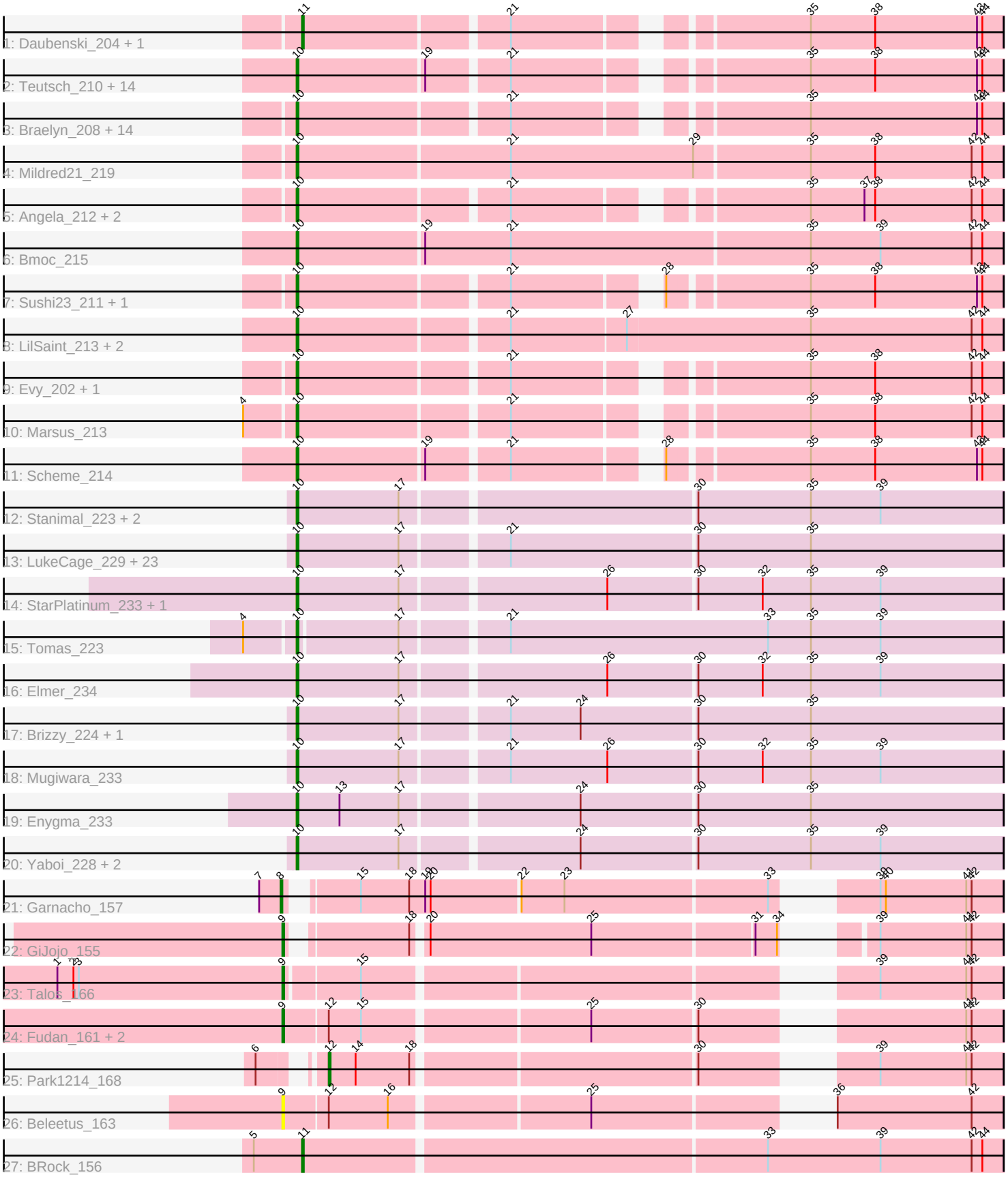
Pham 345600


1: Daubenski_204 + 1
2: Teutsch_210 + 14
3: Braelyn_208 + 14
4: Mildred21_219
5: Angela_212 + 2
6: Bmoc_215
7: Sushi23_211 + 1
8: LilSaint_213 + 2
9: Evy_202 + 1
10: Marsus_213
11: Scheme_214
12: Stanimal_223 + 2
13: LukeCage_229 + 23
14: StarPlatinum_233 + 1
15: Tomas_223
16: Elmer_234
17: Brizzy_224 + 1
18: Mugiwara_233
19: Enygma_233
20: Yaboi_228 + 2
21: Garnacho_157
22: GiJojo_155
23: Talos_166
24: Fudan_161 + 2
25: Park1214_168
26: Beleetus_163
27: BRock_156

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 345600 Report

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

Pham number 345600 has 93 members, 5 are drafts.

Phages represented in each track:
• Track 1 : Daubenski_204, Cadmus_208
• Track 2 : Teutsch_210, Lululemon_208, Larnav_210, PacManQ_208, HangryHippo_209, EGole_214, Watermoore_210, WashU_206, Peebs_208, Coogler_208, ArianaSWT_214, BlueOtter_209, Cursive_213, Leo04_212, Cross_210
• Track 3 : Braelyn_208, PynkPanther_211, Davielle_211, Bartholomune_212, PinkiePie_211, Persimmon_214, WhereRU_211, Shuckle_209, NootNoot_208, Eliot67_212, Navo_206, Liandry_211, Squillium_214, Paradiddles_203, FreddyDRoo_211
• Track 4 : Mildred21_219
• Track 5 : Angela_212, MulchMansion_213, LilMartin_209
• Track 6 : Bmoc_215
• Track 7 : Sushi23_211, Pepperwood_211
• Track 8 : LilSaint_213, Riptide_213, Anedea_225
• Track 9 : Evy_202, Targaryen_210
• Track 10 : Marsus_213
• Track 11 : Scheme_214
• Track 12 : Stanimal_223, AngryGiraffe_223, BoomerJR_223
• Track 13 : LukeCage_229, SaltySpitoon_225, Starbow_222, Spilled_232, Bordeaux_223, Spelly_230, AcciDwight_233, Birchlyn_224, Gibbi_233, Amabiko_229, Daisy123_227, PumpkinSpice_228, Wipeout_216, TomSawyer_229, JimJam_232, MindFlayer_218, KentuckyRacer_231, Jollison_222, IchabodCrane_219, Rikishi_226, Battuta_223, Tuesday_232, Quaran19_225, CeilingFan_229
• Track 14 : StarPlatinum_233, Wofford_226
• Track 15 : Tomas_223
• Track 16 : Elmer_234
• Track 17 : Brizzy_224, Karimac_225
• Track 18 : Mugiwara_233
• Track 19 : Enygma_233
• Track 20 : Yaboi_228, Genie2_223, Sollertia_224
• Track 21 : Garnacho_157
• Track 22 : GiJojo_155
• Track 23 : Talos_166
• Track 24 : Fudan_161, Alone3_165, LuckySocke_163
• Track 25 : Park1214_168
• Track 26 : Beleetus_163
• Track 27 : BRock_156

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

The start number called the most often in the published annotations is 10, it was called in 78 of the 88 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AcciDwight_233, Amabiko_229, Anedea_225, Angela_212, AngryGiraffe_223, ArianaSWT_214, Bartholomune_212, Battuta_223, Birchlyn_224, BlueOtter_209, Bmoc_215, BoomerJR_223, Bordeaux_223, Braelyn_208, Brizzy_224, CeilingFan_229, Coogler_208, Cross_210, Cursive_213, Daisy123_227, Davielle_211, EGole_214, Eliot67_212, Elmer_234, Enygma_233, Evy_202, FreddyDRoo_211, Genie2_223, Gibbi_233, HangryHippo_209, IchabodCrane_219, JimJam_232, Jollison_222, Karimac_225, KentuckyRacer_231, Larnav_210, Leo04_212, Liandry_211, LilMartin_209, LilSaint_213, LukeCage_229, Lululemon_208, Marsus_213, Mildred21_219, MindFlayer_218, Mugiwara_233, MulchMansion_213, Navo_206, NootNoot_208, PacManQ_208, Paradiddles_203, Peebs_208, Pepperwood_211, Persimmon_214, PinkiePie_211, PumpkinSpice_228, PynkPanther_211, Quaran19_225, Rikishi_226, Riptide_213, SaltySpitoon_225, Scheme_214, Shuckle_209, Sollertia_224, Spelly_230, Spilled_232, Squillium_214, Stanimal_223, StarPlatinum_233, Starbow_222, Sushi23_211, Targaryen_210, Teutsch_210, TomSawyer_229, Tomas_223, Tuesday_232, WashU_206, Watermoore_210, WhereRU_211, Wipeout_216, Wofford_226, Yaboi_228,

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

Genes that do not have the "Most Annotated" start:
• Alone3_165, BRock_156, Beleetus_163, Cadmus_208, Daubenski_204, Fudan_161, Garnacho_157, GiJojo_155, LuckySocke_163, Park1214_168, Talos_166,

Summary by start number:

Start 8:
• Found in 1 of 93 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 88
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Garnacho_157 (BS),

Start 9:
• Found in 6 of 93 (6.5%) of genes in pham
• Manual Annotations of this start: 5 of 88
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alone3_165 (BS), Beleetus_163 (BS), Fudan_161 (BS), GiJojo_155 (BS), LuckySocke_163 (BS), Talos_166 (BS),

Start 10:
• Found in 82 of 93 (88.2%) of genes in pham
• Manual Annotations of this start: 78 of 88

• Called 100.0% of time when present
• Phage (with cluster) where this start called: AcciDwight_233 (BE2), Amabiko_229 (BE2), Anedea_225 (BE1), Angela_212 (BE1), AngryGiraffe_223 (BE2), ArianaSWT_214 (BE1), Bartholomune_212 (BE1), Battuta_223 (BE2), Birchlyn_224 (BE2), BlueOtter_209 (BE1), Bmoc_215 (BE1), BoomerJR_223 (BE2), Bordeaux_223 (BE2), Braelyn_208 (BE1), Brizzy_224 (BE2), CeilingFan_229 (BE2), Coogler_208 (BE1), Cross_210 (BE1), Cursive_213 (BE1), Daisy123_227 (BE2), Davielle_211 (BE1), EGole_214 (BE1), Eliot67_212 (BE1), Elmer_234 (BE2), Enygma_233 (BE2), Evy_202 (BE1), FreddyDRoo_211 (BE1), Genie2_223 (BE2), Gibbi_233 (BE2), HangryHippo_209 (BE1), IchabodCrane_219 (BE2), JimJam_232 (BE2), Jollison_222 (BE2), Karimac_225 (BE2), KentuckyRacer_231 (BE2), Larnav_210 (BE1), Leo04_212 (BE1), Liandry_211 (BE1), LilMartin_209 (BE1), LilSaint_213 (BE1), LukeCage_229 (BE2), Lululemon_208 (BE1), Marsus_213 (BE1), Mildred21_219 (BE1), MindFlayer_218 (BE2), Mugiwara_233 (BE2), MulchMansion_213 (BE1), Navo_206 (BE1), NootNoot_208 (BE1), PacManQ_208 (BE1), Paradiddles_203 (BE1), Peebs_208 (BE1), Pepperwood_211 (BE1), Persimmon_214 (BE1), PinkiePie_211 (BE1), PumpkinSpice_228 (BE2), PynkPanther_211 (BE1), Quaran19_225 (BE2), Rikishi_226 (BE2), Riptide_213 (BE1), SaltySpitoon_225 (BE2), Scheme_214 (BE1), Shuckle_209 (BE1), Sollertia_224 (BE2), Spelly_230 (BE2), Spilled_232 (BE2), Squillium_214 (BE1), Stanimal_223 (BE2), StarPlatinum_233 (BE2), Starbow_222 (BE2), Sushi23_211 (BE1), Targaryen_210 (BE1), Teutsch_210 (BE1), TomSawyer_229 (BE2), Tomas_223 (BE2), Tuesday_232 (BE2), WashU_206 (BE1), Watermoore_210 (BE1), WhereRU_211 (BE1), Wipeout_216 (BE2), Wofford_226 (BE2), Yaboi_228 (BE2),

Start 11:
• Found in 3 of 93 (3.2%) of genes in pham
• Manual Annotations of this start: 3 of 88
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BRock_156 (BS), Cadmus_208 (BE1), Daubenski_204 (BE1),

Start 12:
• Found in 5 of 93 (5.4%) of genes in pham
• Manual Annotations of this start: 1 of 88
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Park1214_168 (BS),

Summary by clusters:

There are 3 clusters represented in this pham: BE2, BE1, BS,

Info for manual annotations of cluster BE1:
•Start number 10 was manually annotated 43 times for cluster BE1.
•Start number 11 was manually annotated 2 times for cluster BE1.

Info for manual annotations of cluster BE2:
•Start number 10 was manually annotated 35 times for cluster BE2.

Info for manual annotations of cluster BS:
•Start number 8 was manually annotated 1 time for cluster BS.
•Start number 9 was manually annotated 5 times for cluster BS.
•Start number 11 was manually annotated 1 time for cluster BS.

•Start number 12 was manually annotated 1 time for cluster BS.

Gene Information:

Gene: AcciDwight_233 Start: 107633, Stop: 108016, Start Num: 10
Candidate Starts for AcciDwight_233:
(Start: 10 @107633 has 78 MA's), (17, 107690), (21, 107744), (30, 107846), (35, 107909),

Gene: Alone3_165 Start: 87981, Stop: 88337, Start Num: 9
Candidate Starts for Alone3_165:
(Start: 9 @87981 has 5 MA's), (Start: 12 @88005 has 1 MA's), (15, 88023), (25, 88143), (30, 88200), (41, 88317), (42, 88320),

Gene: Amabiko_229 Start: 107451, Stop: 107834, Start Num: 10
Candidate Starts for Amabiko_229:
(Start: 10 @107451 has 78 MA's), (17, 107508), (21, 107562), (30, 107664), (35, 107727),

Gene: Anedea_225 Start: 108387, Stop: 108770, Start Num: 10
Candidate Starts for Anedea_225:
(Start: 10 @108387 has 78 MA's), (21, 108498), (27, 108561), (35, 108663), (42, 108753), (44, 108759),

Gene: Angela_212 Start: 105457, Stop: 105816, Start Num: 10
Candidate Starts for Angela_212:
(Start: 10 @105457 has 78 MA's), (21, 105568), (35, 105709), (37, 105739), (38, 105745), (42, 105799), (44, 105805),

Gene: AngryGiraffe_223 Start: 107336, Stop: 107719, Start Num: 10
Candidate Starts for AngryGiraffe_223:
(Start: 10 @107336 has 78 MA's), (17, 107393), (30, 107549), (35, 107612), (39, 107651),

Gene: ArianaSWT_214 Start: 107908, Stop: 108267, Start Num: 10
Candidate Starts for ArianaSWT_214:
(Start: 10 @107908 has 78 MA's), (19, 107977), (21, 108019), (35, 108160), (38, 108196), (43, 108253), (44, 108256),

Gene: BRock_156 Start: 83013, Stop: 83396, Start Num: 11
Candidate Starts for BRock_156:
(5, 82986), (Start: 11 @83013 has 3 MA's), (33, 83265), (39, 83328), (42, 83379), (44, 83385),

Gene: Bartholomune_212 Start: 106018, Stop: 106377, Start Num: 10
Candidate Starts for Bartholomune_212:
(Start: 10 @106018 has 78 MA's), (21, 106129), (35, 106270), (43, 106363), (44, 106366),

Gene: Battuta_223 Start: 106766, Stop: 107149, Start Num: 10
Candidate Starts for Battuta_223:
(Start: 10 @106766 has 78 MA's), (17, 106823), (21, 106877), (30, 106979), (35, 107042),

Gene: Beleetus_163 Start: 86450, Stop: 86806, Start Num: 9
Candidate Starts for Beleetus_163:

(Start: 9 @86450 has 5 MA's), (Start: 12 @86474 has 1 MA's), (16, 86507), (25, 86612), (36, 86714), (42, 86789),

Gene: Birchlyn_224 Start: 104699, Stop: 105082, Start Num: 10
Candidate Starts for Birchlyn_224:
(Start: 10 @104699 has 78 MA's), (17, 104756), (21, 104810), (30, 104912), (35, 104975),

Gene: BlueOtter_209 Start: 106161, Stop: 106520, Start Num: 10
Candidate Starts for BlueOtter_209:
(Start: 10 @106161 has 78 MA's), (19, 106230), (21, 106272), (35, 106413), (38, 106449), (43, 106506), (44, 106509),

Gene: Bmoc_215 Start: 106273, Stop: 106662, Start Num: 10
Candidate Starts for Bmoc_215:
(Start: 10 @106273 has 78 MA's), (19, 106342), (21, 106390), (35, 106555), (39, 106594), (42, 106645), (44, 106651),

Gene: BoomerJR_223 Start: 107769, Stop: 108152, Start Num: 10
Candidate Starts for BoomerJR_223:
(Start: 10 @107769 has 78 MA's), (17, 107826), (30, 107982), (35, 108045), (39, 108084),

Gene: Bordeaux_223 Start: 107349, Stop: 107732, Start Num: 10
Candidate Starts for Bordeaux_223:
(Start: 10 @107349 has 78 MA's), (17, 107406), (21, 107460), (30, 107562), (35, 107625),

Gene: Braelyn_208 Start: 105665, Stop: 106024, Start Num: 10
Candidate Starts for Braelyn_208:
(Start: 10 @105665 has 78 MA's), (21, 105776), (35, 105917), (43, 106010), (44, 106013),

Gene: Brizzy_224 Start: 107877, Stop: 108260, Start Num: 10
Candidate Starts for Brizzy_224:
(Start: 10 @107877 has 78 MA's), (17, 107934), (21, 107988), (24, 108027), (30, 108090), (35, 108153),

Gene: Cadmus_208 Start: 106959, Stop: 107315, Start Num: 11
Candidate Starts for Cadmus_208:
(Start: 11 @106959 has 3 MA's), (21, 107067), (35, 107208), (38, 107244), (43, 107301), (44, 107304),

Gene: CeilingFan_229 Start: 108144, Stop: 108527, Start Num: 10
Candidate Starts for CeilingFan_229:
(Start: 10 @108144 has 78 MA's), (17, 108201), (21, 108255), (30, 108357), (35, 108420),

Gene: Coogler_208 Start: 106553, Stop: 106912, Start Num: 10
Candidate Starts for Coogler_208:
(Start: 10 @106553 has 78 MA's), (19, 106622), (21, 106664), (35, 106805), (38, 106841), (43, 106898), (44, 106901),

Gene: Cross_210 Start: 106806, Stop: 107165, Start Num: 10
Candidate Starts for Cross_210:
(Start: 10 @106806 has 78 MA's), (19, 106875), (21, 106917), (35, 107058), (38, 107094), (43, 107151), (44, 107154),

Gene: Cursive_213 Start: 106490, Stop: 106849, Start Num: 10

Candidate Starts for Cursive_213:
(Start: 10 @106490 has 78 MA's), (19, 106559), (21, 106601), (35, 106742), (38, 106778), (43, 106835), (44, 106838),

Gene: Daisy123_227 Start: 108006, Stop: 108389, Start Num: 10
Candidate Starts for Daisy123_227:
(Start: 10 @108006 has 78 MA's), (17, 108063), (21, 108117), (30, 108219), (35, 108282),

Gene: Daubenski_204 Start: 106854, Stop: 107210, Start Num: 11
Candidate Starts for Daubenski_204:
(Start: 11 @106854 has 3 MA's), (21, 106962), (35, 107103), (38, 107139), (43, 107196), (44, 107199),

Gene: Davielle_211 Start: 106063, Stop: 106422, Start Num: 10
Candidate Starts for Davielle_211:
(Start: 10 @106063 has 78 MA's), (21, 106174), (35, 106315), (43, 106408), (44, 106411),

Gene: EGole_214 Start: 108503, Stop: 108862, Start Num: 10
Candidate Starts for EGole_214:
(Start: 10 @108503 has 78 MA's), (19, 108572), (21, 108614), (35, 108755), (38, 108791), (43, 108848), (44, 108851),

Gene: Eliot67_212 Start: 105554, Stop: 105913, Start Num: 10
Candidate Starts for Eliot67_212:
(Start: 10 @105554 has 78 MA's), (21, 105665), (35, 105806), (43, 105899), (44, 105902),

Gene: Elmer_234 Start: 111093, Stop: 111476, Start Num: 10
Candidate Starts for Elmer_234:
(Start: 10 @111093 has 78 MA's), (17, 111150), (26, 111258), (30, 111306), (32, 111342), (35, 111369), (39, 111408),

Gene: Enygma_233 Start: 110553, Stop: 110936, Start Num: 10
Candidate Starts for Enygma_233:
(Start: 10 @110553 has 78 MA's), (13, 110577), (17, 110610), (24, 110703), (30, 110766), (35, 110829),

Gene: Evy_202 Start: 106956, Stop: 107315, Start Num: 10
Candidate Starts for Evy_202:
(Start: 10 @106956 has 78 MA's), (21, 107067), (35, 107208), (38, 107244), (42, 107298), (44, 107304),

Gene: FreddyDRoo_211 Start: 105554, Stop: 105913, Start Num: 10
Candidate Starts for FreddyDRoo_211:
(Start: 10 @105554 has 78 MA's), (21, 105665), (35, 105806), (43, 105899), (44, 105902),

Gene: Fudan_161 Start: 86537, Stop: 86893, Start Num: 9
Candidate Starts for Fudan_161:
(Start: 9 @86537 has 5 MA's), (Start: 12 @86561 has 1 MA's), (15, 86579), (25, 86699), (30, 86756), (41, 86873), (42, 86876),

Gene: Garnacho_157 Start: 86421, Stop: 86771, Start Num: 8
Candidate Starts for Garnacho_157:
(7, 86409), (Start: 8 @86421 has 1 MA's), (15, 86451), (18, 86478), (19, 86487), (20, 86490), (22, 86538), (23, 86562), (33, 86673), (39, 86703), (40, 86706), (41, 86751), (42, 86754),

Gene: Genie2_223 Start: 107894, Stop: 108277, Start Num: 10
Candidate Starts for Genie2_223:
(Start: 10 @107894 has 78 MA's), (17, 107951), (24, 108044), (30, 108107), (35, 108170), (39, 108209),

Gene: GiJojo_155 Start: 87356, Stop: 87697, Start Num: 9
Candidate Starts for GiJojo_155:
(Start: 9 @87356 has 5 MA's), (18, 87413), (20, 87419), (25, 87509), (31, 87596), (34, 87608), (39, 87629), (41, 87677), (42, 87680),

Gene: Gibbi_233 Start: 107637, Stop: 108020, Start Num: 10
Candidate Starts for Gibbi_233:
(Start: 10 @107637 has 78 MA's), (17, 107694), (21, 107748), (30, 107850), (35, 107913),

Gene: HangryHippo_209 Start: 106161, Stop: 106520, Start Num: 10
Candidate Starts for HangryHippo_209:
(Start: 10 @106161 has 78 MA's), (19, 106230), (21, 106272), (35, 106413), (38, 106449), (43, 106506), (44, 106509),

Gene: IchabodCrane_219 Start: 107152, Stop: 107535, Start Num: 10
Candidate Starts for IchabodCrane_219:
(Start: 10 @107152 has 78 MA's), (17, 107209), (21, 107263), (30, 107365), (35, 107428),

Gene: JimJam_232 Start: 109073, Stop: 109456, Start Num: 10
Candidate Starts for JimJam_232:
(Start: 10 @109073 has 78 MA's), (17, 109130), (21, 109184), (30, 109286), (35, 109349),

Gene: Jollison_222 Start: 107283, Stop: 107666, Start Num: 10
Candidate Starts for Jollison_222:
(Start: 10 @107283 has 78 MA's), (17, 107340), (21, 107394), (30, 107496), (35, 107559),

Gene: Karimac_225 Start: 107468, Stop: 107851, Start Num: 10
Candidate Starts for Karimac_225:
(Start: 10 @107468 has 78 MA's), (17, 107525), (21, 107579), (24, 107618), (30, 107681), (35, 107744),

Gene: KentuckyRacer_231 Start: 108988, Stop: 109371, Start Num: 10
Candidate Starts for KentuckyRacer_231:
(Start: 10 @108988 has 78 MA's), (17, 109045), (21, 109099), (30, 109201), (35, 109264),

Gene: Larnav_210 Start: 106622, Stop: 106981, Start Num: 10
Candidate Starts for Larnav_210:
(Start: 10 @106622 has 78 MA's), (19, 106691), (21, 106733), (35, 106874), (38, 106910), (43, 106967), (44, 106970),

Gene: Leo04_212 Start: 107187, Stop: 107546, Start Num: 10
Candidate Starts for Leo04_212:
(Start: 10 @107187 has 78 MA's), (19, 107256), (21, 107298), (35, 107439), (38, 107475), (43, 107532), (44, 107535),

Gene: Liandry_211 Start: 106261, Stop: 106620, Start Num: 10
Candidate Starts for Liandry_211:

(Start: 10 @106261 has 78 MA's), (21, 106372), (35, 106513), (43, 106606), (44, 106609),

Gene: LilMartin_209 Start: 104821, Stop: 105180, Start Num: 10
Candidate Starts for LilMartin_209:
(Start: 10 @104821 has 78 MA's), (21, 104932), (35, 105073), (37, 105103), (38, 105109), (42, 105163), (44, 105169),

Gene: LilSaint_213 Start: 106759, Stop: 107142, Start Num: 10
Candidate Starts for LilSaint_213:
(Start: 10 @106759 has 78 MA's), (21, 106870), (27, 106933), (35, 107035), (42, 107125), (44, 107131),

Gene: LuckySocke_163 Start: 86486, Stop: 86842, Start Num: 9
Candidate Starts for LuckySocke_163:
(Start: 9 @86486 has 5 MA's), (Start: 12 @86510 has 1 MA's), (15, 86528), (25, 86648), (30, 86705), (41, 86822), (42, 86825),

Gene: LukeCage_229 Start: 109747, Stop: 110130, Start Num: 10
Candidate Starts for LukeCage_229:
(Start: 10 @109747 has 78 MA's), (17, 109804), (21, 109858), (30, 109960), (35, 110023),

Gene: Lululemon_208 Start: 105542, Stop: 105901, Start Num: 10
Candidate Starts for Lululemon_208:
(Start: 10 @105542 has 78 MA's), (19, 105611), (21, 105653), (35, 105794), (38, 105830), (43, 105887), (44, 105890),

Gene: Marsus_213 Start: 106565, Stop: 106924, Start Num: 10
Candidate Starts for Marsus_213:
(4, 106538), (Start: 10 @106565 has 78 MA's), (21, 106676), (35, 106817), (38, 106853), (42, 106907), (44, 106913),

Gene: Mildred21_219 Start: 104587, Stop: 104976, Start Num: 10
Candidate Starts for Mildred21_219:
(Start: 10 @104587 has 78 MA's), (21, 104704), (29, 104806), (35, 104869), (38, 104905), (42, 104959), (44, 104965),

Gene: MindFlayer_218 Start: 106668, Stop: 107051, Start Num: 10
Candidate Starts for MindFlayer_218:
(Start: 10 @106668 has 78 MA's), (17, 106725), (21, 106779), (30, 106881), (35, 106944),

Gene: Mugiwara_233 Start: 110247, Stop: 110630, Start Num: 10
Candidate Starts for Mugiwara_233:
(Start: 10 @110247 has 78 MA's), (17, 110304), (21, 110358), (26, 110412), (30, 110460), (32, 110496), (35, 110523), (39, 110562),

Gene: MulchMansion_213 Start: 106455, Stop: 106814, Start Num: 10
Candidate Starts for MulchMansion_213:
(Start: 10 @106455 has 78 MA's), (21, 106566), (35, 106707), (37, 106737), (38, 106743), (42, 106797), (44, 106803),

Gene: Navo_206 Start: 104869, Stop: 105228, Start Num: 10
Candidate Starts for Navo_206:
(Start: 10 @104869 has 78 MA's), (21, 104980), (35, 105121), (43, 105214), (44, 105217),

Gene: NootNoot_208 Start: 105073, Stop: 105432, Start Num: 10
Candidate Starts for NootNoot_208:
(Start: 10 @105073 has 78 MA's), (21, 105184), (35, 105325), (43, 105418), (44, 105421),

Gene: PacManQ_208 Start: 105542, Stop: 105901, Start Num: 10
Candidate Starts for PacManQ_208:
(Start: 10 @105542 has 78 MA's), (19, 105611), (21, 105653), (35, 105794), (38, 105830), (43, 105887), (44, 105890),

Gene: Paradiddles_203 Start: 107448, Stop: 107807, Start Num: 10
Candidate Starts for Paradiddles_203:
(Start: 10 @107448 has 78 MA's), (21, 107559), (35, 107700), (43, 107793), (44, 107796),

Gene: Park1214_168 Start: 87945, Stop: 88277, Start Num: 12
Candidate Starts for Park1214_168:
(6, 87921), (Start: 12 @87945 has 1 MA's), (14, 87960), (18, 87990), (30, 88140), (39, 88209), (41, 88257), (42, 88260),

Gene: Peebs_208 Start: 106593, Stop: 106952, Start Num: 10
Candidate Starts for Peebs_208:
(Start: 10 @106593 has 78 MA's), (19, 106662), (21, 106704), (35, 106845), (38, 106881), (43, 106938), (44, 106941),

Gene: Pepperwood_211 Start: 106825, Stop: 107184, Start Num: 10
Candidate Starts for Pepperwood_211:
(Start: 10 @106825 has 78 MA's), (21, 106936), (28, 107005), (35, 107077), (38, 107113), (43, 107170), (44, 107173),

Gene: Persimmon_214 Start: 105887, Stop: 106246, Start Num: 10
Candidate Starts for Persimmon_214:
(Start: 10 @105887 has 78 MA's), (21, 105998), (35, 106139), (43, 106232), (44, 106235),

Gene: PinkiePie_211 Start: 106261, Stop: 106620, Start Num: 10
Candidate Starts for PinkiePie_211:
(Start: 10 @106261 has 78 MA's), (21, 106372), (35, 106513), (43, 106606), (44, 106609),

Gene: PumpkinSpice_228 Start: 107889, Stop: 108272, Start Num: 10
Candidate Starts for PumpkinSpice_228:
(Start: 10 @107889 has 78 MA's), (17, 107946), (21, 108000), (30, 108102), (35, 108165),

Gene: PynkPanther_211 Start: 106703, Stop: 107062, Start Num: 10
Candidate Starts for PynkPanther_211:
(Start: 10 @106703 has 78 MA's), (21, 106814), (35, 106955), (43, 107048), (44, 107051),

Gene: Quaran19_225 Start: 107330, Stop: 107713, Start Num: 10
Candidate Starts for Quaran19_225:
(Start: 10 @107330 has 78 MA's), (17, 107387), (21, 107441), (30, 107543), (35, 107606),

Gene: Rikishi_226 Start: 107611, Stop: 107994, Start Num: 10
Candidate Starts for Rikishi_226:
(Start: 10 @107611 has 78 MA's), (17, 107668), (21, 107722), (30, 107824), (35, 107887),

Gene: Riptide_213 Start: 105917, Stop: 106300, Start Num: 10
Candidate Starts for Riptide_213:
(Start: 10 @105917 has 78 MA's), (21, 106028), (27, 106091), (35, 106193), (42, 106283), (44, 106289),

Gene: SaltySpitoon_225 Start: 106872, Stop: 107255, Start Num: 10
Candidate Starts for SaltySpitoon_225:
(Start: 10 @106872 has 78 MA's), (17, 106929), (21, 106983), (30, 107085), (35, 107148),

Gene: Scheme_214 Start: 108097, Stop: 108456, Start Num: 10
Candidate Starts for Scheme_214:
(Start: 10 @108097 has 78 MA's), (19, 108166), (21, 108208), (28, 108277), (35, 108349), (38, 108385), (43, 108442), (44, 108445),

Gene: Shuckle_209 Start: 106819, Stop: 107178, Start Num: 10
Candidate Starts for Shuckle_209:
(Start: 10 @106819 has 78 MA's), (21, 106930), (35, 107071), (43, 107164), (44, 107167),

Gene: Sollertia_224 Start: 107883, Stop: 108266, Start Num: 10
Candidate Starts for Sollertia_224:
(Start: 10 @107883 has 78 MA's), (17, 107940), (24, 108033), (30, 108096), (35, 108159), (39, 108198),

Gene: Spelly_230 Start: 106801, Stop: 107184, Start Num: 10
Candidate Starts for Spelly_230:
(Start: 10 @106801 has 78 MA's), (17, 106858), (21, 106912), (30, 107014), (35, 107077),

Gene: Spilled_232 Start: 108005, Stop: 108388, Start Num: 10
Candidate Starts for Spilled_232:
(Start: 10 @108005 has 78 MA's), (17, 108062), (21, 108116), (30, 108218), (35, 108281),

Gene: Squillium_214 Start: 106263, Stop: 106622, Start Num: 10
Candidate Starts for Squillium_214:
(Start: 10 @106263 has 78 MA's), (21, 106374), (35, 106515), (43, 106608), (44, 106611),

Gene: Stanimal_223 Start: 108255, Stop: 108638, Start Num: 10
Candidate Starts for Stanimal_223:
(Start: 10 @108255 has 78 MA's), (17, 108312), (30, 108468), (35, 108531), (39, 108570),

Gene: StarPlatinum_233 Start: 109978, Stop: 110361, Start Num: 10
Candidate Starts for StarPlatinum_233:
(Start: 10 @109978 has 78 MA's), (17, 110035), (26, 110143), (30, 110191), (32, 110227), (35, 110254), (39, 110293),

Gene: Starbow_222 Start: 106845, Stop: 107228, Start Num: 10
Candidate Starts for Starbow_222:
(Start: 10 @106845 has 78 MA's), (17, 106902), (21, 106956), (30, 107058), (35, 107121),

Gene: Sushi23_211 Start: 107459, Stop: 107818, Start Num: 10
Candidate Starts for Sushi23_211:
(Start: 10 @107459 has 78 MA's), (21, 107570), (28, 107639), (35, 107711), (38, 107747), (43, 107804), (44, 107807),

Gene: Talos_166 Start: 86505, Stop: 86858, Start Num: 9
Candidate Starts for Talos_166:
(1, 86379), (2, 86388), (3, 86391), (Start: 9 @86505 has 5 MA's), (15, 86544), (39, 86790), (41, 86838), (42, 86841),

Gene: Targaryen_210 Start: 107640, Stop: 107999, Start Num: 10
Candidate Starts for Targaryen_210:
(Start: 10 @107640 has 78 MA's), (21, 107751), (35, 107892), (38, 107928), (42, 107982), (44, 107988),

Gene: Teutsch_210 Start: 107281, Stop: 107640, Start Num: 10
Candidate Starts for Teutsch_210:
(Start: 10 @107281 has 78 MA's), (19, 107350), (21, 107392), (35, 107533), (38, 107569), (43, 107626), (44, 107629),

Gene: TomSawyer_229 Start: 109316, Stop: 109699, Start Num: 10
Candidate Starts for TomSawyer_229:
(Start: 10 @109316 has 78 MA's), (17, 109373), (21, 109427), (30, 109529), (35, 109592),

Gene: Tomas_223 Start: 108257, Stop: 108640, Start Num: 10
Candidate Starts for Tomas_223:
(4, 108230), (Start: 10 @108257 has 78 MA's), (17, 108311), (21, 108365), (33, 108509), (35, 108533), (39, 108572),

Gene: Tuesday_232 Start: 107856, Stop: 108239, Start Num: 10
Candidate Starts for Tuesday_232:
(Start: 10 @107856 has 78 MA's), (17, 107913), (21, 107967), (30, 108069), (35, 108132),

Gene: WashU_206 Start: 107072, Stop: 107431, Start Num: 10
Candidate Starts for WashU_206:
(Start: 10 @107072 has 78 MA's), (19, 107141), (21, 107183), (35, 107324), (38, 107360), (43, 107417), (44, 107420),

Gene: Watermoore_210 Start: 107804, Stop: 108163, Start Num: 10
Candidate Starts for Watermoore_210:
(Start: 10 @107804 has 78 MA's), (19, 107873), (21, 107915), (35, 108056), (38, 108092), (43, 108149), (44, 108152),

Gene: WhereRU_211 Start: 106066, Stop: 106425, Start Num: 10
Candidate Starts for WhereRU_211:
(Start: 10 @106066 has 78 MA's), (21, 106177), (35, 106318), (43, 106411), (44, 106414),

Gene: Wipeout_216 Start: 108268, Stop: 108651, Start Num: 10
Candidate Starts for Wipeout_216:
(Start: 10 @108268 has 78 MA's), (17, 108325), (21, 108379), (30, 108481), (35, 108544),

Gene: Wofford_226 Start: 110959, Stop: 111342, Start Num: 10
Candidate Starts for Wofford_226:
(Start: 10 @110959 has 78 MA's), (17, 111016), (26, 111124), (30, 111172), (32, 111208), (35, 111235), (39, 111274),

Gene: Yaboi_228 Start: 107818, Stop: 108201, Start Num: 10
Candidate Starts for Yaboi_228:

(Start: 10 @107818 has 78 MA's), (17, 107875), (24, 107968), (30, 108031), (35, 108094), (39, 108133),