 98 MA's), (86, 95710), (111, 95791), (132, 95917), (133, 95926), (136, 95944), (138, 95953), (153, 96001),

Gene: Nimbo_62 Start: 41971, Stop: 42624, Start Num: 22
Candidate Starts for Nimbo_62:

(Start: 22 @41971 has 19 MA's), (26, 41980), (36, 42013), (Start: 45 @42052 has 6 MA's), (64, 42130), (71, 42172), (84, 42217), (103, 42322), (105, 42328), (111, 42343), (125, 42424), (132, 42451), (136, 42478), (146, 42514), (158, 42580), (159, 42583), (160, 42589), (163, 42610),

Gene: Nirvana_82 Start: 59297, Stop: 58671, Start Num: 51
Candidate Starts for Nirvana_82:
(Start: 51 @59297 has 5 MA's), (65, 59216), (70, 59174), (98, 59060), (99, 59057), (123, 58946), (130, 58901), (134, 58871), (139, 58850), (167, 58703),

Gene: Nitzel_88 Start: 49520, Stop: 50077, Start Num: 49
Candidate Starts for Nitzel_88:
(7, 49328), (23, 49436), (35, 49475), (Start: 49 @49520 has 13 MA's), (61, 49574), (71, 49634), (89, 49706), (104, 49787), (130, 49901), (132, 49913), (133, 49922), (136, 49940), (141, 49958), (149, 49988), (165, 50072),

Gene: NootNoot_177 Start: 94903, Stop: 95460, Start Num: 53
Candidate Starts for NootNoot_177:
(Start: 53 @94903 has 98 MA's), (86, 95080), (111, 95161), (132, 95287), (133, 95296), (136, 95314), (138, 95323), (153, 95371),

Gene: ObLaDi_71 Start: 46578, Stop: 47111, Start Num: 53
Candidate Starts for ObLaDi_71:
(Start: 53 @46578 has 98 MA's), (72, 46695), (82, 46725), (84, 46734), (123, 46875), (132, 46932), (136, 46959), (151, 47010), (160, 47070),

Gene: OldBen_66 Start: 43364, Stop: 44017, Start Num: 22
Candidate Starts for OldBen_66:
(Start: 22 @43364 has 19 MA's), (26, 43373), (36, 43406), (Start: 45 @43445 has 6 MA's), (64, 43523), (71, 43565), (84, 43610), (103, 43715), (105, 43721), (111, 43736), (125, 43817), (132, 43844), (136, 43871), (146, 43907), (158, 43973), (159, 43976), (160, 43982), (163, 44003),

Gene: OwlsT2W_93 Start: 51404, Stop: 51961, Start Num: 49
Candidate Starts for OwlsT2W_93:
(7, 51212), (23, 51320), (35, 51359), (Start: 49 @51404 has 13 MA's), (61, 51458), (71, 51518), (89, 51590), (104, 51671), (130, 51785), (132, 51797), (133, 51806), (136, 51824), (141, 51842), (149, 51872), (165, 51956),

Gene: PHappiness_69 Start: 44193, Stop: 44846, Start Num: 22
Candidate Starts for PHappiness_69:
(Start: 22 @44193 has 19 MA's), (26, 44202), (36, 44235), (Start: 45 @44274 has 6 MA's), (64, 44352), (71, 44394), (84, 44439), (103, 44544), (105, 44550), (111, 44565), (125, 44646), (132, 44673), (136, 44700), (146, 44736), (158, 44802), (159, 44805), (160, 44811), (163, 44832),

Gene: PSonyx_37 Start: 31434, Stop: 30970, Start Num: 53
Candidate Starts for PSonyx_37:
(40, 31467), (Start: 53 @31434 has 98 MA's), (85, 31275), (95, 31257), (114, 31209), (126, 31152), (132, 31128), (136, 31101),

Gene: PacManQ_179 Start: 95754, Stop: 96311, Start Num: 53
Candidate Starts for PacManQ_179:
(Start: 53 @95754 has 98 MA's), (58, 95781), (64, 95829), (73, 95877), (81, 95907), (86, 95931), (126, 96114), (132, 96138), (133, 96147), (135, 96159), (136, 96165), (138, 96174),

Gene: Paradiddles_174 Start: 97716, Stop: 98273, Start Num: 53
Candidate Starts for Paradiddles_174:
(Start: 53 @97716 has 98 MA's), (86, 97893), (111, 97974), (132, 98100), (133, 98109), (136, 98127), (138, 98136), (153, 98184),

Gene: Patelgo_114 Start: 74809, Stop: 75336, Start Num: 48
Candidate Starts for Patelgo_114:
(Start: 48 @74809 has 17 MA's), (Start: 53 @74818 has 98 MA's), (78, 74962), (80, 74965), (83, 74977), (86, 74995), (127, 75151), (132, 75172), (136, 75199), (140, 75214), (160, 75310), (161, 75322),

Gene: Peebs_178 Start: 96695, Stop: 97252, Start Num: 53
Candidate Starts for Peebs_178:
(Start: 53 @96695 has 98 MA's), (58, 96722), (64, 96770), (73, 96818), (81, 96848), (86, 96872), (126, 97055), (132, 97079), (133, 97088), (135, 97100), (136, 97106), (138, 97115),

Gene: Pepperwood_179 Start: 96639, Stop: 97196, Start Num: 53
Candidate Starts for Pepperwood_179:
(Start: 53 @96639 has 98 MA's), (58, 96666), (64, 96714), (73, 96762), (81, 96792), (86, 96816), (126, 96999), (132, 97023), (133, 97032), (135, 97044), (136, 97050), (138, 97059),

Gene: Persimmon_181 Start: 95550, Stop: 96107, Start Num: 53
Candidate Starts for Persimmon_181:
(Start: 53 @95550 has 98 MA's), (73, 95673), (81, 95703), (86, 95727), (92, 95742), (123, 95877), (130, 95922), (132, 95934), (133, 95943), (135, 95955), (136, 95961), (138, 95970),

Gene: PhesterPhotato_73 Start: 45038, Stop: 45586, Start Num: 46
Candidate Starts for PhesterPhotato_73:
(34, 44990), (42, 45026), (Start: 46 @45038 has 2 MA's), (71, 45158), (100, 45275), (105, 45290), (123, 45356), (125, 45386), (132, 45413), (136, 45440), (146, 45476), (158, 45542), (159, 45545), (160, 45551), (163, 45572),

Gene: Phishy_2 Start: 216, Stop: 800, Start Num: 53
Candidate Starts for Phishy_2:
(12, 69), (19, 111), (41, 186), (Start: 53 @216 has 98 MA's), (68, 315), (71, 327), (77, 345), (81, 363), (90, 405), (100, 453), (125, 579), (126, 582), (132, 606), (136, 633), (161, 756),

Gene: Phredrick_110 Start: 71544, Stop: 72104, Start Num: 48
Candidate Starts for Phredrick_110:
(29, 71478), (35, 71499), (Start: 48 @71544 has 17 MA's), (61, 71604), (75, 71679), (80, 71700), (83, 71712), (87, 71733), (116, 71832), (123, 71883), (132, 71940), (133, 71949), (136, 71967), (140, 71982), (160, 72078), (161, 72090),

Gene: PinkiePie_178 Start: 95896, Stop: 96453, Start Num: 53
Candidate Starts for PinkiePie_178:
(Start: 53 @95896 has 98 MA's), (86, 96073), (111, 96154), (132, 96280), (133, 96289), (136, 96307), (138, 96316), (153, 96364),

Gene: Poenanya_71 Start: 44678, Stop: 45256, Start Num: 22
Candidate Starts for Poenanya_71:
(Start: 22 @44678 has 19 MA's), (26, 44687), (71, 44810), (84, 44855), (105, 44960), (125, 45056), (132, 45083), (136, 45110), (146, 45146), (158, 45212), (159, 45215), (160, 45221), (163, 45242),

Gene: Polka14_72 Start: 45394, Stop: 46047, Start Num: 22
Candidate Starts for Polka14_72:
(Start: 22 @45394 has 19 MA's), (26, 45403), (36, 45436), (Start: 45 @45475 has 6 MA's), (64, 45553), (71, 45595), (84, 45640), (103, 45745), (105, 45751), (111, 45766), (125, 45847), (132, 45874), (136, 45901), (146, 45937), (158, 46003), (159, 46006), (160, 46012), (163, 46033),

Gene: Powerball_59 Start: 40153, Stop: 40761, Start Num: 53
Candidate Starts for Powerball_59:
(25, 40072), (Start: 53 @40153 has 98 MA's), (68, 40252), (71, 40264), (77, 40282), (81, 40300), (90, 40342), (100, 40390), (105, 40405), (111, 40420), (115, 40435), (130, 40531), (132, 40543), (136, 40570), (154, 40651),

Gene: PumpkinSpice_192 Start: 97187, Stop: 97744, Start Num: 53
Candidate Starts for PumpkinSpice_192:
(Start: 53 @97187 has 98 MA's), (73, 97310), (86, 97364), (114, 97457), (125, 97544), (127, 97550), (132, 97571), (133, 97580), (135, 97592), (136, 97598), (138, 97607),

Gene: Pupper_72 Start: 25365, Stop: 25928, Start Num: 49
Candidate Starts for Pupper_72:
(Start: 49 @25365 has 13 MA's), (71, 25482), (72, 25488), (82, 25518), (128, 25695), (132, 25713), (136, 25740),

Gene: PynkPanther_180 Start: 96734, Stop: 97291, Start Num: 53
Candidate Starts for PynkPanther_180:
(Start: 53 @96734 has 98 MA's), (86, 96911), (106, 96977), (111, 96992), (132, 97118), (133, 97127), (136, 97145), (138, 97154),

Gene: Quantum_77 Start: 57043, Stop: 56420, Start Num: 50
Candidate Starts for Quantum_77:
(Start: 50 @57043 has 5 MA's), (65, 56962), (98, 56806), (99, 56803), (113, 56755), (123, 56692), (124, 56683), (130, 56650), (144, 56584), (167, 56452),

Gene: Quaran19_190 Start: 96628, Stop: 97185, Start Num: 53
Candidate Starts for Quaran19_190:
(Start: 53 @96628 has 98 MA's), (73, 96751), (86, 96805), (114, 96898), (125, 96985), (127, 96991), (132, 97012), (133, 97021), (135, 97033), (136, 97039), (138, 97048),

Gene: RedBird_69 Start: 43183, Stop: 43761, Start Num: 22
Candidate Starts for RedBird_69:
(Start: 22 @43183 has 19 MA's), (26, 43192), (71, 43315), (84, 43360), (105, 43465), (125, 43561), (132, 43588), (136, 43615), (146, 43651), (158, 43717), (159, 43720), (160, 43726), (163, 43747),

Gene: Rikishi_189 Start: 96739, Stop: 97296, Start Num: 53
Candidate Starts for Rikishi_189:
(Start: 53 @96739 has 98 MA's), (73, 96862), (86, 96916), (114, 97009), (118, 97027), (125, 97096), (132, 97123), (133, 97132), (135, 97144), (136, 97150), (138, 97159),

Gene: Riptide_176 Start: 94295, Stop: 94852, Start Num: 53
Candidate Starts for Riptide_176:
(Start: 53 @94295 has 98 MA's), (86, 94472), (108, 94541), (111, 94553), (117, 94580), (118, 94583), (132, 94679), (133, 94688), (136, 94706), (138, 94715),

Gene: Rita_95 Start: 53949, Stop: 54506, Start Num: 49

Candidate Starts for Rita_95:
(7, 53757), (23, 53865), (35, 53904), (Start: 49 @53949 has 13 MA's), (61, 54003), (71, 54063), (89, 54135), (104, 54216), (130, 54330), (132, 54342), (133, 54351), (136, 54369), (141, 54387), (149, 54417), (165, 54501),

Gene: RitaG_69 Start: 44538, Stop: 45191, Start Num: 22
Candidate Starts for RitaG_69:
(Start: 22 @44538 has 19 MA's), (26, 44547), (36, 44580), (Start: 45 @44619 has 6 MA's), (64, 44697), (71, 44739), (84, 44784), (103, 44889), (105, 44895), (111, 44910), (125, 44991), (132, 45018), (136, 45045), (146, 45081), (158, 45147), (159, 45150), (160, 45156), (163, 45177),

Gene: Ruthy_58 Start: 42248, Stop: 42835, Start Num: 53
Candidate Starts for Ruthy_58:
(Start: 53 @42248 has 98 MA's), (68, 42347), (71, 42359), (77, 42377), (81, 42395), (90, 42437), (100, 42485), (105, 42500), (111, 42515), (125, 42611), (132, 42638), (136, 42665), (169, 42824),

Gene: SCentae_71 Start: 25119, Stop: 25682, Start Num: 49
Candidate Starts for SCentae_71:
(Start: 49 @25119 has 13 MA's), (71, 25236), (72, 25242), (82, 25272), (128, 25449), (132, 25467), (136, 25494),

Gene: SPB78_66 Start: 42811, Stop: 43368, Start Num: 51
Candidate Starts for SPB78_66:
(23, 42730), (30, 42748), (32, 42754), (Start: 51 @42811 has 5 MA's), (63, 42880), (77, 42946), (81, 42961), (91, 43003), (96, 43027), (114, 43093), (115, 43096), (132, 43189), (136, 43216), (148, 43264), (160, 43330),

Gene: SaltySpitoon_190 Start: 96170, Stop: 96727, Start Num: 53
Candidate Starts for SaltySpitoon_190:
(Start: 53 @96170 has 98 MA's), (73, 96293), (86, 96347), (114, 96440), (125, 96527), (127, 96533), (132, 96554), (133, 96563), (135, 96575), (136, 96581), (138, 96590),

Gene: Samisti12_182 Start: 98079, Stop: 98636, Start Num: 53
Candidate Starts for Samisti12_182:
(Start: 53 @98079 has 98 MA's), (58, 98106), (64, 98154), (73, 98202), (81, 98232), (86, 98256), (126, 98439), (132, 98463), (133, 98472), (135, 98484), (136, 98490), (138, 98499),

Gene: Sarkar_78 Start: 57043, Stop: 56420, Start Num: 50
Candidate Starts for Sarkar_78:
(Start: 50 @57043 has 5 MA's), (65, 56962), (98, 56806), (99, 56803), (113, 56755), (123, 56692), (124, 56683), (130, 56650), (144, 56584), (167, 56452),

Gene: Sashimi_88 Start: 48886, Stop: 49443, Start Num: 53
Candidate Starts for Sashimi_88:
(Start: 53 @48886 has 98 MA's), (64, 48955), (68, 48985), (82, 49033), (94, 49063), (132, 49216), (136, 49243), (143, 49270), (160, 49354), (164, 49378),

Gene: Sassafras_69 Start: 43501, Stop: 44079, Start Num: 22
Candidate Starts for Sassafras_69:
(Start: 22 @43501 has 19 MA's), (26, 43510), (71, 43633), (84, 43678), (105, 43783), (125, 43879), (132, 43906), (136, 43933), (146, 43969), (158, 44035), (159, 44038), (160, 44044), (163, 44065),

Gene: Satis_78 Start: 57039, Stop: 56416, Start Num: 50

Candidate Starts for Satis_78:
(Start: 50 @57039 has 5 MA's), (65, 56958), (98, 56802), (99, 56799), (113, 56751), (123, 56688), (124, 56679), (130, 56646), (144, 56580), (167, 56448),

Gene: Sbash_62 Start: 43188, Stop: 43778, Start Num: 44
Candidate Starts for Sbash_62:
(33, 43146), (Start: 44 @43188 has 1 MA's), (72, 43317), (84, 43362), (88, 43380), (105, 43482), (111, 43497), (125, 43578), (132, 43605), (136, 43632), (146, 43668), (159, 43737), (160, 43743), (163, 43764),

Gene: Scheme_183 Start: 98260, Stop: 98817, Start Num: 53
Candidate Starts for Scheme_183:
(Start: 53 @98260 has 98 MA's), (58, 98287), (64, 98335), (73, 98383), (81, 98413), (86, 98437), (126, 98620), (132, 98644), (133, 98653), (135, 98665), (136, 98671), (138, 98680),

Gene: Scottish_67 Start: 43084, Stop: 43737, Start Num: 22
Candidate Starts for Scottish_67:
(Start: 22 @43084 has 19 MA's), (26, 43093), (36, 43126), (Start: 45 @43165 has 6 MA's), (64, 43243), (71, 43285), (84, 43330), (103, 43435), (105, 43441), (111, 43456), (125, 43537), (132, 43564), (136, 43591), (146, 43627), (158, 43693), (159, 43696), (160, 43702), (163, 43723),

Gene: SeresaTree_110 Start: 72518, Stop: 73087, Start Num: 48
Candidate Starts for SeresaTree_110:
(Start: 48 @72518 has 17 MA's), (Start: 53 @72527 has 98 MA's), (80, 72674), (83, 72686), (115, 72803), (127, 72860), (132, 72881), (136, 72908), (140, 72923), (159, 73013), (160, 73019), (161, 73031),

Gene: Sham_107 Start: 72628, Stop: 73191, Start Num: 47
Candidate Starts for Sham_107:
(31, 72571), (39, 72598), (Start: 47 @72628 has 7 MA's), (80, 72784), (83, 72796), (115, 72913), (120, 72937), (132, 73024), (133, 73033), (136, 73051), (140, 73066), (160, 73162),

Gene: Shuckle_178 Start: 96745, Stop: 97302, Start Num: 53
Candidate Starts for Shuckle_178:
(Start: 53 @96745 has 98 MA's), (81, 96898), (86, 96922), (111, 97003), (132, 97129), (133, 97138), (136, 97156), (138, 97165), (153, 97213),

Gene: SiSi_68 Start: 44708, Stop: 45361, Start Num: 22
Candidate Starts for SiSi_68:
(Start: 22 @44708 has 19 MA's), (26, 44717), (36, 44750), (Start: 45 @44789 has 6 MA's), (64, 44867), (71, 44909), (84, 44954), (103, 45059), (105, 45065), (111, 45080), (125, 45161), (132, 45188), (136, 45215), (146, 45251), (158, 45317), (159, 45320), (160, 45326), (163, 45347),

Gene: SkinnyPete_50 Start: 33679, Stop: 34233, Start Num: 45
Candidate Starts for SkinnyPete_50:
(13, 33553), (15, 33577), (18, 33586), (27, 33613), (Start: 45 @33679 has 6 MA's), (71, 33799), (103, 33931), (104, 33934), (105, 33937), (111, 33952), (117, 33979), (123, 34003), (125, 34033), (132, 34060), (136, 34087), (146, 34123), (159, 34192), (160, 34198), (163, 34219),

Gene: Skog_133 Start: 54097, Stop: 54663, Start Num: 51
Candidate Starts for Skog_133:
(Start: 51 @54097 has 5 MA's), (71, 54208), (84, 54253), (94, 54277), (125, 54421), (126, 54424), (132, 54448), (135, 54469), (136, 54475), (168, 54640),

Gene: Sollertia_186 Start: 96138, Stop: 96692, Start Num: 53
Candidate Starts for Sollertia_186:
(Start: 53 @96138 has 98 MA's), (64, 96213), (86, 96315), (106, 96381), (108, 96384), (125, 96495), (132, 96522), (133, 96531), (135, 96543), (136, 96549), (138, 96558), (147, 96591), (157, 96645),

Gene: Soul22_95 Start: 50440, Stop: 50997, Start Num: 49
Candidate Starts for Soul22_95:
(7, 50248), (23, 50356), (35, 50395), (Start: 49 @50440 has 13 MA's), (61, 50494), (71, 50554), (89, 50626), (104, 50707), (130, 50821), (132, 50833), (136, 50860), (141, 50878), (149, 50908), (165, 50992),

Gene: SparkleGoddess_109 Start: 73096, Stop: 73659, Start Num: 47
Candidate Starts for SparkleGoddess_109:
(31, 73039), (39, 73066), (Start: 47 @73096 has 7 MA's), (80, 73252), (83, 73264), (87, 73285), (101, 73339), (127, 73471), (130, 73480), (132, 73492), (135, 73513), (136, 73519), (140, 73534), (160, 73630),

Gene: Sparky_55 Start: 38977, Stop: 39525, Start Num: 46
Candidate Starts for Sparky_55:
(1, 38575), (2, 38632), (9, 38827), (11, 38842), (Start: 46 @38977 has 2 MA's), (71, 39097), (82, 39133), (105, 39229), (111, 39244), (125, 39325), (132, 39352), (136, 39379), (146, 39415), (158, 39481), (159, 39484), (160, 39490),

Gene: Spelly_193 Start: 96099, Stop: 96656, Start Num: 53
Candidate Starts for Spelly_193:
(Start: 53 @96099 has 98 MA's), (73, 96222), (81, 96252), (86, 96276), (114, 96369), (125, 96456), (127, 96462), (132, 96483), (133, 96492), (135, 96504), (136, 96510), (138, 96519),

Gene: Spilled_196 Start: 97303, Stop: 97860, Start Num: 53
Candidate Starts for Spilled_196:
(Start: 53 @97303 has 98 MA's), (73, 97426), (86, 97480), (114, 97573), (127, 97666), (132, 97687), (133, 97696), (135, 97708), (136, 97714), (138, 97723),

Gene: Squillium_181 Start: 95898, Stop: 96455, Start Num: 53
Candidate Starts for Squillium_181:
(Start: 53 @95898 has 98 MA's), (86, 96075), (111, 96156), (132, 96282), (133, 96291), (136, 96309), (138, 96318), (153, 96366),

Gene: StAugustine_3 Start: 1052, Stop: 1621, Start Num: 45
Candidate Starts for StAugustine_3:
(Start: 45 @1052 has 6 MA's), (59, 1097), (68, 1154), (71, 1166), (82, 1202), (88, 1229), (111, 1325), (126, 1412), (131, 1433), (132, 1436), (136, 1463), (159, 1565),

Gene: Stanimal_185 Start: 96499, Stop: 97053, Start Num: 53
Candidate Starts for Stanimal_185:
(Start: 53 @96499 has 98 MA's), (64, 96574), (86, 96676), (106, 96742), (108, 96745), (125, 96856), (132, 96883), (133, 96892), (135, 96904), (136, 96910), (138, 96919), (147, 96952), (157, 97006),

Gene: StarPlatinum_196 Start: 98569, Stop: 99126, Start Num: 53
Candidate Starts for StarPlatinum_196:
(Start: 53 @98569 has 98 MA's), (64, 98644), (73, 98692), (81, 98722), (86, 98746), (114, 98839), (125, 98926), (132, 98953), (133, 98962), (135, 98974), (136, 98980), (138, 98989), (157, 99076),

Gene: Starbow_188 Start: 96143, Stop: 96700, Start Num: 53
Candidate Starts for Starbow_188:
(Start: 53 @96143 has 98 MA's), (73, 96266), (86, 96320), (114, 96413), (125, 96500), (127, 96506), (132, 96527), (133, 96536), (135, 96548), (136, 96554), (138, 96563),

Gene: Stigma_109 Start: 73104, Stop: 73667, Start Num: 47
Candidate Starts for Stigma_109:
(31, 73047), (39, 73074), (Start: 47 @73104 has 7 MA's), (80, 73260), (83, 73272), (87, 73293), (101, 73347), (127, 73479), (130, 73488), (132, 73500), (136, 73527), (140, 73542), (160, 73638),

Gene: Sushi23_181 Start: 97745, Stop: 98302, Start Num: 53
Candidate Starts for Sushi23_181:
(Start: 53 @97745 has 98 MA's), (58, 97772), (64, 97820), (73, 97868), (81, 97898), (86, 97922), (126, 98105), (132, 98129), (133, 98138), (135, 98150), (136, 98156), (138, 98165),

Gene: Taotie_35 Start: 29024, Stop: 28560, Start Num: 53
Candidate Starts for Taotie_35:
(40, 29057), (Start: 53 @29024 has 98 MA's), (85, 28865), (95, 28847), (114, 28799), (126, 28742), (132, 28718), (136, 28691),

Gene: Targaryen_179 Start: 97642, Stop: 98199, Start Num: 53
Candidate Starts for Targaryen_179:
(Start: 53 @97642 has 98 MA's), (73, 97765), (81, 97795), (86, 97819), (92, 97834), (123, 97969), (130, 98014), (132, 98026), (133, 98035), (135, 98047), (136, 98053), (138, 98062),

Gene: Teutsch_179 Start: 97177, Stop: 97734, Start Num: 53
Candidate Starts for Teutsch_179:
(Start: 53 @97177 has 98 MA's), (58, 97204), (64, 97252), (73, 97300), (81, 97330), (86, 97354), (126, 97537), (132, 97561), (133, 97570), (135, 97582), (136, 97588), (138, 97597),

Gene: Tomas_184 Start: 96480, Stop: 97016, Start Num: 53
Candidate Starts for Tomas_184:
(Start: 53 @96480 has 98 MA's), (68, 96582), (86, 96657), (108, 96726), (111, 96738), (132, 96846), (133, 96855), (136, 96873), (138, 96882), (159, 96978),

Gene: Tribute_178 Start: 97194, Stop: 97751, Start Num: 53
Candidate Starts for Tribute_178:
(Start: 53 @97194 has 98 MA's), (58, 97221), (64, 97269), (73, 97317), (81, 97347), (86, 97371), (126, 97554), (132, 97578), (133, 97587), (135, 97599), (136, 97605), (138, 97614),

Gene: Tuesday_197 Start: 97154, Stop: 97711, Start Num: 53
Candidate Starts for Tuesday_197:
(Start: 53 @97154 has 98 MA's), (73, 97277), (86, 97331), (114, 97424), (125, 97511), (127, 97517), (132, 97538), (133, 97547), (135, 97559), (136, 97565), (138, 97574),

Gene: TunaTartare_110 Start: 74387, Stop: 74956, Start Num: 48
Candidate Starts for TunaTartare_110:
(43, 74375), (Start: 48 @74387 has 17 MA's), (Start: 53 @74396 has 98 MA's), (78, 74540), (80, 74543), (83, 74555), (127, 74729), (132, 74750), (133, 74759), (136, 74777), (140, 74792), (159, 74882), (160, 74888), (161, 74900),

Gene: VanLee_87 Start: 48126, Stop: 48647, Start Num: 53

Candidate Starts for VanLee_87:
(Start: 53 @48126 has 98 MA's), (71, 48237), (72, 48243), (74, 48246), (84, 48282), (105, 48357), (115, 48387), (123, 48423), (132, 48480), (136, 48507),

Gene: Warpy_184 Start: 96658, Stop: 97212, Start Num: 53
Candidate Starts for Warpy_184:
(Start: 53 @96658 has 98 MA's), (73, 96781), (86, 96835), (92, 96850), (106, 96901), (130, 97030), (132, 97042), (133, 97051), (135, 97063), (136, 97069), (138, 97078),

Gene: WashU_177 Start: 97268, Stop: 97825, Start Num: 53
Candidate Starts for WashU_177:
(Start: 53 @97268 has 98 MA's), (73, 97391), (81, 97421), (86, 97445), (126, 97628), (132, 97652), (133, 97661), (135, 97673), (136, 97679), (138, 97688), (151, 97730),

Gene: Watermoore_179 Start: 97589, Stop: 98146, Start Num: 53
Candidate Starts for Watermoore_179:
(Start: 53 @97589 has 98 MA's), (58, 97616), (64, 97664), (73, 97712), (81, 97742), (86, 97766), (126, 97949), (132, 97973), (133, 97982), (135, 97994), (136, 98000), (138, 98009),

Gene: Westy_113 Start: 74131, Stop: 74694, Start Num: 47
Candidate Starts for Westy_113:
(31, 74074), (39, 74101), (Start: 47 @74131 has 7 MA's), (80, 74287), (83, 74299), (87, 74320), (101, 74374), (127, 74506), (130, 74515), (132, 74527), (135, 74548), (136, 74554), (140, 74569), (160, 74665),

Gene: WhereRU_180 Start: 96302, Stop: 96859, Start Num: 53
Candidate Starts for WhereRU_180:
(Start: 53 @96302 has 98 MA's), (73, 96425), (81, 96455), (86, 96479), (92, 96494), (123, 96629), (130, 96674), (132, 96686), (133, 96695), (135, 96707), (136, 96713), (138, 96722),

Gene: Wipeout_182 Start: 97566, Stop: 98123, Start Num: 53
Candidate Starts for Wipeout_182:
(Start: 53 @97566 has 98 MA's), (73, 97689), (86, 97743), (114, 97836), (125, 97923), (127, 97929), (132, 97950), (133, 97959), (135, 97971), (136, 97977), (138, 97986),

Gene: Wofford_189 Start: 99505, Stop: 100062, Start Num: 53
Candidate Starts for Wofford_189:
(Start: 53 @99505 has 98 MA's), (64, 99580), (81, 99658), (86, 99682), (114, 99775), (117, 99790), (125, 99862), (132, 99889), (133, 99898), (135, 99910), (136, 99916), (138, 99925),

Gene: Yaboi_189 Start: 96073, Stop: 96627, Start Num: 53
Candidate Starts for Yaboi_189:
(Start: 53 @96073 has 98 MA's), (64, 96148), (86, 96250), (106, 96316), (108, 96319), (125, 96430), (132, 96457), (133, 96466), (135, 96478), (136, 96484), (138, 96493), (147, 96526), (157, 96580),

Gene: Zuko_37 Start: 32848, Stop: 32147, Start Num: 20
Candidate Starts for Zuko_37:
(17, 32860), (Start: 20 @32848 has 1 MA's), (27, 32830), (39, 32791), (Start: 53 @32749 has 98 MA's), (54, 32746), (55, 32743), (60, 32698), (62, 32686), (65, 32671), (66, 32668), (67, 32653), (79, 32593), (93, 32515), (97, 32497), (100, 32482), (103, 32473), (121, 32410), (123, 32389), (132, 32332), (135, 32311), (136, 32305), (145, 32275), (150, 32254),

Gene: pZL12_59c Start: 47859, Stop: 47257, Start Num: 35

Candidate Starts for pZL12_59c:
(35, 47859), (56, 47790), (57, 47787), (82, 47661), (94, 47607), (104, 47568), (116, 47535), (130, 47454), (132, 47442), (136, 47415), (161, 47286),