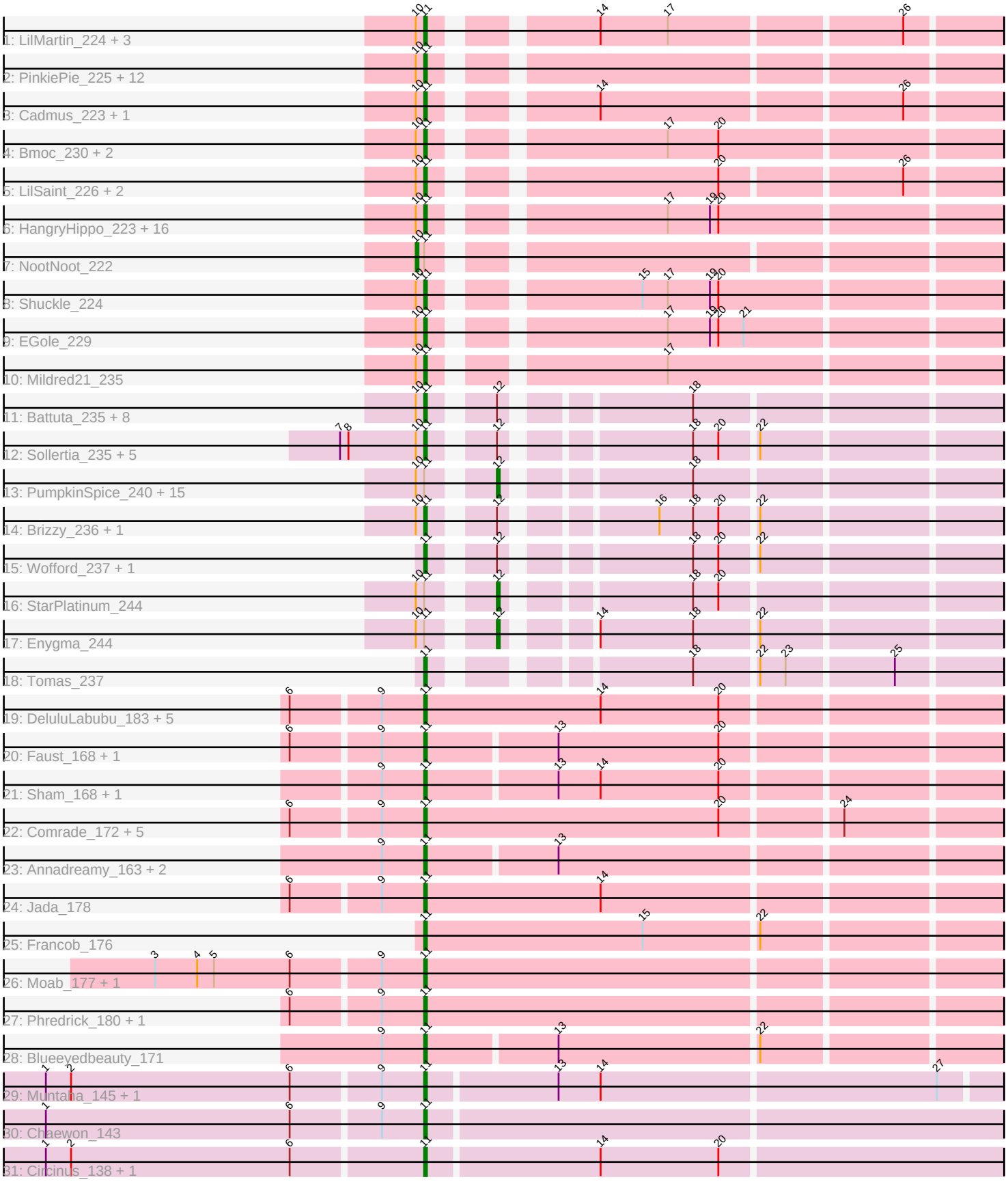
Pham 334603


1: LilMartin_224 + 3
2: PinkiePie_225 + 12
3: Cadmus_223 + 1
4: Bmoc_230 + 2
5: LilSaint_226 + 2
6: HangryHippo_223 + 16
7: NootNoot_222
8: Shuckle_224
9: EGole_229
10: Mildred21_235
11: Battuta_235 + 8
12: Sollertia_235 + 5
13: PumpkinSpice_240 + 15
14: Brizzy_236 + 1
15: Wofford_237 + 1
16: StarPlatinum_244
17: Enygma_244
18: Tomas_237
19: DeluluLabubu_183 + 5
20: Faust_168 + 1
21: Sham_168 + 1
22: Comrade_172 + 5
23: Annadreamy_163 + 2
24: Jada_178
25: Francob_176
26: Moab_177 + 1
27: Phredrick_180 + 1
28: Blueeyedbeauty_171
29: Muntaha_145 + 1
30: Chaewon_143
31: Circinus_138 + 1

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 334603 Report

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

Pham number 334603 has 115 members, 6 are drafts.

Phages represented in each track:
• Track 1 : LilMartin_224, Marsus_227, MulchMansion_228, Angela_228
• Track 2 : PinkiePie_225, FreddyDRoo_226, Persimmon_228, Paradiddles_217, Braelyn_221, Liandry_225, Navo_219, Eliot67_227, WhereRU_224, PynkPanther_225, Squillium_228, Davielle_224, Bartholomune_225
• Track 3 : Cadmus_223, Daubenski_219
• Track 4 : Bmoc_230, Targaryen_225, Evy_215
• Track 5 : LilSaint_226, Anedea_238, Riptide_226
• Track 6 : HangryHippo_223, PacManQ_222, WashU_219, Lululemon_222, Tribute_221, Pepperwood_225, BlueOtter_223, Watermoore_224, Coogler_222, Leo04_225, Cross_224, Sushi23_226, Scheme_228, Larnav_225, Teutsch_224, Cursive_228, ArianaSWT_228
• Track 7 : NootNoot_222
• Track 8 : Shuckle_224
• Track 9 : EGole_229
• Track 10 : Mildred21_235
• Track 11 : Battuta_235, Jollison_234, MindFlayer_230, LukeCage_240, Mugiwara_244, SaltySpitoon_237, Gibbi_245, Amabiko_241, Daisy123_239
• Track 12 : Sollertia_235, Stanimal_234, BoomerJR_234, AngryGiraffe_234, Yaboi_239, Genie2_234
• Track 13 : PumpkinSpice_240, Wipeout_227, Rikishi_238, JimJam_244, Spilled_244, IchabodCrane_231, Bordeaux_235, AcciDwight_245, Spelly_242, Quaran19_237, Birchlyn_236, Tuesday_244, CeilingFan_241, TomSawyer_241, Starbow_234, KentuckyRacer_243
• Track 14 : Brizzy_236, Karimac_237
• Track 15 : Wofford_237, Elmer_245
• Track 16 : StarPlatinum_244
• Track 17 : Enygma_244
• Track 18 : Tomas_237
• Track 19 : DeluluLabubu_183, Gilson_179, Forrest_181, Maupel_180, Emma1919_180, MeganTheeKilla_179
• Track 20 : Faust_168, SeresaTree_170
• Track 21 : Sham_168, TunaTartare_175
• Track 22 : Comrade_172, Karp_169, Westy_177, SparkleGoddess_175, Stigma_173, Belfort_175
• Track 23 : Annadreamy_163, Beuffert_169, Limpid_170
• Track 24 : Jada_178
• Track 25 : Francob_176

• Track 26 : Moab_177, Patelgo_178
• Track 27 : Phredrick_180, Kenrey_182
• Track 28 : Blueeyedbeauty_171
• Track 29 : Muntaha_145, Wakanda_144
• Track 30 : Chaewon_143
• Track 31 : Circinus_138, BillNye_137

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

The start number called the most often in the published annotations is 11, it was called in 92 of the 109 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Amabiko_241, Anedea_238, Angela_228, AngryGiraffe_234, Annadreamy_163, ArianaSWT_228, Bartholomune_225, Battuta_235, Belfort_175, Beuffert_169, BillNye_137, BlueOtter_223, Blueeyedbeauty_171, Bmoc_230, BoomerJR_234, Braelyn_221, Brizzy_236, Cadmus_223, Chaewon_143, Circinus_138, Comrade_172, Coogler_222, Cross_224, Cursive_228, Daisy123_239, Daubenski_219, Davielle_224, DeluluLabubu_183, EGole_229, Eliot67_227, Elmer_245, Emma1919_180, Evy_215, Faust_168, Forrest_181, Francob_176, FreddyDRoo_226, Genie2_234, Gibbi_245, Gilson_179, HangryHippo_223, Jada_178, Jollison_234, Karimac_237, Karp_169, Kenrey_182, Larnav_225, Leo04_225, Liandry_225, LilMartin_224, LilSaint_226, Limpid_170, LukeCage_240, Lululemon_222, Marsus_227, Maupel_180, MeganTheeKilla_179, Mildred21_235, MindFlayer_230, Moab_177, Mugiwara_244, MulchMansion_228, Muntaha_145, Navo_219, PacManQ_222, Paradiddles_217, Patelgo_178, Pepperwood_225, Persimmon_228, Phredrick_180, PinkiePie_225, PynkPanther_225, Riptide_226, SaltySpitoon_237, Scheme_228, SeresaTree_170, Sham_168, Shuckle_224, Sollertia_235, SparkleGoddess_175, Squillium_228, Stanimal_234, Stigma_173, Sushi23_226, Targaryen_225, Teutsch_224, Tomas_237, Tribute_221, TunaTartare_175, Wakanda_144, WashU_219, Watermoore_224, Westy_177, WhereRU_224, Wofford_237, Yaboi_239,

Genes that have the "Most Annotated" start but do not call it:
• AcciDwight_245, Birchlyn_236, Bordeaux_235, CeilingFan_241, Enygma_244, IchabodCrane_231, JimJam_244, KentuckyRacer_243, NootNoot_222, PumpkinSpice_240, Quaran19_237, Rikishi_238, Spelly_242, Spilled_244, StarPlatinum_244, Starbow_234, TomSawyer_241, Tuesday_244, Wipeout_227,

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

Summary by start number:

Start 10:
• Found in 81 of 115 (70.4%) of genes in pham
• Manual Annotations of this start: 1 of 109
• Called 1.2% of time when present
• Phage (with cluster) where this start called: NootNoot_222 (BE1),

Start 11:
• Found in 115 of 115 (100.0%) of genes in pham
• Manual Annotations of this start: 92 of 109
• Called 83.5% of time when present
• Phage (with cluster) where this start called: Amabiko_241 (BE2), Anedea_238 (BE1), Angela_228 (BE1), AngryGiraffe_234 (BE2), Annadreamy_163 (BK1), ArianaSWT_228 (BE1), Bartholomune_225 (BE1), Battuta_235 (BE2), Belfort_175 (BK1), Beuffert_169 (BK1), BillNye_137 (BK2), BlueOtter_223 (BE1), Blueeyedbeauty_171 (BK1), Bmoc_230 (BE1), BoomerJR_234 (BE2), Braelyn_221 (BE1), Brizzy_236 (BE2), Cadmus_223 (BE1), Chaewon_143 (BK2), Circinus_138 (BK2), Comrade_172 (BK1), Coogler_222 (BE1), Cross_224 (BE1), Cursive_228 (BE1), Daisy123_239 (BE2), Daubenski_219 (BE1), Davielle_224 (BE1), DeluluLabubu_183 (BK1), EGole_229 (BE1), Eliot67_227 (BE1), Elmer_245 (BE2), Emma1919_180 (BK1), Evy_215 (BE1), Faust_168 (BK1), Forrest_181 (BK1), Francob_176 (BK1), FreddyDRoo_226 (BE1), Genie2_234 (BE2), Gibbi_245 (BE2), Gilson_179 (BK1), HangryHippo_223 (BE1), Jada_178 (BK1), Jollison_234 (BE2), Karimac_237 (BE2), Karp_169 (BK1), Kenrey_182 (BK1), Larnav_225 (BE1), Leo04_225 (BE1), Liandry_225 (BE1), LilMartin_224 (BE1), LilSaint_226 (BE1), Limpid_170 (BK1), LukeCage_240 (BE2), Lululemon_222 (BE1), Marsus_227 (BE1), Maupel_180 (BK1), MeganTheeKilla_179 (BK1), Mildred21_235 (BE1), MindFlayer_230 (BE2), Moab_177 (BK1), Mugiwara_244 (BE2), MulchMansion_228 (BE1), Muntaha_145 (BK2), Navo_219 (BE1), PacManQ_222 (BE1), Paradiddles_217 (BE1), Patelgo_178 (BK1), Pepperwood_225 (BE1), Persimmon_228 (BE1), Phredrick_180 (BK1), PinkiePie_225 (BE1), PynkPanther_225 (BE1), Riptide_226 (BE1), SaltySpitoon_237 (BE2), Scheme_228 (BE1), SeresaTree_170 (BK1), Sham_168 (BK1), Shuckle_224 (BE1), Sollertia_235 (BE2), SparkleGoddess_175 (BK1), Squillium_228 (BE1), Stanimal_234 (BE2), Stigma_173 (BK1), Sushi23_226 (BE1), Targaryen_225 (BE1), Teutsch_224 (BE1), Tomas_237 (BE2), Tribute_221 (BE1), TunaTartare_175 (BK1), Wakanda_144 (BK2), WashU_219 (BE1), Watermoore_224 (BE1), Westy_177 (BK1), WhereRU_224 (BE1), Wofford_237 (BE2), Yaboi_239 (BE2),

Start 12:
• Found in 37 of 115 (32.2%) of genes in pham
• Manual Annotations of this start: 16 of 109
• Called 48.6% of time when present
• Phage (with cluster) where this start called: AcciDwight_245 (BE2), Birchlyn_236 (BE2), Bordeaux_235 (BE2), CeilingFan_241 (BE2), Enygma_244 (BE2), IchabodCrane_231 (BE2), JimJam_244 (BE2), KentuckyRacer_243 (BE2), PumpkinSpice_240 (BE2), Quaran19_237 (BE2), Rikishi_238 (BE2), Spelly_242 (BE2), Spilled_244 (BE2), StarPlatinum_244 (BE2), Starbow_234 (BE2), TomSawyer_241 (BE2), Tuesday_244 (BE2), Wipeout_227 (BE2),

Summary by clusters:

There are 4 clusters represented in this pham: BE2, BE1, BK1, BK2,

Info for manual annotations of cluster BE1:
•Start number 10 was manually annotated 1 time for cluster BE1.
•Start number 11 was manually annotated 44 times for cluster BE1.

Info for manual annotations of cluster BE2:
•Start number 11 was manually annotated 19 times for cluster BE2.

•Start number 12 was manually annotated 16 times for cluster BE2.

Info for manual annotations of cluster BK1:
•Start number 11 was manually annotated 24 times for cluster BK1.

Info for manual annotations of cluster BK2:
•Start number 11 was manually annotated 5 times for cluster BK2.

Gene Information:

Gene: AcciDwight_245 Start: 111862, Stop: 112020, Start Num: 12
Candidate Starts for AcciDwight_245:
(Start: 10 @111841 has 1 MA's), (Start: 11 @111844 has 92 MA's), (Start: 12 @111862 has 16 MA's), (18, 111919),

Gene: Amabiko_241 Start: 111662, Stop: 111838, Start Num: 11
Candidate Starts for Amabiko_241:
(Start: 10 @111659 has 1 MA's), (Start: 11 @111662 has 92 MA's), (Start: 12 @111680 has 16 MA's), (18, 111737),

Gene: Anedea_238 Start: 115142, Stop: 115324, Start Num: 11
Candidate Starts for Anedea_238:
(Start: 10 @115139 has 1 MA's), (Start: 11 @115142 has 92 MA's), (20, 115232), (26, 115292),

Gene: Angela_228 Start: 113366, Stop: 113548, Start Num: 11
Candidate Starts for Angela_228:
(Start: 10 @113363 has 1 MA's), (Start: 11 @113366 has 92 MA's), (14, 113414), (17, 113438), (26, 113516),

Gene: AngryGiraffe_234 Start: 111145, Stop: 111321, Start Num: 11
Candidate Starts for AngryGiraffe_234:
(7, 111115), (8, 111118), (Start: 10 @111142 has 1 MA's), (Start: 11 @111145 has 92 MA's), (Start: 12 @111163 has 16 MA's), (18, 111220), (20, 111229), (22, 111241),

Gene: Annadreamy_163 Start: 88680, Stop: 88874, Start Num: 11
Candidate Starts for Annadreamy_163:
(9, 88665), (Start: 11 @88680 has 92 MA's), (13, 88725),

Gene: ArianaSWT_228 Start: 115002, Stop: 115187, Start Num: 11
Candidate Starts for ArianaSWT_228:
(Start: 10 @114999 has 1 MA's), (Start: 11 @115002 has 92 MA's), (17, 115074), (19, 115089), (20, 115092),

Gene: Bartholomune_225 Start: 113119, Stop: 113301, Start Num: 11
Candidate Starts for Bartholomune_225:
(Start: 10 @113116 has 1 MA's), (Start: 11 @113119 has 92 MA's),

Gene: Battuta_235 Start: 110977, Stop: 111153, Start Num: 11
Candidate Starts for Battuta_235:
(Start: 10 @110974 has 1 MA's), (Start: 11 @110977 has 92 MA's), (Start: 12 @110995 has 16 MA's), (18, 111052),

Gene: Belfort_175 Start: 94501, Stop: 94698, Start Num: 11
Candidate Starts for Belfort_175:
(6, 94456), (9, 94486), (Start: 11 @94501 has 92 MA's), (20, 94606), (24, 94645),

Gene: Beuffert_169 Start: 92863, Stop: 93057, Start Num: 11
Candidate Starts for Beuffert_169:
(9, 92848), (Start: 11 @92863 has 92 MA's), (13, 92908),

Gene: BillNye_137 Start: 84086, Stop: 84286, Start Num: 11
Candidate Starts for BillNye_137:
(1, 83954), (2, 83963), (6, 84041), (Start: 11 @84086 has 92 MA's), (14, 84146), (20, 84188),

Gene: Birchlyn_236 Start: 108928, Stop: 109086, Start Num: 12
Candidate Starts for Birchlyn_236:
(Start: 10 @108907 has 1 MA's), (Start: 11 @108910 has 92 MA's), (Start: 12 @108928 has 16 MA's), (18, 108985),

Gene: BlueOtter_223 Start: 113255, Stop: 113440, Start Num: 11
Candidate Starts for BlueOtter_223:
(Start: 10 @113252 has 1 MA's), (Start: 11 @113255 has 92 MA's), (17, 113327), (19, 113342), (20, 113345),

Gene: Blueeyedbeauty_171 Start: 92447, Stop: 92641, Start Num: 11
Candidate Starts for Blueeyedbeauty_171:
(9, 92432), (Start: 11 @92447 has 92 MA's), (13, 92492), (22, 92561),

Gene: Bmoc_230 Start: 113807, Stop: 113992, Start Num: 11
Candidate Starts for Bmoc_230:
(Start: 10 @113804 has 1 MA's), (Start: 11 @113807 has 92 MA's), (17, 113879), (20, 113897),

Gene: BoomerJR_234 Start: 111578, Stop: 111754, Start Num: 11
Candidate Starts for BoomerJR_234:
(7, 111548), (8, 111551), (Start: 10 @111575 has 1 MA's), (Start: 11 @111578 has 92 MA's), (Start: 12 @111596 has 16 MA's), (18, 111653), (20, 111662), (22, 111674),

Gene: Bordeaux_235 Start: 111578, Stop: 111736, Start Num: 12
Candidate Starts for Bordeaux_235:
(Start: 10 @111557 has 1 MA's), (Start: 11 @111560 has 92 MA's), (Start: 12 @111578 has 16 MA's), (18, 111635),

Gene: Braelyn_221 Start: 112766, Stop: 112948, Start Num: 11
Candidate Starts for Braelyn_221:
(Start: 10 @112763 has 1 MA's), (Start: 11 @112766 has 92 MA's),

Gene: Brizzy_236 Start: 112088, Stop: 112264, Start Num: 11
Candidate Starts for Brizzy_236:
(Start: 10 @112085 has 1 MA's), (Start: 11 @112088 has 92 MA's), (Start: 12 @112106 has 16 MA's), (16, 112151), (18, 112163), (20, 112172), (22, 112184),

Gene: Cadmus_223 Start: 114488, Stop: 114670, Start Num: 11
Candidate Starts for Cadmus_223:
(Start: 10 @114485 has 1 MA's), (Start: 11 @114488 has 92 MA's), (14, 114536), (26, 114638),

Gene: CeilingFan_241 Start: 112373, Stop: 112531, Start Num: 12
Candidate Starts for CeilingFan_241:
(Start: 10 @112352 has 1 MA's), (Start: 11 @112355 has 92 MA's), (Start: 12 @112373 has 16 MA's), (18, 112430),

Gene: Chaewon_143 Start: 84064, Stop: 84264, Start Num: 11
Candidate Starts for Chaewon_143:
(1, 83932), (6, 84019), (9, 84049), (Start: 11 @84064 has 92 MA's),

Gene: Circinus_138 Start: 84054, Stop: 84254, Start Num: 11
Candidate Starts for Circinus_138:
(1, 83922), (2, 83931), (6, 84009), (Start: 11 @84054 has 92 MA's), (14, 84114), (20, 84156),

Gene: Comrade_172 Start: 94703, Stop: 94900, Start Num: 11
Candidate Starts for Comrade_172:
(6, 94658), (9, 94688), (Start: 11 @94703 has 92 MA's), (20, 94808), (24, 94847),

Gene: Coogler_222 Start: 113680, Stop: 113865, Start Num: 11
Candidate Starts for Coogler_222:
(Start: 10 @113677 has 1 MA's), (Start: 11 @113680 has 92 MA's), (17, 113752), (19, 113767), (20, 113770),

Gene: Cross_224 Start: 113900, Stop: 114085, Start Num: 11
Candidate Starts for Cross_224:
(Start: 10 @113897 has 1 MA's), (Start: 11 @113900 has 92 MA's), (17, 113972), (19, 113987), (20, 113990),

Gene: Cursive_228 Start: 114007, Stop: 114192, Start Num: 11
Candidate Starts for Cursive_228:
(Start: 10 @114004 has 1 MA's), (Start: 11 @114007 has 92 MA's), (17, 114079), (19, 114094), (20, 114097),

Gene: Daisy123_239 Start: 112217, Stop: 112393, Start Num: 11
Candidate Starts for Daisy123_239:
(Start: 10 @112214 has 1 MA's), (Start: 11 @112217 has 92 MA's), (Start: 12 @112235 has 16 MA's), (18, 112292),

Gene: Daubenski_219 Start: 114389, Stop: 114571, Start Num: 11
Candidate Starts for Daubenski_219:
(Start: 10 @114386 has 1 MA's), (Start: 11 @114389 has 92 MA's), (14, 114437), (26, 114539),

Gene: Davielle_224 Start: 113164, Stop: 113346, Start Num: 11
Candidate Starts for Davielle_224:
(Start: 10 @113161 has 1 MA's), (Start: 11 @113164 has 92 MA's),

Gene: DeluluLabubu_183 Start: 95726, Stop: 95923, Start Num: 11
Candidate Starts for DeluluLabubu_183:
(6, 95681), (9, 95711), (Start: 11 @95726 has 92 MA's), (14, 95789), (20, 95831),

Gene: EGole_229 Start: 116091, Stop: 116276, Start Num: 11
Candidate Starts for EGole_229:

(Start: 10 @116088 has 1 MA's), (Start: 11 @116091 has 92 MA's), (17, 116163), (19, 116178), (20, 116181), (21, 116190),

Gene: Eliot67_227 Start: 112948, Stop: 113130, Start Num: 11
Candidate Starts for Eliot67_227:
(Start: 10 @112945 has 1 MA's), (Start: 11 @112948 has 92 MA's),

Gene: Elmer_245 Start: 115153, Stop: 115329, Start Num: 11
Candidate Starts for Elmer_245:
(Start: 11 @115153 has 92 MA's), (Start: 12 @115171 has 16 MA's), (18, 115228), (20, 115237), (22, 115249),

Gene: Emma1919_180 Start: 93745, Stop: 93942, Start Num: 11
Candidate Starts for Emma1919_180:
(6, 93700), (9, 93730), (Start: 11 @93745 has 92 MA's), (14, 93808), (20, 93850),

Gene: Enygma_244 Start: 114381, Stop: 114539, Start Num: 12
Candidate Starts for Enygma_244:
(Start: 10 @114360 has 1 MA's), (Start: 11 @114363 has 92 MA's), (Start: 12 @114381 has 16 MA's), (14, 114405), (18, 114438), (22, 114459),

Gene: Evy_215 Start: 114074, Stop: 114259, Start Num: 11
Candidate Starts for Evy_215:
(Start: 10 @114071 has 1 MA's), (Start: 11 @114074 has 92 MA's), (17, 114146), (20, 114164),

Gene: Faust_168 Start: 93832, Stop: 94026, Start Num: 11
Candidate Starts for Faust_168:
(6, 93787), (9, 93817), (Start: 11 @93832 has 92 MA's), (13, 93877), (20, 93934),

Gene: Forrest_181 Start: 95180, Stop: 95377, Start Num: 11
Candidate Starts for Forrest_181:
(6, 95135), (9, 95165), (Start: 11 @95180 has 92 MA's), (14, 95243), (20, 95285),

Gene: Francob_176 Start: 93736, Stop: 93933, Start Num: 11
Candidate Starts for Francob_176:
(Start: 11 @93736 has 92 MA's), (15, 93814), (22, 93853),

Gene: FreddyDRoo_226 Start: 112948, Stop: 113130, Start Num: 11
Candidate Starts for FreddyDRoo_226:
(Start: 10 @112945 has 1 MA's), (Start: 11 @112948 has 92 MA's),

Gene: Genie2_234 Start: 111703, Stop: 111879, Start Num: 11
Candidate Starts for Genie2_234:
(7, 111673), (8, 111676), (Start: 10 @111700 has 1 MA's), (Start: 11 @111703 has 92 MA's), (Start: 12 @111721 has 16 MA's), (18, 111778), (20, 111787), (22, 111799),

Gene: Gibbi_245 Start: 111848, Stop: 112024, Start Num: 11
Candidate Starts for Gibbi_245:
(Start: 10 @111845 has 1 MA's), (Start: 11 @111848 has 92 MA's), (Start: 12 @111866 has 16 MA's), (18, 111923),

Gene: Gilson_179 Start: 93707, Stop: 93904, Start Num: 11
Candidate Starts for Gilson_179:

(6, 93662), (9, 93692), (Start: 11 @93707 has 92 MA's), (14, 93770), (20, 93812),

Gene: HangryHippo_223 Start: 113255, Stop: 113440, Start Num: 11
Candidate Starts for HangryHippo_223:
(Start: 10 @113252 has 1 MA's), (Start: 11 @113255 has 92 MA's), (17, 113327), (19, 113342), (20, 113345),

Gene: IchabodCrane_231 Start: 111381, Stop: 111539, Start Num: 12
Candidate Starts for IchabodCrane_231:
(Start: 10 @111360 has 1 MA's), (Start: 11 @111363 has 92 MA's), (Start: 12 @111381 has 16 MA's), (18, 111438),

Gene: Jada_178 Start: 93873, Stop: 94070, Start Num: 11
Candidate Starts for Jada_178:
(6, 93828), (9, 93858), (Start: 11 @93873 has 92 MA's), (14, 93936),

Gene: JimJam_244 Start: 113302, Stop: 113460, Start Num: 12
Candidate Starts for JimJam_244:
(Start: 10 @113281 has 1 MA's), (Start: 11 @113284 has 92 MA's), (Start: 12 @113302 has 16 MA's), (18, 113359),

Gene: Jollison_234 Start: 111494, Stop: 111670, Start Num: 11
Candidate Starts for Jollison_234:
(Start: 10 @111491 has 1 MA's), (Start: 11 @111494 has 92 MA's), (Start: 12 @111512 has 16 MA's), (18, 111569),

Gene: Karimac_237 Start: 111679, Stop: 111855, Start Num: 11
Candidate Starts for Karimac_237:
(Start: 10 @111676 has 1 MA's), (Start: 11 @111679 has 92 MA's), (Start: 12 @111697 has 16 MA's), (16, 111742), (18, 111754), (20, 111763), (22, 111775),

Gene: Karp_169 Start: 93927, Stop: 94124, Start Num: 11
Candidate Starts for Karp_169:
(6, 93882), (9, 93912), (Start: 11 @93927 has 92 MA's), (20, 94032), (24, 94071),

Gene: Kenrey_182 Start: 94740, Stop: 94937, Start Num: 11
Candidate Starts for Kenrey_182:
(6, 94695), (9, 94725), (Start: 11 @94740 has 92 MA's),

Gene: KentuckyRacer_243 Start: 113217, Stop: 113375, Start Num: 12
Candidate Starts for KentuckyRacer_243:
(Start: 10 @113196 has 1 MA's), (Start: 11 @113199 has 92 MA's), (Start: 12 @113217 has 16 MA's), (18, 113274),

Gene: Larnav_225 Start: 114173, Stop: 114358, Start Num: 11
Candidate Starts for Larnav_225:
(Start: 10 @114170 has 1 MA's), (Start: 11 @114173 has 92 MA's), (17, 114245), (19, 114260), (20, 114263),

Gene: Leo04_225 Start: 114281, Stop: 114466, Start Num: 11
Candidate Starts for Leo04_225:
(Start: 10 @114278 has 1 MA's), (Start: 11 @114281 has 92 MA's), (17, 114353), (19, 114368), (20, 114371),

Gene: Liandry_225 Start: 113655, Stop: 113837, Start Num: 11
Candidate Starts for Liandry_225:
(Start: 10 @113652 has 1 MA's), (Start: 11 @113655 has 92 MA's),

Gene: LilMartin_224 Start: 112306, Stop: 112488, Start Num: 11
Candidate Starts for LilMartin_224:
(Start: 10 @112303 has 1 MA's), (Start: 11 @112306 has 92 MA's), (14, 112354), (17, 112378), (26, 112456),

Gene: LilSaint_226 Start: 113514, Stop: 113696, Start Num: 11
Candidate Starts for LilSaint_226:
(Start: 10 @113511 has 1 MA's), (Start: 11 @113514 has 92 MA's), (20, 113604), (26, 113664),

Gene: Limpid_170 Start: 93993, Stop: 94187, Start Num: 11
Candidate Starts for Limpid_170:
(9, 93978), (Start: 11 @93993 has 92 MA's), (13, 94038),

Gene: LukeCage_240 Start: 113524, Stop: 113700, Start Num: 11
Candidate Starts for LukeCage_240:
(Start: 10 @113521 has 1 MA's), (Start: 11 @113524 has 92 MA's), (Start: 12 @113542 has 16 MA's), (18, 113599),

Gene: Lululemon_222 Start: 113060, Stop: 113245, Start Num: 11
Candidate Starts for Lululemon_222:
(Start: 10 @113057 has 1 MA's), (Start: 11 @113060 has 92 MA's), (17, 113132), (19, 113147), (20, 113150),

Gene: Marsus_227 Start: 113971, Stop: 114153, Start Num: 11
Candidate Starts for Marsus_227:
(Start: 10 @113968 has 1 MA's), (Start: 11 @113971 has 92 MA's), (14, 114019), (17, 114043), (26, 114121),

Gene: Maupel_180 Start: 93707, Stop: 93904, Start Num: 11
Candidate Starts for Maupel_180:
(6, 93662), (9, 93692), (Start: 11 @93707 has 92 MA's), (14, 93770), (20, 93812),

Gene: MeganTheeKilla_179 Start: 93776, Stop: 93973, Start Num: 11
Candidate Starts for MeganTheeKilla_179:
(6, 93731), (9, 93761), (Start: 11 @93776 has 92 MA's), (14, 93839), (20, 93881),

Gene: Mildred21_235 Start: 112445, Stop: 112630, Start Num: 11
Candidate Starts for Mildred21_235:
(Start: 10 @112442 has 1 MA's), (Start: 11 @112445 has 92 MA's), (17, 112517),

Gene: MindFlayer_230 Start: 110879, Stop: 111055, Start Num: 11
Candidate Starts for MindFlayer_230:
(Start: 10 @110876 has 1 MA's), (Start: 11 @110879 has 92 MA's), (Start: 12 @110897 has 16 MA's), (18, 110954),

Gene: Moab_177 Start: 96216, Stop: 96413, Start Num: 11
Candidate Starts for Moab_177:
(3, 96123), (4, 96138), (5, 96144), (6, 96171), (9, 96201), (Start: 11 @96216 has 92 MA's),

Gene: Mugiwara_244 Start: 114062, Stop: 114238, Start Num: 11
Candidate Starts for Mugiwara_244:
(Start: 10 @114059 has 1 MA's), (Start: 11 @114062 has 92 MA's), (Start: 12 @114080 has 16 MA's), (18, 114137),

Gene: MulchMansion_228 Start: 113940, Stop: 114122, Start Num: 11
Candidate Starts for MulchMansion_228:
(Start: 10 @113937 has 1 MA's), (Start: 11 @113940 has 92 MA's), (14, 113988), (17, 114012), (26, 114090),

Gene: Muntaha_145 Start: 83035, Stop: 83232, Start Num: 11
Candidate Starts for Muntaha_145:
(1, 82903), (2, 82912), (6, 82990), (9, 83020), (Start: 11 @83035 has 92 MA's), (13, 83080), (14, 83095), (27, 83212),

Gene: Navo_219 Start: 111970, Stop: 112152, Start Num: 11
Candidate Starts for Navo_219:
(Start: 10 @111967 has 1 MA's), (Start: 11 @111970 has 92 MA's),

Gene: NootNoot_222 Start: 112497, Stop: 112682, Start Num: 10
Candidate Starts for NootNoot_222:
(Start: 10 @112497 has 1 MA's), (Start: 11 @112500 has 92 MA's),

Gene: PacManQ_222 Start: 113060, Stop: 113245, Start Num: 11
Candidate Starts for PacManQ_222:
(Start: 10 @113057 has 1 MA's), (Start: 11 @113060 has 92 MA's), (17, 113132), (19, 113147), (20, 113150),

Gene: Paradiddles_217 Start: 114875, Stop: 115057, Start Num: 11
Candidate Starts for Paradiddles_217:
(Start: 10 @114872 has 1 MA's), (Start: 11 @114875 has 92 MA's),

Gene: Patelgo_178 Start: 96674, Stop: 96871, Start Num: 11
Candidate Starts for Patelgo_178:
(3, 96581), (4, 96596), (5, 96602), (6, 96629), (9, 96659), (Start: 11 @96674 has 92 MA's),

Gene: Pepperwood_225 Start: 113952, Stop: 114137, Start Num: 11
Candidate Starts for Pepperwood_225:
(Start: 10 @113949 has 1 MA's), (Start: 11 @113952 has 92 MA's), (17, 114024), (19, 114039), (20, 114042),

Gene: Persimmon_228 Start: 112988, Stop: 113170, Start Num: 11
Candidate Starts for Persimmon_228:
(Start: 10 @112985 has 1 MA's), (Start: 11 @112988 has 92 MA's),

Gene: Phredrick_180 Start: 93371, Stop: 93568, Start Num: 11
Candidate Starts for Phredrick_180:
(6, 93326), (9, 93356), (Start: 11 @93371 has 92 MA's),

Gene: PinkiePie_225 Start: 113655, Stop: 113837, Start Num: 11
Candidate Starts for PinkiePie_225:
(Start: 10 @113652 has 1 MA's), (Start: 11 @113655 has 92 MA's),

Gene: PumpkinSpice_240 Start: 112118, Stop: 112276, Start Num: 12
Candidate Starts for PumpkinSpice_240:
(Start: 10 @112097 has 1 MA's), (Start: 11 @112100 has 92 MA's), (Start: 12 @112118 has 16 MA's), (18, 112175),

Gene: PynkPanther_225 Start: 113853, Stop: 114035, Start Num: 11
Candidate Starts for PynkPanther_225:
(Start: 10 @113850 has 1 MA's), (Start: 11 @113853 has 92 MA's),

Gene: Quaran19_237 Start: 111559, Stop: 111717, Start Num: 12
Candidate Starts for Quaran19_237:
(Start: 10 @111538 has 1 MA's), (Start: 11 @111541 has 92 MA's), (Start: 12 @111559 has 16 MA's), (18, 111616),

Gene: Rikishi_238 Start: 111840, Stop: 111998, Start Num: 12
Candidate Starts for Rikishi_238:
(Start: 10 @111819 has 1 MA's), (Start: 11 @111822 has 92 MA's), (Start: 12 @111840 has 16 MA's), (18, 111897),

Gene: Riptide_226 Start: 112672, Stop: 112854, Start Num: 11
Candidate Starts for Riptide_226:
(Start: 10 @112669 has 1 MA's), (Start: 11 @112672 has 92 MA's), (20, 112762), (26, 112822),

Gene: SaltySpitoon_237 Start: 111083, Stop: 111259, Start Num: 11
Candidate Starts for SaltySpitoon_237:
(Start: 10 @111080 has 1 MA's), (Start: 11 @111083 has 92 MA's), (Start: 12 @111101 has 16 MA's), (18, 111158),

Gene: Scheme_228 Start: 115191, Stop: 115376, Start Num: 11
Candidate Starts for Scheme_228:
(Start: 10 @115188 has 1 MA's), (Start: 11 @115191 has 92 MA's), (17, 115263), (19, 115278), (20, 115281),

Gene: SeresaTree_170 Start: 93214, Stop: 93408, Start Num: 11
Candidate Starts for SeresaTree_170:
(6, 93169), (9, 93199), (Start: 11 @93214 has 92 MA's), (13, 93259), (20, 93316),

Gene: Sham_168 Start: 94831, Stop: 95025, Start Num: 11
Candidate Starts for Sham_168:
(9, 94816), (Start: 11 @94831 has 92 MA's), (13, 94876), (14, 94891), (20, 94933),

Gene: Shuckle_224 Start: 114504, Stop: 114689, Start Num: 11
Candidate Starts for Shuckle_224:
(Start: 10 @114501 has 1 MA's), (Start: 11 @114504 has 92 MA's), (15, 114567), (17, 114576), (19, 114591), (20, 114594),

Gene: Sollertia_235 Start: 111692, Stop: 111868, Start Num: 11
Candidate Starts for Sollertia_235:
(7, 111662), (8, 111665), (Start: 10 @111689 has 1 MA's), (Start: 11 @111692 has 92 MA's), (Start: 12 @111710 has 16 MA's), (18, 111767), (20, 111776), (22, 111788),

Gene: SparkleGoddess_175 Start: 94911, Stop: 95108, Start Num: 11

Candidate Starts for SparkleGoddess_175:
(6, 94866), (9, 94896), (Start: 11 @94911 has 92 MA's), (20, 95016), (24, 95055),

Gene: Spelly_242 Start: 111030, Stop: 111188, Start Num: 12
Candidate Starts for Spelly_242:
(Start: 10 @111009 has 1 MA's), (Start: 11 @111012 has 92 MA's), (Start: 12 @111030 has 16 MA's), (18, 111087),

Gene: Spilled_244 Start: 112234, Stop: 112392, Start Num: 12
Candidate Starts for Spilled_244:
(Start: 10 @112213 has 1 MA's), (Start: 11 @112216 has 92 MA's), (Start: 12 @112234 has 16 MA's), (18, 112291),

Gene: Squillium_228 Start: 113657, Stop: 113839, Start Num: 11
Candidate Starts for Squillium_228:
(Start: 10 @113654 has 1 MA's), (Start: 11 @113657 has 92 MA's),

Gene: Stanimal_234 Start: 112064, Stop: 112240, Start Num: 11
Candidate Starts for Stanimal_234:
(7, 112034), (8, 112037), (Start: 10 @112061 has 1 MA's), (Start: 11 @112064 has 92 MA's), (Start: 12 @112082 has 16 MA's), (18, 112139), (20, 112148), (22, 112160),

Gene: StarPlatinum_244 Start: 114042, Stop: 114200, Start Num: 12
Candidate Starts for StarPlatinum_244:
(Start: 10 @114021 has 1 MA's), (Start: 11 @114024 has 92 MA's), (Start: 12 @114042 has 16 MA's), (18, 114099), (20, 114108),

Gene: Starbow_234 Start: 111074, Stop: 111232, Start Num: 12
Candidate Starts for Starbow_234:
(Start: 10 @111053 has 1 MA's), (Start: 11 @111056 has 92 MA's), (Start: 12 @111074 has 16 MA's), (18, 111131),

Gene: Stigma_173 Start: 95148, Stop: 95345, Start Num: 11
Candidate Starts for Stigma_173:
(6, 95103), (9, 95133), (Start: 11 @95148 has 92 MA's), (20, 95253), (24, 95292),

Gene: Sushi23_226 Start: 115010, Stop: 115195, Start Num: 11
Candidate Starts for Sushi23_226:
(Start: 10 @115007 has 1 MA's), (Start: 11 @115010 has 92 MA's), (17, 115082), (19, 115097), (20, 115100),

Gene: Targaryen_225 Start: 115182, Stop: 115367, Start Num: 11
Candidate Starts for Targaryen_225:
(Start: 10 @115179 has 1 MA's), (Start: 11 @115182 has 92 MA's), (17, 115254), (20, 115272),

Gene: Teutsch_224 Start: 114375, Stop: 114560, Start Num: 11
Candidate Starts for Teutsch_224:
(Start: 10 @114372 has 1 MA's), (Start: 11 @114375 has 92 MA's), (17, 114447), (19, 114462), (20, 114465),

Gene: TomSawyer_241 Start: 113545, Stop: 113703, Start Num: 12
Candidate Starts for TomSawyer_241:

(Start: 10 @113524 has 1 MA's), (Start: 11 @113527 has 92 MA's), (Start: 12 @113545 has 16 MA's), (18, 113602),

Gene: Tomas_237 Start: 115433, Stop: 115609, Start Num: 11
Candidate Starts for Tomas_237:
(Start: 11 @115433 has 92 MA's), (18, 115508), (22, 115529), (23, 115538), (25, 115574),

Gene: Tribute_221 Start: 114540, Stop: 114725, Start Num: 11
Candidate Starts for Tribute_221:
(Start: 10 @114537 has 1 MA's), (Start: 11 @114540 has 92 MA's), (17, 114612), (19, 114627), (20, 114630),

Gene: Tuesday_244 Start: 112085, Stop: 112243, Start Num: 12
Candidate Starts for Tuesday_244:
(Start: 10 @112064 has 1 MA's), (Start: 11 @112067 has 92 MA's), (Start: 12 @112085 has 16 MA's), (18, 112142),

Gene: TunaTartare_175 Start: 96543, Stop: 96737, Start Num: 11
Candidate Starts for TunaTartare_175:
(9, 96528), (Start: 11 @96543 has 92 MA's), (13, 96588), (14, 96603), (20, 96645),

Gene: Wakanda_144 Start: 82977, Stop: 83174, Start Num: 11
Candidate Starts for Wakanda_144:
(1, 82845), (2, 82854), (6, 82932), (9, 82962), (Start: 11 @82977 has 92 MA's), (13, 83022), (14, 83037), (27, 83154),

Gene: WashU_219 Start: 114162, Stop: 114347, Start Num: 11
Candidate Starts for WashU_219:
(Start: 10 @114159 has 1 MA's), (Start: 11 @114162 has 92 MA's), (17, 114234), (19, 114249), (20, 114252),

Gene: Watermoore_224 Start: 114898, Stop: 115083, Start Num: 11
Candidate Starts for Watermoore_224:
(Start: 10 @114895 has 1 MA's), (Start: 11 @114898 has 92 MA's), (17, 114970), (19, 114985), (20, 114988),

Gene: Westy_177 Start: 95460, Stop: 95657, Start Num: 11
Candidate Starts for Westy_177:
(6, 95415), (9, 95445), (Start: 11 @95460 has 92 MA's), (20, 95565), (24, 95604),

Gene: WhereRU_224 Start: 113149, Stop: 113331, Start Num: 11
Candidate Starts for WhereRU_224:
(Start: 10 @113146 has 1 MA's), (Start: 11 @113149 has 92 MA's),

Gene: Wipeout_227 Start: 112497, Stop: 112655, Start Num: 12
Candidate Starts for Wipeout_227:
(Start: 10 @112476 has 1 MA's), (Start: 11 @112479 has 92 MA's), (Start: 12 @112497 has 16 MA's), (18, 112554),

Gene: Wofford_237 Start: 114767, Stop: 114943, Start Num: 11
Candidate Starts for Wofford_237:
(Start: 11 @114767 has 92 MA's), (Start: 12 @114785 has 16 MA's), (18, 114842), (20, 114851), (22, 114863),

Gene: Yaboi_239 Start: 111627, Stop: 111803, Start Num: 11
Candidate Starts for Yaboi_239:
(7, 111597), (8, 111600), (Start: 10 @111624 has 1 MA's), (Start: 11 @111627 has 92 MA's), (Start: 12 @111645 has 16 MA's), (18, 111702), (20, 111711), (22, 111723),