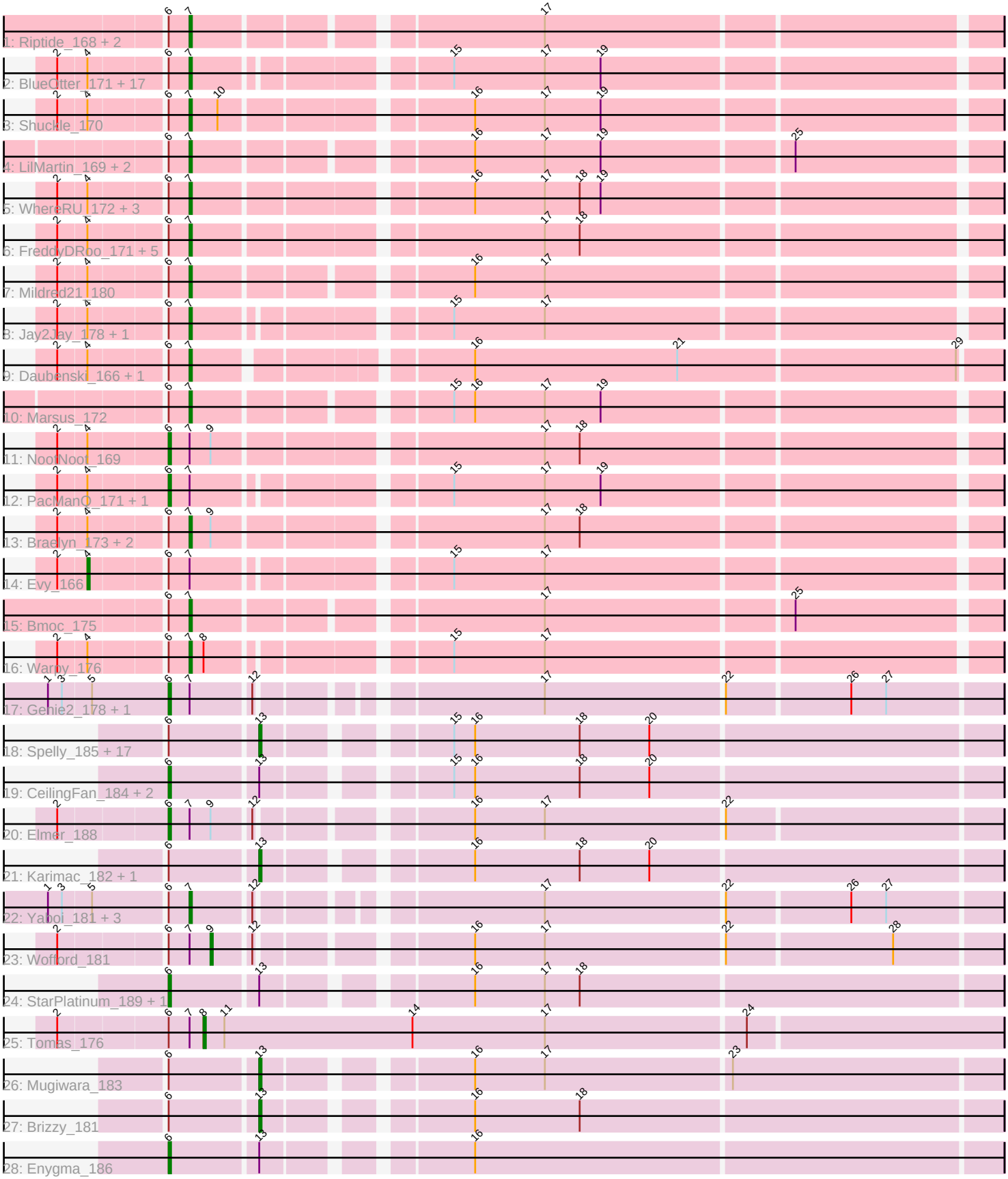
Pham 347497


1: Riptide_168 + 2
2: BlueOtter_171 + 17
3: Shuckle_170
4: LilMartin_169 + 2
5: WhereRU_172 + 3
6: FreddyDRoo_171 + 5
7: Mildred21_180
8: Jay2Jay_178 + 1
9: Daubenski_166 + 1
10: Marsus_172
11: NootNoot_169
12: PacManO_171 + 1
13: Braelyn_173 + 2
14: Evy_166
15: Bmoc_175
16: Wamy_176
17: Genie2_178 + 1
18: Spelly_185 + 17
19: CeilingFan_184 + 2
20: Elmer_188
21: Karimac_182 + 1
22: Yaboi_181 + 3
23: Wofford_181
24: StarPlatinum_189 + 1
25: Tomas_176
26: Mugiwara_183
27: Brizzy_181
28: Enygma_186

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 347497 Report

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

Pham number 347497 has 87 members, 3 are drafts.

Phages represented in each track:
• Track 1 : Riptide_168, Anedea_175, LilSaint_167
• Track 2 : BlueOtter_171, Coogler_171, Peebs_170, Scheme_175, Leo04_173, Cursive_171, Samisti12_174, Cross_172, Teutsch_171, Pepperwood_171, Larnav_172, ArianaSWT_173, Tribute_170, EGole_174, HangryHippo_171, Sushi23_172, Watermoore_171, WashU_169
• Track 3 : Shuckle_170
• Track 4 : LilMartin_169, Angela_171, MulchMansion_170
• Track 5 : WhereRU_172, PynkPanther_173, Davielle_173, Persimmon_173
• Track 6 : FreddyDRoo_171, Squillium_173, Liandry_172, PinkiePie_170, Bartholomune_172, Eliot67_173
• Track 7 : Mildred21_180
• Track 8 : Jay2Jay_178, Targaryen_172
• Track 9 : Daubenski_166, Cadmus_167
• Track 10 : Marsus_172
• Track 11 : NootNoot_169
• Track 12 : PacManQ_171, Lululemon_171
• Track 13 : Braelyn_173, Paradiddles_166, Navo_170
• Track 14 : Evy_166
• Track 15 : Bmoc_175
• Track 16 : Warpy_176
• Track 17 : Genie2_178, BoomerJR_178
• Track 18 : Spelly_185, AcciDwight_190, JimJam_188, Amabiko_185, Bordeaux_181, KentuckyRacer_186, Birchlyn_181, IchabodCrane_177, Battuta_182, Quaran19_182, Rikishi_183, Jollison_180, PumpkinSpice_184, Wipeout_175, Starbow_180, Gibbi_190, SaltySpitoon_182, TomSawyer_186
• Track 19 : CeilingFan_184, Daisy123_184, MindFlayer_176
• Track 20 : Elmer_188
• Track 21 : Karimac_182, Spilled_187
• Track 22 : Yaboi_181, Sollertia_178, Stanimal_177, AngryGiraffe_176
• Track 23 : Wofford_181
• Track 24 : StarPlatinum_189, LukeCage_181
• Track 25 : Tomas_176
• Track 26 : Mugiwara_183
• Track 27 : Brizzy_181
• Track 28 : Enygma_186

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

The start number called the most often in the published annotations is 7, it was called in 49 of the 84 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Anedea_175, Angela_171, AngryGiraffe_176, ArianaSWT_173, Bartholomune_172, BlueOtter_171, Bmoc_175, Braelyn_173, Cadmus_167, Coogler_171, Cross_172, Cursive_171, Daubenski_166, Davielle_173, EGole_174, Eliot67_173, FreddyDRoo_171, HangryHippo_171, Jay2Jay_178, Larnav_172, Leo04_173, Liandry_172, LilMartin_169, LilSaint_167, Marsus_172, Mildred21_180, MulchMansion_170, Navo_170, Paradiddles_166, Peebs_170, Pepperwood_171, Persimmon_173, PinkiePie_170, PynkPanther_173, Riptide_168, Samisti12_174, Scheme_175, Shuckle_170, Sollertia_178, Squillium_173, Stanimal_177, Sushi23_172, Targaryen_172, Teutsch_171, Tribute_170, Warpy_176, WashU_169, Watermoore_171, WhereRU_172, Yaboi_181,

Genes that have the "Most Annotated" start but do not call it:
• BoomerJR_178, Elmer_188, Evy_166, Genie2_178, Lululemon_171, NootNoot_169, PacManQ_171, Tomas_176, Wofford_181,

Genes that do not have the "Most Annotated" start:
• AcciDwight_190, Amabiko_185, Battuta_182, Birchlyn_181, Bordeaux_181, Brizzy_181, CeilingFan_184, Daisy123_184, Enygma_186, Gibbi_190, IchabodCrane_177, JimJam_188, Jollison_180, Karimac_182, KentuckyRacer_186, LukeCage_181, MindFlayer_176, Mugiwara_183, PumpkinSpice_184, Quaran19_182, Rikishi_183, SaltySpitoon_182, Spelly_185, Spilled_187, StarPlatinum_189, Starbow_180, TomSawyer_186, Wipeout_175,

Summary by start number:

Start 4:
• Found in 42 of 87 (48.3%) of genes in pham
• Manual Annotations of this start: 1 of 84
• Called 2.4% of time when present
• Phage (with cluster) where this start called: Evy_166 (BE1),

Start 6:
• Found in 87 of 87 (100.0%) of genes in pham
• Manual Annotations of this start: 12 of 84
• Called 13.8% of time when present
• Phage (with cluster) where this start called: BoomerJR_178 (BE2), CeilingFan_184 (BE2), Daisy123_184 (BE2), Elmer_188 (BE2), Enygma_186 (BE2), Genie2_178 (BE2), LukeCage_181 (BE2), Lululemon_171 (BE1), MindFlayer_176 (BE2), NootNoot_169 (BE1), PacManQ_171 (BE1), StarPlatinum_189 (BE2),

Start 7:
• Found in 59 of 87 (67.8%) of genes in pham
• Manual Annotations of this start: 49 of 84
• Called 84.7% of time when present
• Phage (with cluster) where this start called: Anedea_175 (BE1), Angela_171 (BE1), AngryGiraffe_176 (BE2), ArianaSWT_173 (BE1), Bartholomune_172 (BE1),

BlueOtter_171 (BE1), Bmoc_175 (BE1), Braelyn_173 (BE1), Cadmus_167 (BE1), Coogler_171 (BE1), Cross_172 (BE1), Cursive_171 (BE1), Daubenski_166 (BE1), Davielle_173 (BE1), EGole_174 (BE1), Eliot67_173 (BE1), FreddyDRoo_171 (BE1), HangryHippo_171 (BE1), Jay2Jay_178 (BE1), Larnav_172 (BE1), Leo04_173 (BE1), Liandry_172 (BE1), LilMartin_169 (BE1), LilSaint_167 (BE1), Marsus_172 (BE1), Mildred21_180 (BE1), MulchMansion_170 (BE1), Navo_170 (BE1), Paradiddles_166 (BE1), Peebs_170 (BE1), Pepperwood_171 (BE1), Persimmon_173 (BE1), PinkiePie_170 (BE1), PynkPanther_173 (BE1), Riptide_168 (BE1), Samisti12_174 (BE1), Scheme_175 (BE1), Shuckle_170 (BE1), Sollertia_178 (BE2), Squillium_173 (BE1), Stanimal_177 (BE2), Sushi23_172 (BE1), Targaryen_172 (BE1), Teutsch_171 (BE1), Tribute_170 (BE1), Warpy_176 (BE1), WashU_169 (BE1), Watermoore_171 (BE1), WhereRU_172 (BE1), Yaboi_181 (BE2),

Start 8:
• Found in 2 of 87 (2.3%) of genes in pham
• Manual Annotations of this start: 1 of 84
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Tomas_176 (BE2),

Start 9:
• Found in 6 of 87 (6.9%) of genes in pham
• Manual Annotations of this start: 1 of 84
• Called 16.7% of time when present
• Phage (with cluster) where this start called: Wofford_181 (BE2),

Start 13:
• Found in 28 of 87 (32.2%) of genes in pham
• Manual Annotations of this start: 20 of 84
• Called 78.6% of time when present
• Phage (with cluster) where this start called: AcciDwight_190 (BE2), Amabiko_185 (BE2), Battuta_182 (BE2), Birchlyn_181 (BE2), Bordeaux_181 (BE2), Brizzy_181 (BE2), Gibbi_190 (BE2), IchabodCrane_177 (BE2), JimJam_188 (BE2), Jollison_180 (BE2), Karimac_182 (BE2), KentuckyRacer_186 (BE2), Mugiwara_183 (BE2), PumpkinSpice_184 (BE2), Quaran19_182 (BE2), Rikishi_183 (BE2), SaltySpitoon_182 (BE2), Spelly_185 (BE2), Spilled_187 (BE2), Starbow_180 (BE2), TomSawyer_186 (BE2), Wipeout_175 (BE2),

Summary by clusters:

There are 2 clusters represented in this pham: BE2, BE1,

Info for manual annotations of cluster BE1:
•Start number 4 was manually annotated 1 time for cluster BE1.
•Start number 6 was manually annotated 3 times for cluster BE1.
•Start number 7 was manually annotated 45 times for cluster BE1.

Info for manual annotations of cluster BE2:
•Start number 6 was manually annotated 9 times for cluster BE2.
•Start number 7 was manually annotated 4 times for cluster BE2.
•Start number 8 was manually annotated 1 time for cluster BE2.
•Start number 9 was manually annotated 1 time for cluster BE2.
•Start number 13 was manually annotated 20 times for cluster BE2.

Gene Information:

Gene: AcciDwight_190 Start: 95637, Stop: 95933, Start Num: 13
Candidate Starts for AcciDwight_190:
(Start: 6 @95601 has 12 MA's), (Start: 13 @95637 has 20 MA's), (15, 95703), (16, 95712), (18, 95757), (20, 95787),

Gene: Amabiko_185 Start: 95064, Stop: 95360, Start Num: 13
Candidate Starts for Amabiko_185:
(Start: 6 @95028 has 12 MA's), (Start: 13 @95064 has 20 MA's), (15, 95130), (16, 95139), (18, 95184), (20, 95214),

Gene: Anedea_175 Start: 94252, Stop: 94572, Start Num: 7
Candidate Starts for Anedea_175:
(Start: 6 @94243 has 12 MA's), (Start: 7 @94252 has 49 MA's), (17, 94387),

Gene: Angela_171 Start: 93836, Stop: 94156, Start Num: 7
Candidate Starts for Angela_171:
(Start: 6 @93827 has 12 MA's), (Start: 7 @93836 has 49 MA's), (16, 93941), (17, 93971), (19, 93995), (25, 94073),

Gene: AngryGiraffe_176 Start: 94241, Stop: 94558, Start Num: 7
Candidate Starts for AngryGiraffe_176:
(1, 94184), (3, 94190), (5, 94202), (Start: 6 @94232 has 12 MA's), (Start: 7 @94241 has 49 MA's), (12, 94265), (17, 94370), (22, 94445), (26, 94496), (27, 94511),

Gene: ArianaSWT_173 Start: 94873, Stop: 95193, Start Num: 7
Candidate Starts for ArianaSWT_173:
(2, 94822), (Start: 4 @94834 has 1 MA's), (Start: 6 @94864 has 12 MA's), (Start: 7 @94873 has 49 MA's), (15, 94969), (17, 95008), (19, 95032),

Gene: Bartholomune_172 Start: 93699, Stop: 94022, Start Num: 7
Candidate Starts for Bartholomune_172:
(2, 93648), (Start: 4 @93660 has 1 MA's), (Start: 6 @93690 has 12 MA's), (Start: 7 @93699 has 49 MA's), (17, 93837), (18, 93852),

Gene: Battuta_182 Start: 94846, Stop: 95142, Start Num: 13
Candidate Starts for Battuta_182:
(Start: 6 @94810 has 12 MA's), (Start: 13 @94846 has 20 MA's), (15, 94912), (16, 94921), (18, 94966), (20, 94996),

Gene: Birchlyn_181 Start: 92703, Stop: 92999, Start Num: 13
Candidate Starts for Birchlyn_181:
(Start: 6 @92667 has 12 MA's), (Start: 13 @92703 has 20 MA's), (15, 92769), (16, 92778), (18, 92823), (20, 92853),

Gene: BlueOtter_171 Start: 94910, Stop: 95230, Start Num: 7
Candidate Starts for BlueOtter_171:
(2, 94859), (Start: 4 @94871 has 1 MA's), (Start: 6 @94901 has 12 MA's), (Start: 7 @94910 has 49 MA's), (15, 95006), (17, 95045), (19, 95069),

Gene: Bmoc_175 Start: 94581, Stop: 94901, Start Num: 7
Candidate Starts for Bmoc_175:
(Start: 6 @94572 has 12 MA's), (Start: 7 @94581 has 49 MA's), (17, 94716), (25, 94818),

Gene: BoomerJR_178 Start: 94666, Stop: 94992, Start Num: 6
Candidate Starts for BoomerJR_178:
(1, 94618), (3, 94624), (5, 94636), (Start: 6 @94666 has 12 MA's), (Start: 7 @94675 has 49 MA's), (12, 94699), (17, 94804), (22, 94879), (26, 94930), (27, 94945),

Gene: Bordeaux_181 Start: 95353, Stop: 95649, Start Num: 13
Candidate Starts for Bordeaux_181:
(Start: 6 @95317 has 12 MA's), (Start: 13 @95353 has 20 MA's), (15, 95419), (16, 95428), (18, 95473), (20, 95503),

Gene: Braelyn_173 Start: 94759, Stop: 95082, Start Num: 7
Candidate Starts for Braelyn_173:
(2, 94708), (Start: 4 @94720 has 1 MA's), (Start: 6 @94750 has 12 MA's), (Start: 7 @94759 has 49 MA's), (Start: 9 @94768 has 1 MA's), (17, 94897), (18, 94912),

Gene: Brizzy_181 Start: 95508, Stop: 95804, Start Num: 13
Candidate Starts for Brizzy_181:
(Start: 6 @95472 has 12 MA's), (Start: 13 @95508 has 20 MA's), (16, 95583), (18, 95628),

Gene: Cadmus_167 Start: 94240, Stop: 94566, Start Num: 7
Candidate Starts for Cadmus_167:
(2, 94189), (Start: 4 @94201 has 1 MA's), (Start: 6 @94231 has 12 MA's), (Start: 7 @94240 has 49 MA's), (16, 94345), (21, 94432), (29, 94549),

Gene: CeilingFan_184 Start: 95551, Stop: 95883, Start Num: 6
Candidate Starts for CeilingFan_184:
(Start: 6 @95551 has 12 MA's), (Start: 13 @95587 has 20 MA's), (15, 95653), (16, 95662), (18, 95707), (20, 95737),

Gene: Coogler_171 Start: 95579, Stop: 95899, Start Num: 7
Candidate Starts for Coogler_171:
(2, 95528), (Start: 4 @95540 has 1 MA's), (Start: 6 @95570 has 12 MA's), (Start: 7 @95579 has 49 MA's), (15, 95675), (17, 95714), (19, 95738),

Gene: Cross_172 Start: 95555, Stop: 95875, Start Num: 7
Candidate Starts for Cross_172:
(2, 95504), (Start: 4 @95516 has 1 MA's), (Start: 6 @95546 has 12 MA's), (Start: 7 @95555 has 49 MA's), (15, 95651), (17, 95690), (19, 95714),

Gene: Cursive_171 Start: 93764, Stop: 94084, Start Num: 7
Candidate Starts for Cursive_171:
(2, 93713), (Start: 4 @93725 has 1 MA's), (Start: 6 @93755 has 12 MA's), (Start: 7 @93764 has 49 MA's), (15, 93860), (17, 93899), (19, 93923),

Gene: Daisy123_184 Start: 95805, Stop: 96137, Start Num: 6
Candidate Starts for Daisy123_184:
(Start: 6 @95805 has 12 MA's), (Start: 13 @95841 has 20 MA's), (15, 95907), (16, 95916), (18, 95961), (20, 95991),

Gene: Daubenski_166 Start: 95477, Stop: 95803, Start Num: 7
Candidate Starts for Daubenski_166:
(2, 95426), (Start: 4 @95438 has 1 MA's), (Start: 6 @95468 has 12 MA's), (Start: 7 @95477 has 49 MA's), (16, 95582), (21, 95669), (29, 95786),

Gene: Davielle_173 Start: 94426, Stop: 94749, Start Num: 7
Candidate Starts for Davielle_173:
(2, 94375), (Start: 4 @94387 has 1 MA's), (Start: 6 @94417 has 12 MA's), (Start: 7 @94426 has 49 MA's), (16, 94534), (17, 94564), (18, 94579), (19, 94588),

Gene: EGole_174 Start: 96572, Stop: 96892, Start Num: 7
Candidate Starts for EGole_174:
(2, 96521), (Start: 4 @96533 has 1 MA's), (Start: 6 @96563 has 12 MA's), (Start: 7 @96572 has 49 MA's), (15, 96668), (17, 96707), (19, 96731),

Gene: Eliot67_173 Start: 93735, Stop: 94058, Start Num: 7
Candidate Starts for Eliot67_173:
(2, 93684), (Start: 4 @93696 has 1 MA's), (Start: 6 @93726 has 12 MA's), (Start: 7 @93735 has 49 MA's), (17, 93873), (18, 93888),

Gene: Elmer_188 Start: 98199, Stop: 98528, Start Num: 6
Candidate Starts for Elmer_188:
(2, 98157), (Start: 6 @98199 has 12 MA's), (Start: 7 @98208 has 49 MA's), (Start: 9 @98217 has 1 MA's), (12, 98232), (16, 98310), (17, 98340), (22, 98415),

Gene: Enygma_186 Start: 97654, Stop: 97986, Start Num: 6
Candidate Starts for Enygma_186:
(Start: 6 @97654 has 12 MA's), (Start: 13 @97690 has 20 MA's), (16, 97765),

Gene: Evy_166 Start: 94943, Stop: 95302, Start Num: 4
Candidate Starts for Evy_166:
(2, 94931), (Start: 4 @94943 has 1 MA's), (Start: 6 @94973 has 12 MA's), (Start: 7 @94982 has 49 MA's), (15, 95078), (17, 95117),

Gene: FreddyDRoo_171 Start: 93735, Stop: 94058, Start Num: 7
Candidate Starts for FreddyDRoo_171:
(2, 93684), (Start: 4 @93696 has 1 MA's), (Start: 6 @93726 has 12 MA's), (Start: 7 @93735 has 49 MA's), (17, 93873), (18, 93888),

Gene: Genie2_178 Start: 94780, Stop: 95106, Start Num: 6
Candidate Starts for Genie2_178:
(1, 94732), (3, 94738), (5, 94750), (Start: 6 @94780 has 12 MA's), (Start: 7 @94789 has 49 MA's), (12, 94813), (17, 94918), (22, 94993), (26, 95044), (27, 95059),

Gene: Gibbi_190 Start: 95641, Stop: 95937, Start Num: 13
Candidate Starts for Gibbi_190:
(Start: 6 @95605 has 12 MA's), (Start: 13 @95641 has 20 MA's), (15, 95707), (16, 95716), (18, 95761), (20, 95791),

Gene: HangryHippo_171 Start: 94910, Stop: 95230, Start Num: 7
Candidate Starts for HangryHippo_171:
(2, 94859), (Start: 4 @94871 has 1 MA's), (Start: 6 @94901 has 12 MA's), (Start: 7 @94910 has 49 MA's), (15, 95006), (17, 95045), (19, 95069),

Gene: IchabodCrane_177 Start: 94765, Stop: 95061, Start Num: 13
Candidate Starts for IchabodCrane_177:
(Start: 6 @94729 has 12 MA's), (Start: 13 @94765 has 20 MA's), (15, 94831), (16, 94840), (18, 94885), (20, 94915),

Gene: Jay2Jay_178 Start: 95781, Stop: 96101, Start Num: 7
Candidate Starts for Jay2Jay_178:
(2, 95730), (Start: 4 @95742 has 1 MA's), (Start: 6 @95772 has 12 MA's), (Start: 7 @95781 has 49 MA's), (15, 95877), (17, 95916),

Gene: JimJam_188 Start: 96686, Stop: 96982, Start Num: 13
Candidate Starts for JimJam_188:
(Start: 6 @96650 has 12 MA's), (Start: 13 @96686 has 20 MA's), (15, 96752), (16, 96761), (18, 96806), (20, 96836),

Gene: Jollison_180 Start: 95287, Stop: 95583, Start Num: 13
Candidate Starts for Jollison_180:
(Start: 6 @95251 has 12 MA's), (Start: 13 @95287 has 20 MA's), (15, 95353), (16, 95362), (18, 95407), (20, 95437),

Gene: Karimac_182 Start: 95481, Stop: 95777, Start Num: 13
Candidate Starts for Karimac_182:
(Start: 6 @95445 has 12 MA's), (Start: 13 @95481 has 20 MA's), (16, 95556), (18, 95601), (20, 95631),

Gene: KentuckyRacer_186 Start: 96432, Stop: 96728, Start Num: 13
Candidate Starts for KentuckyRacer_186:
(Start: 6 @96396 has 12 MA's), (Start: 13 @96432 has 20 MA's), (15, 96498), (16, 96507), (18, 96552), (20, 96582),

Gene: Larnav_172 Start: 95529, Stop: 95849, Start Num: 7
Candidate Starts for Larnav_172:
(2, 95478), (Start: 4 @95490 has 1 MA's), (Start: 6 @95520 has 12 MA's), (Start: 7 @95529 has 49 MA's), (15, 95625), (17, 95664), (19, 95688),

Gene: Leo04_173 Start: 95410, Stop: 95730, Start Num: 7
Candidate Starts for Leo04_173:
(2, 95359), (Start: 4 @95371 has 1 MA's), (Start: 6 @95401 has 12 MA's), (Start: 7 @95410 has 49 MA's), (15, 95506), (17, 95545), (19, 95569),

Gene: Liandry_172 Start: 94442, Stop: 94765, Start Num: 7
Candidate Starts for Liandry_172:
(2, 94391), (Start: 4 @94403 has 1 MA's), (Start: 6 @94433 has 12 MA's), (Start: 7 @94442 has 49 MA's), (17, 94580), (18, 94595),

Gene: LilMartin_169 Start: 93455, Stop: 93775, Start Num: 7
Candidate Starts for LilMartin_169:
(Start: 6 @93446 has 12 MA's), (Start: 7 @93455 has 49 MA's), (16, 93560), (17, 93590), (19, 93614), (25, 93692),

Gene: LilSaint_167 Start: 92888, Stop: 93208, Start Num: 7
Candidate Starts for LilSaint_167:
(Start: 6 @92879 has 12 MA's), (Start: 7 @92888 has 49 MA's), (17, 93023),

Gene: LukeCage_181 Start: 96206, Stop: 96538, Start Num: 6
Candidate Starts for LukeCage_181:
(Start: 6 @96206 has 12 MA's), (Start: 13 @96242 has 20 MA's), (16, 96317), (17, 96347), (18, 96362),

Gene: Lululemon_171 Start: 94282, Stop: 94611, Start Num: 6
Candidate Starts for Lululemon_171:
(2, 94240), (Start: 4 @94252 has 1 MA's), (Start: 6 @94282 has 12 MA's), (Start: 7 @94291 has 49 MA's), (15, 94387), (17, 94426), (19, 94450),

Gene: Marsus_172 Start: 94098, Stop: 94418, Start Num: 7
Candidate Starts for Marsus_172:
(Start: 6 @94089 has 12 MA's), (Start: 7 @94098 has 49 MA's), (15, 94194), (16, 94203), (17, 94233), (19, 94257),

Gene: Mildred21_180 Start: 93826, Stop: 94146, Start Num: 7
Candidate Starts for Mildred21_180:
(2, 93775), (Start: 4 @93787 has 1 MA's), (Start: 6 @93817 has 12 MA's), (Start: 7 @93826 has 49 MA's), (16, 93931), (17, 93961),

Gene: MindFlayer_176 Start: 94636, Stop: 94968, Start Num: 6
Candidate Starts for MindFlayer_176:
(Start: 6 @94636 has 12 MA's), (Start: 13 @94672 has 20 MA's), (15, 94738), (16, 94747), (18, 94792), (20, 94822),

Gene: Mugiwara_183 Start: 96069, Stop: 96365, Start Num: 13
Candidate Starts for Mugiwara_183:
(Start: 6 @96033 has 12 MA's), (Start: 13 @96069 has 20 MA's), (16, 96144), (17, 96174), (23, 96252),

Gene: MulchMansion_170 Start: 94098, Stop: 94418, Start Num: 7
Candidate Starts for MulchMansion_170:
(Start: 6 @94089 has 12 MA's), (Start: 7 @94098 has 49 MA's), (16, 94203), (17, 94233), (19, 94257), (25, 94335),

Gene: Navo_170 Start: 94140, Stop: 94463, Start Num: 7
Candidate Starts for Navo_170:
(2, 94089), (Start: 4 @94101 has 1 MA's), (Start: 6 @94131 has 12 MA's), (Start: 7 @94140 has 49 MA's), (Start: 9 @94149 has 1 MA's), (17, 94278), (18, 94293),

Gene: NootNoot_169 Start: 93493, Stop: 93825, Start Num: 6
Candidate Starts for NootNoot_169:
(2, 93451), (Start: 4 @93463 has 1 MA's), (Start: 6 @93493 has 12 MA's), (Start: 7 @93502 has 49 MA's), (Start: 9 @93511 has 1 MA's), (17, 93640), (18, 93655),

Gene: PacManQ_171 Start: 94282, Stop: 94611, Start Num: 6
Candidate Starts for PacManQ_171:
(2, 94240), (Start: 4 @94252 has 1 MA's), (Start: 6 @94282 has 12 MA's), (Start: 7 @94291 has 49 MA's), (15, 94387), (17, 94426), (19, 94450),

Gene: Paradiddles_166 Start: 95805, Stop: 96128, Start Num: 7
Candidate Starts for Paradiddles_166:
(2, 95754), (Start: 4 @95766 has 1 MA's), (Start: 6 @95796 has 12 MA's), (Start: 7 @95805 has 49 MA's), (Start: 9 @95814 has 1 MA's), (17, 95943), (18, 95958),

Gene: Peebs_170 Start: 95232, Stop: 95552, Start Num: 7
Candidate Starts for Peebs_170:
(2, 95181), (Start: 4 @95193 has 1 MA's), (Start: 6 @95223 has 12 MA's), (Start: 7 @95232 has 49 MA's), (15, 95328), (17, 95367), (19, 95391),

Gene: Pepperwood_171 Start: 95176, Stop: 95496, Start Num: 7
Candidate Starts for Pepperwood_171:
(2, 95125), (Start: 4 @95137 has 1 MA's), (Start: 6 @95167 has 12 MA's), (Start: 7 @95176 has 49 MA's), (15, 95272), (17, 95311), (19, 95335),

Gene: Persimmon_173 Start: 93674, Stop: 93997, Start Num: 7
Candidate Starts for Persimmon_173:
(2, 93623), (Start: 4 @93635 has 1 MA's), (Start: 6 @93665 has 12 MA's), (Start: 7 @93674 has 49 MA's), (16, 93782), (17, 93812), (18, 93827), (19, 93836),

Gene: PinkiePie_170 Start: 94442, Stop: 94765, Start Num: 7
Candidate Starts for PinkiePie_170:
(2, 94391), (Start: 4 @94403 has 1 MA's), (Start: 6 @94433 has 12 MA's), (Start: 7 @94442 has 49 MA's), (17, 94580), (18, 94595),

Gene: PumpkinSpice_184 Start: 95893, Stop: 96189, Start Num: 13
Candidate Starts for PumpkinSpice_184:
(Start: 6 @95857 has 12 MA's), (Start: 13 @95893 has 20 MA's), (15, 95959), (16, 95968), (18, 96013), (20, 96043),

Gene: PynkPanther_173 Start: 95281, Stop: 95604, Start Num: 7
Candidate Starts for PynkPanther_173:
(2, 95230), (Start: 4 @95242 has 1 MA's), (Start: 6 @95272 has 12 MA's), (Start: 7 @95281 has 49 MA's), (16, 95389), (17, 95419), (18, 95434), (19, 95443),

Gene: Quaran19_182 Start: 95332, Stop: 95628, Start Num: 13
Candidate Starts for Quaran19_182:
(Start: 6 @95296 has 12 MA's), (Start: 13 @95332 has 20 MA's), (15, 95398), (16, 95407), (18, 95452), (20, 95482),

Gene: Rikishi_183 Start: 95445, Stop: 95741, Start Num: 13
Candidate Starts for Rikishi_183:
(Start: 6 @95409 has 12 MA's), (Start: 13 @95445 has 20 MA's), (15, 95511), (16, 95520), (18, 95565), (20, 95595),

Gene: Riptide_168 Start: 92891, Stop: 93211, Start Num: 7
Candidate Starts for Riptide_168:
(Start: 6 @92882 has 12 MA's), (Start: 7 @92891 has 49 MA's), (17, 93026),

Gene: SaltySpitoon_182 Start: 94876, Stop: 95172, Start Num: 13
Candidate Starts for SaltySpitoon_182:
(Start: 6 @94840 has 12 MA's), (Start: 13 @94876 has 20 MA's), (15, 94942), (16, 94951), (18, 94996), (20, 95026),

Gene: Samisti12_174 Start: 96616, Stop: 96936, Start Num: 7
Candidate Starts for Samisti12_174:

(2, 96565), (Start: 4 @96577 has 1 MA's), (Start: 6 @96607 has 12 MA's), (Start: 7 @96616 has 49 MA's), (15, 96712), (17, 96751), (19, 96775),

Gene: Scheme_175 Start: 96797, Stop: 97117, Start Num: 7
Candidate Starts for Scheme_175:
(2, 96746), (Start: 4 @96758 has 1 MA's), (Start: 6 @96788 has 12 MA's), (Start: 7 @96797 has 49 MA's), (15, 96893), (17, 96932), (19, 96956),

Gene: Shuckle_170 Start: 94834, Stop: 95157, Start Num: 7
Candidate Starts for Shuckle_170:
(2, 94783), (Start: 4 @94795 has 1 MA's), (Start: 6 @94825 has 12 MA's), (Start: 7 @94834 has 49 MA's), (10, 94846), (16, 94942), (17, 94972), (19, 94996),

Gene: Sollertia_178 Start: 94789, Stop: 95106, Start Num: 7
Candidate Starts for Sollertia_178:
(1, 94732), (3, 94738), (5, 94750), (Start: 6 @94780 has 12 MA's), (Start: 7 @94789 has 49 MA's), (12, 94813), (17, 94918), (22, 94993), (26, 95044), (27, 95059),

Gene: Spelly_185 Start: 94805, Stop: 95101, Start Num: 13
Candidate Starts for Spelly_185:
(Start: 6 @94769 has 12 MA's), (Start: 13 @94805 has 20 MA's), (15, 94871), (16, 94880), (18, 94925), (20, 94955),

Gene: Spilled_187 Start: 95618, Stop: 95914, Start Num: 13
Candidate Starts for Spilled_187:
(Start: 6 @95582 has 12 MA's), (Start: 13 @95618 has 20 MA's), (16, 95693), (18, 95738), (20, 95768),

Gene: Squillium_173 Start: 94444, Stop: 94767, Start Num: 7
Candidate Starts for Squillium_173:
(2, 94393), (Start: 4 @94405 has 1 MA's), (Start: 6 @94435 has 12 MA's), (Start: 7 @94444 has 49 MA's), (17, 94582), (18, 94597),

Gene: Stanimal_177 Start: 95150, Stop: 95467, Start Num: 7
Candidate Starts for Stanimal_177:
(1, 95093), (3, 95099), (5, 95111), (Start: 6 @95141 has 12 MA's), (Start: 7 @95150 has 49 MA's), (12, 95174), (17, 95279), (22, 95354), (26, 95405), (27, 95420),

Gene: StarPlatinum_189 Start: 97255, Stop: 97587, Start Num: 6
Candidate Starts for StarPlatinum_189:
(Start: 6 @97255 has 12 MA's), (Start: 13 @97291 has 20 MA's), (16, 97366), (17, 97396), (18, 97411),

Gene: Starbow_180 Start: 94849, Stop: 95145, Start Num: 13
Candidate Starts for Starbow_180:
(Start: 6 @94813 has 12 MA's), (Start: 13 @94849 has 20 MA's), (15, 94915), (16, 94924), (18, 94969), (20, 94999),

Gene: Sushi23_172 Start: 95590, Stop: 95910, Start Num: 7
Candidate Starts for Sushi23_172:
(2, 95539), (Start: 4 @95551 has 1 MA's), (Start: 6 @95581 has 12 MA's), (Start: 7 @95590 has 49 MA's), (15, 95686), (17, 95725), (19, 95749),

Gene: Targaryen_172 Start: 96191, Stop: 96511, Start Num: 7
Candidate Starts for Targaryen_172:

(2, 96140), (Start: 4 @96152 has 1 MA's), (Start: 6 @96182 has 12 MA's), (Start: 7 @96191 has 49 MA's), (15, 96287), (17, 96326),

Gene: Teutsch_171 Start: 95714, Stop: 96034, Start Num: 7
Candidate Starts for Teutsch_171:
(2, 95663), (Start: 4 @95675 has 1 MA's), (Start: 6 @95705 has 12 MA's), (Start: 7 @95714 has 49 MA's), (15, 95810), (17, 95849), (19, 95873),

Gene: TomSawyer_186 Start: 96537, Stop: 96833, Start Num: 13
Candidate Starts for TomSawyer_186:
(Start: 6 @96501 has 12 MA's), (Start: 13 @96537 has 20 MA's), (15, 96603), (16, 96612), (18, 96657), (20, 96687),

Gene: Tomas_176 Start: 95090, Stop: 95428, Start Num: 8
Candidate Starts for Tomas_176:
(2, 95030), (Start: 6 @95075 has 12 MA's), (Start: 7 @95084 has 49 MA's), (Start: 8 @95090 has 1 MA's), (11, 95099), (14, 95180), (17, 95237), (24, 95321),

Gene: Tribute_170 Start: 95731, Stop: 96051, Start Num: 7
Candidate Starts for Tribute_170:
(2, 95680), (Start: 4 @95692 has 1 MA's), (Start: 6 @95722 has 12 MA's), (Start: 7 @95731 has 49 MA's), (15, 95827), (17, 95866), (19, 95890),

Gene: Warpy_176 Start: 95260, Stop: 95580, Start Num: 7
Candidate Starts for Warpy_176:
(2, 95209), (Start: 4 @95221 has 1 MA's), (Start: 6 @95251 has 12 MA's), (Start: 7 @95260 has 49 MA's), (Start: 8 @95266 has 1 MA's), (15, 95356), (17, 95395),

Gene: WashU_169 Start: 95805, Stop: 96125, Start Num: 7
Candidate Starts for WashU_169:
(2, 95754), (Start: 4 @95766 has 1 MA's), (Start: 6 @95796 has 12 MA's), (Start: 7 @95805 has 49 MA's), (15, 95901), (17, 95940), (19, 95964),

Gene: Watermoore_171 Start: 96126, Stop: 96446, Start Num: 7
Candidate Starts for Watermoore_171:
(2, 96075), (Start: 4 @96087 has 1 MA's), (Start: 6 @96117 has 12 MA's), (Start: 7 @96126 has 49 MA's), (15, 96222), (17, 96261), (19, 96285),

Gene: WhereRU_172 Start: 94426, Stop: 94749, Start Num: 7
Candidate Starts for WhereRU_172:
(2, 94375), (Start: 4 @94387 has 1 MA's), (Start: 6 @94417 has 12 MA's), (Start: 7 @94426 has 49 MA's), (16, 94534), (17, 94564), (18, 94579), (19, 94588),

Gene: Wipeout_175 Start: 95881, Stop: 96177, Start Num: 13
Candidate Starts for Wipeout_175:
(Start: 6 @95845 has 12 MA's), (Start: 13 @95881 has 20 MA's), (15, 95947), (16, 95956), (18, 96001), (20, 96031),

Gene: Wofford_181 Start: 98176, Stop: 98487, Start Num: 9
Candidate Starts for Wofford_181:
(2, 98116), (Start: 6 @98158 has 12 MA's), (Start: 7 @98167 has 49 MA's), (Start: 9 @98176 has 1 MA's), (12, 98191), (16, 98269), (17, 98299), (22, 98374), (28, 98443),

Gene: Yaboi_181 Start: 94724, Stop: 95041, Start Num: 7
Candidate Starts for Yaboi_181:
(1, 94667), (3, 94673), (5, 94685), (Start: 6 @94715 has 12 MA's), (Start: 7 @94724 has 49 MA's), (12, 94748), (17, 94853), (22, 94928), (26, 94979), (27, 94994),