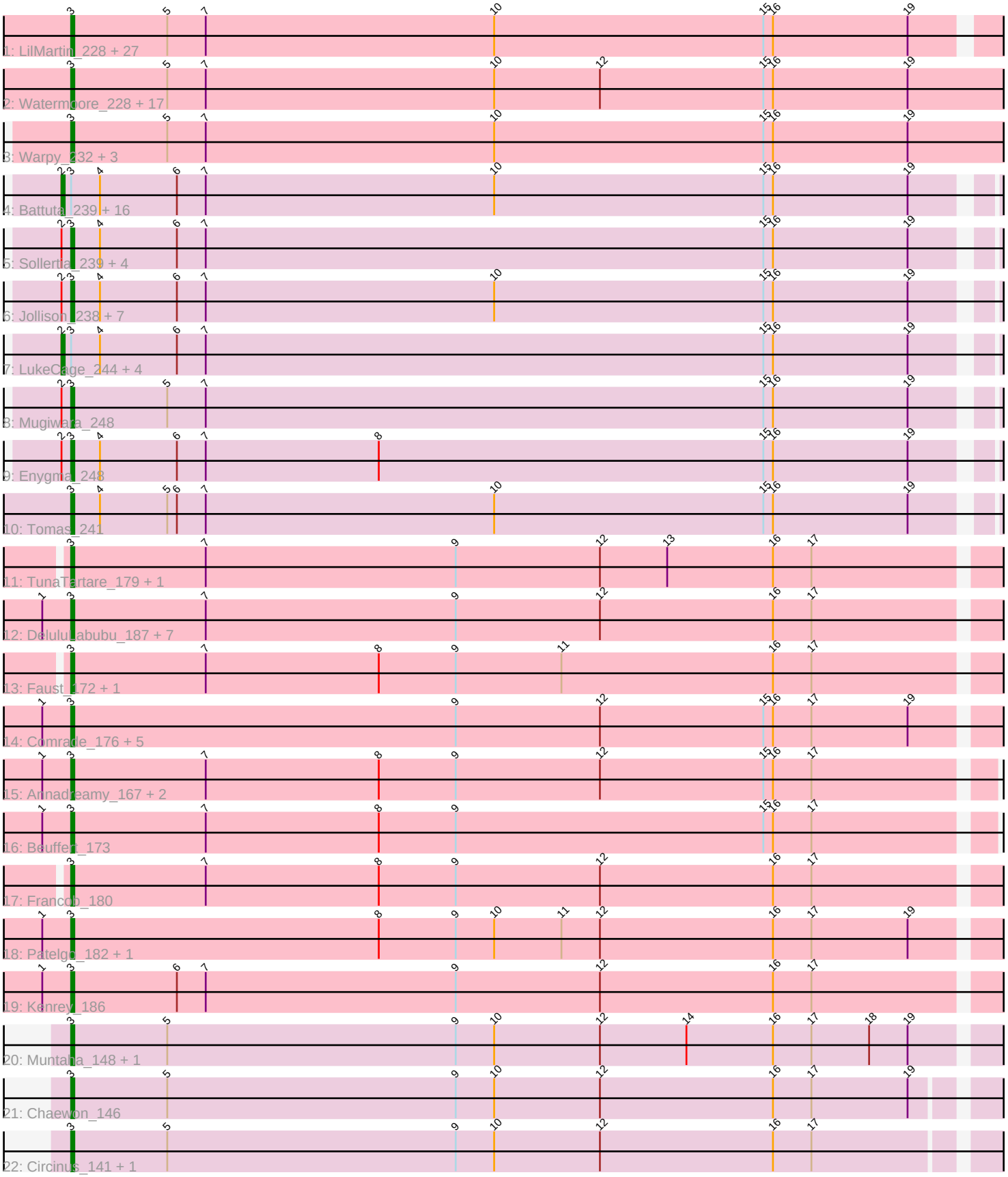
Pham 332619


1: LilMartin_228 + 27
2: Watermoore_228 + 17
3: Warpy_232 + 3
4: Battuta_239 + 16
5: Sollertia_239 + 4
6: Jollison_238 + 7
7: LukeCage_244 + 4
8: Mugiwara_248
9: Enygma_248
10: Tomas_241
11: TunaTartare_179 + 1
12: Delululabubu_187 + 7
13: Faust_172 + 1
14: Comrade_176 + 5
15: Annadreamy_167 + 2
16: Beuffet_173
17: Franco_180
18: Patelgo_182 + 1
19: Kenrey_186
20: Muntaha_148 + 1
21: Chaewon_146
22: Circinus_141 + 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 332619 Report

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

Pham number 332619 has 119 members, 6 are drafts.

Phages represented in each track:
• Track 1 : LilMartin_228, Persimmon_232, PinkiePie_229, FreddyDRoo_230, Cadmus_227, Paradiddles_221, NootNoot_226, Bmoc_234, Marsus_231, Braelyn_225, Liandry_229, Anedea_242, LilSaint_230, Eliot67_231, MulchMansion_232, Shuckle_228, Angela_232, WhereRU_228, PynkPanther_229, Samisti12_233, EGole_233, Navo_223, Davielle_228, Riptide_230, Squillium_232, Mildred21_239, Daubenski_223, Bartholomune_229
• Track 2 : Watermoore_228, Peebs_226, HangryHippo_227, Lululemon_226, Tribute_225, Pepperwood_229, PacManQ_226, Coogler_226, Leo04_229, Cross_228, Sushi23_230, WashU_223, Larnav_229, Scheme_232, BlueOtter_227, Teutsch_228, ArianaSWT_232, Cursive_232
• Track 3 : Warpy_232, Targaryen_229, Evy_219, Jay2Jay_235
• Track 4 : Battuta_239, TomSawyer_245, Starbow_238, SaltySpitoon_241, Gibbi_249, JimJam_248, Amabiko_245, Spilled_248, Wipeout_231, KentuckyRacer_247, Bordeaux_239, AcciDwight_249, Tuesday_248, Quaran19_241, Birchlyn_240, Karimac_241, IchabodCrane_235
• Track 5 : Sollertia_239, Stanimal_238, AngryGiraffe_238, Yaboi_243, Elmer_249
• Track 6 : Jollison_238, Brizzy_240, MindFlayer_234, Rikishi_242, CeilingFan_245, Spelly_246, PumpkinSpice_244, Daisy123_243
• Track 7 : LukeCage_244, BoomerJR_238, Wofford_241, Genie2_238, StarPlatinum_248
• Track 8 : Mugiwara_248
• Track 9 : Enygma_248
• Track 10 : Tomas_241
• Track 11 : TunaTartare_179, Sham_172
• Track 12 : DeluluLabubu_187, MeganTheeKilla_183, Gilson_183, Jada_182, Forrest_185, Maupel_184, Phredrick_184, Emma1919_184
• Track 13 : Faust_172, SeresaTree_174
• Track 14 : Comrade_176, Karp_173, Stigma_177, Belfort_179, SparkleGoddess_179, Westy_181
• Track 15 : Annadreamy_167, Limpid_174, Blueeyedbeauty_175
• Track 16 : Beuffert_173
• Track 17 : Francob_180
• Track 18 : Patelgo_182, Moab_181
• Track 19 : Kenrey_186
• Track 20 : Muntaha_148, Wakanda_147
• Track 21 : Chaewon_146
• Track 22 : Circinus_141, BillNye_140

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

The start number called the most often in the published annotations is 3, it was called in 94 of the 113 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Anedea_242, Angela_232, AngryGiraffe_238, Annadreamy_167, ArianaSWT_232, Bartholomune_229, Belfort_179, Beuffert_173, BillNye_140, BlueOtter_227, Blueeyedbeauty_175, Bmoc_234, Braelyn_225, Brizzy_240, Cadmus_227, CeilingFan_245, Chaewon_146, Circinus_141, Comrade_176, Coogler_226, Cross_228, Cursive_232, Daisy123_243, Daubenski_223, Davielle_228, DeluluLabubu_187, EGole_233, Eliot67_231, Elmer_249, Emma1919_184, Enygma_248, Evy_219, Faust_172, Forrest_185, Francob_180, FreddyDRoo_230, Gilson_183, HangryHippo_227, Jada_182, Jay2Jay_235, Jollison_238, Karp_173, Kenrey_186, Larnav_229, Leo04_229, Liandry_229, LilMartin_228, LilSaint_230, Limpid_174, Lululemon_226, Marsus_231, Maupel_184, MeganTheeKilla_183, Mildred21_239, MindFlayer_234, Moab_181, Mugiwara_248, MulchMansion_232, Muntaha_148, Navo_223, NootNoot_226, PacManQ_226, Paradiddles_221, Patelgo_182, Peebs_226, Pepperwood_229, Persimmon_232, Phredrick_184, PinkiePie_229, PumpkinSpice_244, PynkPanther_229, Rikishi_242, Riptide_230, Samisti12_233, Scheme_232, SeresaTree_174, Sham_172, Shuckle_228, Sollertia_239, SparkleGoddess_179, Spelly_246, Squillium_232, Stanimal_238, Stigma_177, Sushi23_230, Targaryen_229, Teutsch_228, Tomas_241, Tribute_225, TunaTartare_179, Wakanda_147, Warpy_232, WashU_223, Watermoore_228, Westy_181, WhereRU_228, Yaboi_243,

Genes that have the "Most Annotated" start but do not call it:
• AcciDwight_249, Amabiko_245, Battuta_239, Birchlyn_240, BoomerJR_238, Bordeaux_239, Genie2_238, Gibbi_249, IchabodCrane_235, JimJam_248, Karimac_241, KentuckyRacer_247, LukeCage_244, Quaran19_241, SaltySpitoon_241, Spilled_248, StarPlatinum_248, Starbow_238, TomSawyer_245, Tuesday_248, Wipeout_231, Wofford_241,

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

Summary by start number:

Start 2:
• Found in 37 of 119 (31.1%) of genes in pham
• Manual Annotations of this start: 19 of 113
• Called 59.5% of time when present
• Phage (with cluster) where this start called: AcciDwight_249 (BE2), Amabiko_245 (BE2), Battuta_239 (BE2), Birchlyn_240 (BE2), BoomerJR_238 (BE2), Bordeaux_239 (BE2), Genie2_238 (BE2), Gibbi_249 (BE2), IchabodCrane_235 (BE2), JimJam_248 (BE2), Karimac_241 (BE2), KentuckyRacer_247 (BE2), LukeCage_244 (BE2), Quaran19_241 (BE2), SaltySpitoon_241 (BE2), Spilled_248 (BE2), StarPlatinum_248 (BE2), Starbow_238 (BE2), TomSawyer_245 (BE2), Tuesday_248 (BE2), Wipeout_231 (BE2), Wofford_241 (BE2),

Start 3:
• Found in 119 of 119 (100.0%) of genes in pham
• Manual Annotations of this start: 94 of 113
• Called 81.5% of time when present
• Phage (with cluster) where this start called: Anedea_242 (BE1), Angela_232 (BE1), AngryGiraffe_238 (BE2), Annadreamy_167 (BK1), ArianaSWT_232 (BE1), Bartholomune_229 (BE1), Belfort_179 (BK1), Beuffert_173 (BK1), BillNye_140 (BK2), BlueOtter_227 (BE1), Blueeyedbeauty_175 (BK1), Bmoc_234 (BE1), Braelyn_225 (BE1), Brizzy_240 (BE2), Cadmus_227 (BE1), CeilingFan_245 (BE2), Chaewon_146 (BK2), Circinus_141 (BK2), Comrade_176 (BK1), Coogler_226 (BE1), Cross_228 (BE1), Cursive_232 (BE1), Daisy123_243 (BE2), Daubenski_223 (BE1), Davielle_228 (BE1), DeluluLabubu_187 (BK1), EGole_233 (BE1), Eliot67_231 (BE1), Elmer_249 (BE2), Emma1919_184 (BK1), Enygma_248 (BE2), Evy_219 (BE1), Faust_172 (BK1), Forrest_185 (BK1), Francob_180 (BK1), FreddyDRoo_230 (BE1), Gilson_183 (BK1), HangryHippo_227 (BE1), Jada_182 (BK1), Jay2Jay_235 (BE1), Jollison_238 (BE2), Karp_173 (BK1), Kenrey_186 (BK1), Larnav_229 (BE1), Leo04_229 (BE1), Liandry_229 (BE1), LilMartin_228 (BE1), LilSaint_230 (BE1), Limpid_174 (BK1), Lululemon_226 (BE1), Marsus_231 (BE1), Maupel_184 (BK1), MeganTheeKilla_183 (BK1), Mildred21_239 (BE1), MindFlayer_234 (BE2), Moab_181 (BK1), Mugiwara_248 (BE2), MulchMansion_232 (BE1), Muntaha_148 (BK2), Navo_223 (BE1), NootNoot_226 (BE1), PacManQ_226 (BE1), Paradiddles_221 (BE1), Patelgo_182 (BK1), Peebs_226 (BE1), Pepperwood_229 (BE1), Persimmon_232 (BE1), Phredrick_184 (BK1), PinkiePie_229 (BE1), PumpkinSpice_244 (BE2), PynkPanther_229 (BE1), Rikishi_242 (BE2), Riptide_230 (BE1), Samisti12_233 (BE1), Scheme_232 (BE1), SeresaTree_174 (BK1), Sham_172 (BK1), Shuckle_228 (BE1), Sollertia_239 (BE2), SparkleGoddess_179 (BK1), Spelly_246 (BE2), Squillium_232 (BE1), Stanimal_238 (BE2), Stigma_177 (BK1), Sushi23_230 (BE1), Targaryen_229 (BE1), Teutsch_228 (BE1), Tomas_241 (BE2), Tribute_225 (BE1), TunaTartare_179 (BK1), Wakanda_147 (BK2), Warpy_232 (BE1), WashU_223 (BE1), Watermoore_228 (BE1), Westy_181 (BK1), WhereRU_228 (BE1), Yaboi_243 (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 3 was manually annotated 49 times for cluster BE1.

Info for manual annotations of cluster BE2:
•Start number 2 was manually annotated 19 times for cluster BE2.
•Start number 3 was manually annotated 16 times for cluster BE2.

Info for manual annotations of cluster BK1:
•Start number 3 was manually annotated 24 times for cluster BK1.

Info for manual annotations of cluster BK2:
•Start number 3 was manually annotated 5 times for cluster BK2.

Gene Information:

Gene: AcciDwight_249 Start: 113015, Stop: 113317, Start Num: 2
Candidate Starts for AcciDwight_249:
(Start: 2 @113015 has 19 MA's), (Start: 3 @113018 has 94 MA's), (4, 113027), (6, 113051), (7, 113060), (10, 113150), (15, 113234), (16, 113237), (19, 113279),

Gene: Amabiko_245 Start: 112833, Stop: 113135, Start Num: 2
Candidate Starts for Amabiko_245:
(Start: 2 @112833 has 19 MA's), (Start: 3 @112836 has 94 MA's), (4, 112845), (6, 112869), (7, 112878), (10, 112968), (15, 113052), (16, 113055), (19, 113097),

Gene: Anedea_242 Start: 116324, Stop: 116632, Start Num: 3
Candidate Starts for Anedea_242:
(Start: 3 @116324 has 94 MA's), (5, 116354), (7, 116366), (10, 116456), (15, 116540), (16, 116543), (19, 116585),

Gene: Angela_232 Start: 114544, Stop: 114852, Start Num: 3
Candidate Starts for Angela_232:
(Start: 3 @114544 has 94 MA's), (5, 114574), (7, 114586), (10, 114676), (15, 114760), (16, 114763), (19, 114805),

Gene: AngryGiraffe_238 Start: 112319, Stop: 112618, Start Num: 3
Candidate Starts for AngryGiraffe_238:
(Start: 2 @112316 has 19 MA's), (Start: 3 @112319 has 94 MA's), (4, 112328), (6, 112352), (7, 112361), (15, 112535), (16, 112538), (19, 112580),

Gene: Annadreamy_167 Start: 89690, Stop: 89986, Start Num: 3
Candidate Starts for Annadreamy_167:
(1, 89681), (Start: 3 @89690 has 94 MA's), (7, 89732), (8, 89786), (9, 89810), (12, 89855), (15, 89906), (16, 89909), (17, 89921),

Gene: ArianaSWT_232 Start: 116187, Stop: 116492, Start Num: 3
Candidate Starts for ArianaSWT_232:
(Start: 3 @116187 has 94 MA's), (5, 116217), (7, 116229), (10, 116319), (12, 116352), (15, 116403), (16, 116406), (19, 116448),

Gene: Bartholomune_229 Start: 114302, Stop: 114607, Start Num: 3
Candidate Starts for Bartholomune_229:
(Start: 3 @114302 has 94 MA's), (5, 114332), (7, 114344), (10, 114434), (15, 114518), (16, 114521), (19, 114563),

Gene: Battuta_239 Start: 112148, Stop: 112450, Start Num: 2
Candidate Starts for Battuta_239:
(Start: 2 @112148 has 19 MA's), (Start: 3 @112151 has 94 MA's), (4, 112160), (6, 112184), (7, 112193), (10, 112283), (15, 112367), (16, 112370), (19, 112412),

Gene: Belfort_179 Start: 95519, Stop: 95821, Start Num: 3
Candidate Starts for Belfort_179:
(1, 95510), (Start: 3 @95519 has 94 MA's), (9, 95639), (12, 95684), (15, 95735), (16, 95738), (17, 95750), (19, 95780),

Gene: Beuffert_173 Start: 93872, Stop: 94168, Start Num: 3
Candidate Starts for Beuffert_173:

(1, 93863), (Start: 3 @93872 has 94 MA's), (7, 93914), (8, 93968), (9, 93992), (15, 94088), (16, 94091), (17, 94103),

Gene: BillNye_140 Start: 85042, Stop: 85353, Start Num: 3
Candidate Starts for BillNye_140:
(Start: 3 @85042 has 94 MA's), (5, 85072), (9, 85162), (10, 85174), (12, 85207), (16, 85261), (17, 85273),

Gene: Birchlyn_240 Start: 110081, Stop: 110383, Start Num: 2
Candidate Starts for Birchlyn_240:
(Start: 2 @110081 has 19 MA's), (Start: 3 @110084 has 94 MA's), (4, 110093), (6, 110117), (7, 110126), (10, 110216), (15, 110300), (16, 110303), (19, 110345),

Gene: BlueOtter_227 Start: 114440, Stop: 114745, Start Num: 3
Candidate Starts for BlueOtter_227:
(Start: 3 @114440 has 94 MA's), (5, 114470), (7, 114482), (10, 114572), (12, 114605), (15, 114656), (16, 114659), (19, 114701),

Gene: Blueeyedbeauty_175 Start: 93457, Stop: 93753, Start Num: 3
Candidate Starts for Blueeyedbeauty_175:
(1, 93448), (Start: 3 @93457 has 94 MA's), (7, 93499), (8, 93553), (9, 93577), (12, 93622), (15, 93673), (16, 93676), (17, 93688),

Gene: Bmoc_234 Start: 114992, Stop: 115300, Start Num: 3
Candidate Starts for Bmoc_234:
(Start: 3 @114992 has 94 MA's), (5, 115022), (7, 115034), (10, 115124), (15, 115208), (16, 115211), (19, 115253),

Gene: BoomerJR_238 Start: 112749, Stop: 113051, Start Num: 2
Candidate Starts for BoomerJR_238:
(Start: 2 @112749 has 19 MA's), (Start: 3 @112752 has 94 MA's), (4, 112761), (6, 112785), (7, 112794), (15, 112968), (16, 112971), (19, 113013),

Gene: Bordeaux_239 Start: 112731, Stop: 113033, Start Num: 2
Candidate Starts for Bordeaux_239:
(Start: 2 @112731 has 19 MA's), (Start: 3 @112734 has 94 MA's), (4, 112743), (6, 112767), (7, 112776), (10, 112866), (15, 112950), (16, 112953), (19, 112995),

Gene: Braelyn_225 Start: 113949, Stop: 114254, Start Num: 3
Candidate Starts for Braelyn_225:
(Start: 3 @113949 has 94 MA's), (5, 113979), (7, 113991), (10, 114081), (15, 114165), (16, 114168), (19, 114210),

Gene: Brizzy_240 Start: 113262, Stop: 113561, Start Num: 3
Candidate Starts for Brizzy_240:
(Start: 2 @113259 has 19 MA's), (Start: 3 @113262 has 94 MA's), (4, 113271), (6, 113295), (7, 113304), (10, 113394), (15, 113478), (16, 113481), (19, 113523),

Gene: Cadmus_227 Start: 115670, Stop: 115969, Start Num: 3
Candidate Starts for Cadmus_227:
(Start: 3 @115670 has 94 MA's), (5, 115700), (7, 115712), (10, 115802), (15, 115886), (16, 115889), (19, 115931),

Gene: CeilingFan_245 Start: 113529, Stop: 113828, Start Num: 3
Candidate Starts for CeilingFan_245:
(Start: 2 @113526 has 19 MA's), (Start: 3 @113529 has 94 MA's), (4, 113538), (6, 113562), (7, 113571), (10, 113661), (15, 113745), (16, 113748), (19, 113790),

Gene: Chaewon_146 Start: 85028, Stop: 85345, Start Num: 3
Candidate Starts for Chaewon_146:
(Start: 3 @85028 has 94 MA's), (5, 85058), (9, 85148), (10, 85160), (12, 85193), (16, 85247), (17, 85259), (19, 85289),

Gene: Circinus_141 Start: 85010, Stop: 85321, Start Num: 3
Candidate Starts for Circinus_141:
(Start: 3 @85010 has 94 MA's), (5, 85040), (9, 85130), (10, 85142), (12, 85175), (16, 85229), (17, 85241),

Gene: Comrade_176 Start: 95721, Stop: 96023, Start Num: 3
Candidate Starts for Comrade_176:
(1, 95712), (Start: 3 @95721 has 94 MA's), (9, 95841), (12, 95886), (15, 95937), (16, 95940), (17, 95952), (19, 95982),

Gene: Coogler_226 Start: 114865, Stop: 115170, Start Num: 3
Candidate Starts for Coogler_226:
(Start: 3 @114865 has 94 MA's), (5, 114895), (7, 114907), (10, 114997), (12, 115030), (15, 115081), (16, 115084), (19, 115126),

Gene: Cross_228 Start: 115085, Stop: 115390, Start Num: 3
Candidate Starts for Cross_228:
(Start: 3 @115085 has 94 MA's), (5, 115115), (7, 115127), (10, 115217), (12, 115250), (15, 115301), (16, 115304), (19, 115346),

Gene: Cursive_232 Start: 115192, Stop: 115497, Start Num: 3
Candidate Starts for Cursive_232:
(Start: 3 @115192 has 94 MA's), (5, 115222), (7, 115234), (10, 115324), (12, 115357), (15, 115408), (16, 115411), (19, 115453),

Gene: Daisy123_243 Start: 113391, Stop: 113690, Start Num: 3
Candidate Starts for Daisy123_243:
(Start: 2 @113388 has 19 MA's), (Start: 3 @113391 has 94 MA's), (4, 113400), (6, 113424), (7, 113433), (10, 113523), (15, 113607), (16, 113610), (19, 113652),

Gene: Daubenski_223 Start: 115571, Stop: 115870, Start Num: 3
Candidate Starts for Daubenski_223:
(Start: 3 @115571 has 94 MA's), (5, 115601), (7, 115613), (10, 115703), (15, 115787), (16, 115790), (19, 115832),

Gene: Davielle_228 Start: 114347, Stop: 114652, Start Num: 3
Candidate Starts for Davielle_228:
(Start: 3 @114347 has 94 MA's), (5, 114377), (7, 114389), (10, 114479), (15, 114563), (16, 114566), (19, 114608),

Gene: DeluluLabubu_187 Start: 96726, Stop: 97025, Start Num: 3
Candidate Starts for DeluluLabubu_187:

(1, 96717), (Start: 3 @96726 has 94 MA's), (7, 96768), (9, 96846), (12, 96891), (16, 96945), (17, 96957),

Gene: EGole_233 Start: 117276, Stop: 117581, Start Num: 3
Candidate Starts for EGole_233:
(Start: 3 @117276 has 94 MA's), (5, 117306), (7, 117318), (10, 117408), (15, 117492), (16, 117495), (19, 117537),

Gene: Eliot67_231 Start: 114131, Stop: 114436, Start Num: 3
Candidate Starts for Eliot67_231:
(Start: 3 @114131 has 94 MA's), (5, 114161), (7, 114173), (10, 114263), (15, 114347), (16, 114350), (19, 114392),

Gene: Elmer_249 Start: 116327, Stop: 116623, Start Num: 3
Candidate Starts for Elmer_249:
(Start: 2 @116324 has 19 MA's), (Start: 3 @116327 has 94 MA's), (4, 116336), (6, 116360), (7, 116369), (15, 116543), (16, 116546), (19, 116588),

Gene: Emma1919_184 Start: 94745, Stop: 95044, Start Num: 3
Candidate Starts for Emma1919_184:
(1, 94736), (Start: 3 @94745 has 94 MA's), (7, 94787), (9, 94865), (12, 94910), (16, 94964), (17, 94976),

Gene: Enygma_248 Start: 115537, Stop: 115836, Start Num: 3
Candidate Starts for Enygma_248:
(Start: 2 @115534 has 19 MA's), (Start: 3 @115537 has 94 MA's), (4, 115546), (6, 115570), (7, 115579), (8, 115633), (15, 115753), (16, 115756), (19, 115798),

Gene: Evy_219 Start: 115260, Stop: 115571, Start Num: 3
Candidate Starts for Evy_219:
(Start: 3 @115260 has 94 MA's), (5, 115290), (7, 115302), (10, 115392), (15, 115476), (16, 115479), (19, 115521),

Gene: Faust_172 Start: 94845, Stop: 95144, Start Num: 3
Candidate Starts for Faust_172:
(Start: 3 @94845 has 94 MA's), (7, 94887), (8, 94941), (9, 94965), (11, 94998), (16, 95064), (17, 95076),

Gene: Forrest_185 Start: 96187, Stop: 96486, Start Num: 3
Candidate Starts for Forrest_185:
(1, 96178), (Start: 3 @96187 has 94 MA's), (7, 96229), (9, 96307), (12, 96352), (16, 96406), (17, 96418),

Gene: Francob_180 Start: 94737, Stop: 95039, Start Num: 3
Candidate Starts for Francob_180:
(Start: 3 @94737 has 94 MA's), (7, 94779), (8, 94833), (9, 94857), (12, 94902), (16, 94956), (17, 94968),

Gene: FreddyDRoo_230 Start: 114131, Stop: 114436, Start Num: 3
Candidate Starts for FreddyDRoo_230:
(Start: 3 @114131 has 94 MA's), (5, 114161), (7, 114173), (10, 114263), (15, 114347), (16, 114350), (19, 114392),

Gene: Genie2_238 Start: 112874, Stop: 113176, Start Num: 2
Candidate Starts for Genie2_238:
(Start: 2 @112874 has 19 MA's), (Start: 3 @112877 has 94 MA's), (4, 112886), (6, 112910), (7, 112919), (15, 113093), (16, 113096), (19, 113138),

Gene: Gibbi_249 Start: 113019, Stop: 113321, Start Num: 2
Candidate Starts for Gibbi_249:
(Start: 2 @113019 has 19 MA's), (Start: 3 @113022 has 94 MA's), (4, 113031), (6, 113055), (7, 113064), (10, 113154), (15, 113238), (16, 113241), (19, 113283),

Gene: Gilson_183 Start: 94707, Stop: 95006, Start Num: 3
Candidate Starts for Gilson_183:
(1, 94698), (Start: 3 @94707 has 94 MA's), (7, 94749), (9, 94827), (12, 94872), (16, 94926), (17, 94938),

Gene: HangryHippo_227 Start: 114440, Stop: 114745, Start Num: 3
Candidate Starts for HangryHippo_227:
(Start: 3 @114440 has 94 MA's), (5, 114470), (7, 114482), (10, 114572), (12, 114605), (15, 114656), (16, 114659), (19, 114701),

Gene: IchabodCrane_235 Start: 112534, Stop: 112836, Start Num: 2
Candidate Starts for IchabodCrane_235:
(Start: 2 @112534 has 19 MA's), (Start: 3 @112537 has 94 MA's), (4, 112546), (6, 112570), (7, 112579), (10, 112669), (15, 112753), (16, 112756), (19, 112798),

Gene: Jada_182 Start: 94880, Stop: 95179, Start Num: 3
Candidate Starts for Jada_182:
(1, 94871), (Start: 3 @94880 has 94 MA's), (7, 94922), (9, 95000), (12, 95045), (16, 95099), (17, 95111),

Gene: Jay2Jay_235 Start: 115415, Stop: 115726, Start Num: 3
Candidate Starts for Jay2Jay_235:
(Start: 3 @115415 has 94 MA's), (5, 115445), (7, 115457), (10, 115547), (15, 115631), (16, 115634), (19, 115676),

Gene: JimJam_248 Start: 114455, Stop: 114757, Start Num: 2
Candidate Starts for JimJam_248:
(Start: 2 @114455 has 19 MA's), (Start: 3 @114458 has 94 MA's), (4, 114467), (6, 114491), (7, 114500), (10, 114590), (15, 114674), (16, 114677), (19, 114719),

Gene: Jollison_238 Start: 112668, Stop: 112967, Start Num: 3
Candidate Starts for Jollison_238:
(Start: 2 @112665 has 19 MA's), (Start: 3 @112668 has 94 MA's), (4, 112677), (6, 112701), (7, 112710), (10, 112800), (15, 112884), (16, 112887), (19, 112929),

Gene: Karimac_241 Start: 112850, Stop: 113152, Start Num: 2
Candidate Starts for Karimac_241:
(Start: 2 @112850 has 19 MA's), (Start: 3 @112853 has 94 MA's), (4, 112862), (6, 112886), (7, 112895), (10, 112985), (15, 113069), (16, 113072), (19, 113114),

Gene: Karp_173 Start: 94945, Stop: 95247, Start Num: 3
Candidate Starts for Karp_173:

(1, 94936), (Start: 3 @94945 has 94 MA's), (9, 95065), (12, 95110), (15, 95161), (16, 95164), (17, 95176), (19, 95206),

Gene: Kenrey_186 Start: 95747, Stop: 96046, Start Num: 3
Candidate Starts for Kenrey_186:
(1, 95738), (Start: 3 @95747 has 94 MA's), (6, 95780), (7, 95789), (9, 95867), (12, 95912), (16, 95966), (17, 95978),

Gene: KentuckyRacer_247 Start: 114370, Stop: 114672, Start Num: 2
Candidate Starts for KentuckyRacer_247:
(Start: 2 @114370 has 19 MA's), (Start: 3 @114373 has 94 MA's), (4, 114382), (6, 114406), (7, 114415), (10, 114505), (15, 114589), (16, 114592), (19, 114634),

Gene: Larnav_229 Start: 115358, Stop: 115663, Start Num: 3
Candidate Starts for Larnav_229:
(Start: 3 @115358 has 94 MA's), (5, 115388), (7, 115400), (10, 115490), (12, 115523), (15, 115574), (16, 115577), (19, 115619),

Gene: Leo04_229 Start: 115466, Stop: 115771, Start Num: 3
Candidate Starts for Leo04_229:
(Start: 3 @115466 has 94 MA's), (5, 115496), (7, 115508), (10, 115598), (12, 115631), (15, 115682), (16, 115685), (19, 115727),

Gene: Liandry_229 Start: 114838, Stop: 115143, Start Num: 3
Candidate Starts for Liandry_229:
(Start: 3 @114838 has 94 MA's), (5, 114868), (7, 114880), (10, 114970), (15, 115054), (16, 115057), (19, 115099),

Gene: LilMartin_228 Start: 113484, Stop: 113792, Start Num: 3
Candidate Starts for LilMartin_228:
(Start: 3 @113484 has 94 MA's), (5, 113514), (7, 113526), (10, 113616), (15, 113700), (16, 113703), (19, 113745),

Gene: LilSaint_230 Start: 114695, Stop: 115003, Start Num: 3
Candidate Starts for LilSaint_230:
(Start: 3 @114695 has 94 MA's), (5, 114725), (7, 114737), (10, 114827), (15, 114911), (16, 114914), (19, 114956),

Gene: Limpid_174 Start: 95003, Stop: 95299, Start Num: 3
Candidate Starts for Limpid_174:
(1, 94994), (Start: 3 @95003 has 94 MA's), (7, 95045), (8, 95099), (9, 95123), (12, 95168), (15, 95219), (16, 95222), (17, 95234),

Gene: LukeCage_244 Start: 114695, Stop: 114997, Start Num: 2
Candidate Starts for LukeCage_244:
(Start: 2 @114695 has 19 MA's), (Start: 3 @114698 has 94 MA's), (4, 114707), (6, 114731), (7, 114740), (15, 114914), (16, 114917), (19, 114959),

Gene: Lululemon_226 Start: 114245, Stop: 114550, Start Num: 3
Candidate Starts for Lululemon_226:
(Start: 3 @114245 has 94 MA's), (5, 114275), (7, 114287), (10, 114377), (12, 114410), (15, 114461), (16, 114464), (19, 114506),

Gene: Marsus_231 Start: 115149, Stop: 115457, Start Num: 3
Candidate Starts for Marsus_231:
(Start: 3 @115149 has 94 MA's), (5, 115179), (7, 115191), (10, 115281), (15, 115365), (16, 115368), (19, 115410),

Gene: Maupel_184 Start: 94707, Stop: 95006, Start Num: 3
Candidate Starts for Maupel_184:
(1, 94698), (Start: 3 @94707 has 94 MA's), (7, 94749), (9, 94827), (12, 94872), (16, 94926), (17, 94938),

Gene: MeganTheeKilla_183 Start: 94776, Stop: 95075, Start Num: 3
Candidate Starts for MeganTheeKilla_183:
(1, 94767), (Start: 3 @94776 has 94 MA's), (7, 94818), (9, 94896), (12, 94941), (16, 94995), (17, 95007),

Gene: Mildred21_239 Start: 113629, Stop: 113931, Start Num: 3
Candidate Starts for Mildred21_239:
(Start: 3 @113629 has 94 MA's), (5, 113659), (7, 113671), (10, 113761), (15, 113845), (16, 113848), (19, 113890),

Gene: MindFlayer_234 Start: 112053, Stop: 112352, Start Num: 3
Candidate Starts for MindFlayer_234:
(Start: 2 @112050 has 19 MA's), (Start: 3 @112053 has 94 MA's), (4, 112062), (6, 112086), (7, 112095), (10, 112185), (15, 112269), (16, 112272), (19, 112314),

Gene: Moab_181 Start: 97222, Stop: 97524, Start Num: 3
Candidate Starts for Moab_181:
(1, 97213), (Start: 3 @97222 has 94 MA's), (8, 97318), (9, 97342), (10, 97354), (11, 97375), (12, 97387), (16, 97441), (17, 97453), (19, 97483),

Gene: Mugiwara_248 Start: 115237, Stop: 115536, Start Num: 3
Candidate Starts for Mugiwara_248:
(Start: 2 @115234 has 19 MA's), (Start: 3 @115237 has 94 MA's), (5, 115267), (7, 115279), (15, 115453), (16, 115456), (19, 115498),

Gene: MulchMansion_232 Start: 115118, Stop: 115426, Start Num: 3
Candidate Starts for MulchMansion_232:
(Start: 3 @115118 has 94 MA's), (5, 115148), (7, 115160), (10, 115250), (15, 115334), (16, 115337), (19, 115379),

Gene: Muntaha_148 Start: 83978, Stop: 84268, Start Num: 3
Candidate Starts for Muntaha_148:
(Start: 3 @83978 has 94 MA's), (5, 84008), (9, 84098), (10, 84110), (12, 84143), (14, 84170), (16, 84197), (17, 84209), (18, 84227), (19, 84239),

Gene: Navo_223 Start: 113153, Stop: 113458, Start Num: 3
Candidate Starts for Navo_223:
(Start: 3 @113153 has 94 MA's), (5, 113183), (7, 113195), (10, 113285), (15, 113369), (16, 113372), (19, 113414),

Gene: NootNoot_226 Start: 113683, Stop: 113988, Start Num: 3
Candidate Starts for NootNoot_226:

(Start: 3 @113683 has 94 MA's), (5, 113713), (7, 113725), (10, 113815), (15, 113899), (16, 113902), (19, 113944),

Gene: PacManQ_226 Start: 114245, Stop: 114550, Start Num: 3
Candidate Starts for PacManQ_226:
(Start: 3 @114245 has 94 MA's), (5, 114275), (7, 114287), (10, 114377), (12, 114410), (15, 114461), (16, 114464), (19, 114506),

Gene: Paradiddles_221 Start: 116058, Stop: 116363, Start Num: 3
Candidate Starts for Paradiddles_221:
(Start: 3 @116058 has 94 MA's), (5, 116088), (7, 116100), (10, 116190), (15, 116274), (16, 116277), (19, 116319),

Gene: Patelgo_182 Start: 97680, Stop: 97982, Start Num: 3
Candidate Starts for Patelgo_182:
(1, 97671), (Start: 3 @97680 has 94 MA's), (8, 97776), (9, 97800), (10, 97812), (11, 97833), (12, 97845), (16, 97899), (17, 97911), (19, 97941),

Gene: Peebs_226 Start: 115329, Stop: 115634, Start Num: 3
Candidate Starts for Peebs_226:
(Start: 3 @115329 has 94 MA's), (5, 115359), (7, 115371), (10, 115461), (12, 115494), (15, 115545), (16, 115548), (19, 115590),

Gene: Pepperwood_229 Start: 115137, Stop: 115442, Start Num: 3
Candidate Starts for Pepperwood_229:
(Start: 3 @115137 has 94 MA's), (5, 115167), (7, 115179), (10, 115269), (12, 115302), (15, 115353), (16, 115356), (19, 115398),

Gene: Persimmon_232 Start: 114171, Stop: 114476, Start Num: 3
Candidate Starts for Persimmon_232:
(Start: 3 @114171 has 94 MA's), (5, 114201), (7, 114213), (10, 114303), (15, 114387), (16, 114390), (19, 114432),

Gene: Phredrick_184 Start: 94370, Stop: 94669, Start Num: 3
Candidate Starts for Phredrick_184:
(1, 94361), (Start: 3 @94370 has 94 MA's), (7, 94412), (9, 94490), (12, 94535), (16, 94589), (17, 94601),

Gene: PinkiePie_229 Start: 114838, Stop: 115143, Start Num: 3
Candidate Starts for PinkiePie_229:
(Start: 3 @114838 has 94 MA's), (5, 114868), (7, 114880), (10, 114970), (15, 115054), (16, 115057), (19, 115099),

Gene: PumpkinSpice_244 Start: 113274, Stop: 113573, Start Num: 3
Candidate Starts for PumpkinSpice_244:
(Start: 2 @113271 has 19 MA's), (Start: 3 @113274 has 94 MA's), (4, 113283), (6, 113307), (7, 113316), (10, 113406), (15, 113490), (16, 113493), (19, 113535),

Gene: PynkPanther_229 Start: 115036, Stop: 115341, Start Num: 3
Candidate Starts for PynkPanther_229:
(Start: 3 @115036 has 94 MA's), (5, 115066), (7, 115078), (10, 115168), (15, 115252), (16, 115255), (19, 115297),

Gene: Quaran19_241 Start: 112712, Stop: 113014, Start Num: 2
Candidate Starts for Quaran19_241:
(Start: 2 @112712 has 19 MA's), (Start: 3 @112715 has 94 MA's), (4, 112724), (6, 112748), (7, 112757), (10, 112847), (15, 112931), (16, 112934), (19, 112976),

Gene: Rikishi_242 Start: 112996, Stop: 113295, Start Num: 3
Candidate Starts for Rikishi_242:
(Start: 2 @112993 has 19 MA's), (Start: 3 @112996 has 94 MA's), (4, 113005), (6, 113029), (7, 113038), (10, 113128), (15, 113212), (16, 113215), (19, 113257),

Gene: Riptide_230 Start: 113854, Stop: 114162, Start Num: 3
Candidate Starts for Riptide_230:
(Start: 3 @113854 has 94 MA's), (5, 113884), (7, 113896), (10, 113986), (15, 114070), (16, 114073), (19, 114115),

Gene: SaltySpitoon_241 Start: 112254, Stop: 112556, Start Num: 2
Candidate Starts for SaltySpitoon_241:
(Start: 2 @112254 has 19 MA's), (Start: 3 @112257 has 94 MA's), (4, 112266), (6, 112290), (7, 112299), (10, 112389), (15, 112473), (16, 112476), (19, 112518),

Gene: Samisti12_233 Start: 116731, Stop: 117039, Start Num: 3
Candidate Starts for Samisti12_233:
(Start: 3 @116731 has 94 MA's), (5, 116761), (7, 116773), (10, 116863), (15, 116947), (16, 116950), (19, 116992),

Gene: Scheme_232 Start: 116376, Stop: 116681, Start Num: 3
Candidate Starts for Scheme_232:
(Start: 3 @116376 has 94 MA's), (5, 116406), (7, 116418), (10, 116508), (12, 116541), (15, 116592), (16, 116595), (19, 116637),

Gene: SeresaTree_174 Start: 94227, Stop: 94526, Start Num: 3
Candidate Starts for SeresaTree_174:
(Start: 3 @94227 has 94 MA's), (7, 94269), (8, 94323), (9, 94347), (11, 94380), (16, 94446), (17, 94458),

Gene: Sham_172 Start: 95837, Stop: 96136, Start Num: 3
Candidate Starts for Sham_172:
(Start: 3 @95837 has 94 MA's), (7, 95879), (9, 95957), (12, 96002), (13, 96023), (16, 96056), (17, 96068),

Gene: Shuckle_228 Start: 115690, Stop: 115998, Start Num: 3
Candidate Starts for Shuckle_228:
(Start: 3 @115690 has 94 MA's), (5, 115720), (7, 115732), (10, 115822), (15, 115906), (16, 115909), (19, 115951),

Gene: Sollertia_239 Start: 112866, Stop: 113165, Start Num: 3
Candidate Starts for Sollertia_239:
(Start: 2 @112863 has 19 MA's), (Start: 3 @112866 has 94 MA's), (4, 112875), (6, 112899), (7, 112908), (15, 113082), (16, 113085), (19, 113127),

Gene: SparkleGoddess_179 Start: 95929, Stop: 96231, Start Num: 3
Candidate Starts for SparkleGoddess_179:

(1, 95920), (Start: 3 @95929 has 94 MA's), (9, 96049), (12, 96094), (15, 96145), (16, 96148), (17, 96160), (19, 96190),

Gene: Spelly_246 Start: 112186, Stop: 112485, Start Num: 3
Candidate Starts for Spelly_246:
(Start: 2 @112183 has 19 MA's), (Start: 3 @112186 has 94 MA's), (4, 112195), (6, 112219), (7, 112228), (10, 112318), (15, 112402), (16, 112405), (19, 112447),

Gene: Spilled_248 Start: 113387, Stop: 113689, Start Num: 2
Candidate Starts for Spilled_248:
(Start: 2 @113387 has 19 MA's), (Start: 3 @113390 has 94 MA's), (4, 113399), (6, 113423), (7, 113432), (10, 113522), (15, 113606), (16, 113609), (19, 113651),

Gene: Squillium_232 Start: 114840, Stop: 115145, Start Num: 3
Candidate Starts for Squillium_232:
(Start: 3 @114840 has 94 MA's), (5, 114870), (7, 114882), (10, 114972), (15, 115056), (16, 115059), (19, 115101),

Gene: Stanimal_238 Start: 113238, Stop: 113537, Start Num: 3
Candidate Starts for Stanimal_238:
(Start: 2 @113235 has 19 MA's), (Start: 3 @113238 has 94 MA's), (4, 113247), (6, 113271), (7, 113280), (15, 113454), (16, 113457), (19, 113499),

Gene: StarPlatinum_248 Start: 115196, Stop: 115498, Start Num: 2
Candidate Starts for StarPlatinum_248:
(Start: 2 @115196 has 19 MA's), (Start: 3 @115199 has 94 MA's), (4, 115208), (6, 115232), (7, 115241), (15, 115415), (16, 115418), (19, 115460),

Gene: Starbow_238 Start: 112227, Stop: 112529, Start Num: 2
Candidate Starts for Starbow_238:
(Start: 2 @112227 has 19 MA's), (Start: 3 @112230 has 94 MA's), (4, 112239), (6, 112263), (7, 112272), (10, 112362), (15, 112446), (16, 112449), (19, 112491),

Gene: Stigma_177 Start: 96166, Stop: 96468, Start Num: 3
Candidate Starts for Stigma_177:
(1, 96157), (Start: 3 @96166 has 94 MA's), (9, 96286), (12, 96331), (15, 96382), (16, 96385), (17, 96397), (19, 96427),

Gene: Sushi23_230 Start: 116195, Stop: 116500, Start Num: 3
Candidate Starts for Sushi23_230:
(Start: 3 @116195 has 94 MA's), (5, 116225), (7, 116237), (10, 116327), (12, 116360), (15, 116411), (16, 116414), (19, 116456),

Gene: Targaryen_229 Start: 116368, Stop: 116679, Start Num: 3
Candidate Starts for Targaryen_229:
(Start: 3 @116368 has 94 MA's), (5, 116398), (7, 116410), (10, 116500), (15, 116584), (16, 116587), (19, 116629),

Gene: Teutsch_228 Start: 115560, Stop: 115865, Start Num: 3
Candidate Starts for Teutsch_228:
(Start: 3 @115560 has 94 MA's), (5, 115590), (7, 115602), (10, 115692), (12, 115725), (15, 115776), (16, 115779), (19, 115821),

Gene: TomSawyer_245 Start: 114698, Stop: 115000, Start Num: 2
Candidate Starts for TomSawyer_245:
(Start: 2 @114698 has 19 MA's), (Start: 3 @114701 has 94 MA's), (4, 114710), (6, 114734), (7, 114743), (10, 114833), (15, 114917), (16, 114920), (19, 114962),

Gene: Tomas_241 Start: 116605, Stop: 116904, Start Num: 3
Candidate Starts for Tomas_241:
(Start: 3 @116605 has 94 MA's), (4, 116614), (5, 116635), (6, 116638), (7, 116647), (10, 116737), (15, 116821), (16, 116824), (19, 116866),

Gene: Tribute_225 Start: 115725, Stop: 116030, Start Num: 3
Candidate Starts for Tribute_225:
(Start: 3 @115725 has 94 MA's), (5, 115755), (7, 115767), (10, 115857), (12, 115890), (15, 115941), (16, 115944), (19, 115986),

Gene: Tuesday_248 Start: 113238, Stop: 113540, Start Num: 2
Candidate Starts for Tuesday_248:
(Start: 2 @113238 has 19 MA's), (Start: 3 @113241 has 94 MA's), (4, 113250), (6, 113274), (7, 113283), (10, 113373), (15, 113457), (16, 113460), (19, 113502),

Gene: TunaTartare_179 Start: 97549, Stop: 97848, Start Num: 3
Candidate Starts for TunaTartare_179:
(Start: 3 @97549 has 94 MA's), (7, 97591), (9, 97669), (12, 97714), (13, 97735), (16, 97768), (17, 97780),

Gene: Wakanda_147 Start: 83921, Stop: 84211, Start Num: 3
Candidate Starts for Wakanda_147:
(Start: 3 @83921 has 94 MA's), (5, 83951), (9, 84041), (10, 84053), (12, 84086), (14, 84113), (16, 84140), (17, 84152), (18, 84170), (19, 84182),

Gene: Warpy_232 Start: 114853, Stop: 115164, Start Num: 3
Candidate Starts for Warpy_232:
(Start: 3 @114853 has 94 MA's), (5, 114883), (7, 114895), (10, 114985), (15, 115069), (16, 115072), (19, 115114),

Gene: WashU_223 Start: 115347, Stop: 115652, Start Num: 3
Candidate Starts for WashU_223:
(Start: 3 @115347 has 94 MA's), (5, 115377), (7, 115389), (10, 115479), (12, 115512), (15, 115563), (16, 115566), (19, 115608),

Gene: Watermoore_228 Start: 116083, Stop: 116388, Start Num: 3
Candidate Starts for Watermoore_228:
(Start: 3 @116083 has 94 MA's), (5, 116113), (7, 116125), (10, 116215), (12, 116248), (15, 116299), (16, 116302), (19, 116344),

Gene: Westy_181 Start: 96478, Stop: 96780, Start Num: 3
Candidate Starts for Westy_181:
(1, 96469), (Start: 3 @96478 has 94 MA's), (9, 96598), (12, 96643), (15, 96694), (16, 96697), (17, 96709), (19, 96739),

Gene: WhereRU_228 Start: 114332, Stop: 114637, Start Num: 3
Candidate Starts for WhereRU_228:

(Start: 3 @114332 has 94 MA's), (5, 114362), (7, 114374), (10, 114464), (15, 114548), (16, 114551), (19, 114593),

Gene: Wipeout_231 Start: 113650, Stop: 113952, Start Num: 2
Candidate Starts for Wipeout_231:
(Start: 2 @113650 has 19 MA's), (Start: 3 @113653 has 94 MA's), (4, 113662), (6, 113686), (7, 113695), (10, 113785), (15, 113869), (16, 113872), (19, 113914),

Gene: Wofford_241 Start: 115938, Stop: 116237, Start Num: 2
Candidate Starts for Wofford_241:
(Start: 2 @115938 has 19 MA's), (Start: 3 @115941 has 94 MA's), (4, 115950), (6, 115974), (7, 115983), (15, 116157), (16, 116160), (19, 116202),

Gene: Yaboi_243 Start: 112801, Stop: 113100, Start Num: 3
Candidate Starts for Yaboi_243:
(Start: 2 @112798 has 19 MA's), (Start: 3 @112801 has 94 MA's), (4, 112810), (6, 112834), (7, 112843), (15, 113017), (16, 113020), (19, 113062),