

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 200139 Report

This analysis was run 01/18/25 on database version 583.

Pham number 200139 has 104 members, 10 are drafts.

Phages represented in each track:

- Track 1 : PacManQ_191, Leo04_194, Cross_192, Daubenski_185, Navo_186, Larnav_193, Liandry_191, BlueOtter_192, Shuckle_194, Bartholomune_192, Cursive_193, PinkiePie_191, Sushi23_193, Pepperwood_192, HangryHippo_192, Scheme_197, Watermoore_192, NootNoot_188, Tribute_190, Paradiddles_185, Teutsch_191, Lululemon_191
- Track 2 : Evy_186, Jay2Jay_198, Targaryen_192, Warpy_196
- Track 3 : Angela_194, MulchMansion_195, Wofford_200, Elmer_208
- Track 4 : Mildred21_201
- Track 5 : WhereRU_192, Persimmon_193, Braelyn_189
- Track 6 : Marsus_202
- Track 7 : Riptide_194, Anedea_198
- Track 8 : Samisti12_195
- Track 9 : LilMartin_192
- Track 10 : Bmoc_197
- Track 11 : Squillium_194
- Track 12 : Peebs_190
- Track 13 : Karimac_202, Birchlyn_200, IchabodCrane_197, Quaran19_202, Gibbi_209, Sollertia_198, MindFlayer_195, Rikishi_209, SaltySpittoon_201, Jollison_199, Genie2_197, TomSawyer_206, BoomerJR_197, KentuckyRacer_208, Amabiko_206, Spelly_205, Stanimal_197, Starbow_199, JimJam_209, PumpkinSpice_204, CeilingFan_213, Yaboi_202, Wipeout_193, Spilled_208
- Track 14 : Mugiwara_211
- Track 15 : StarPlatinum_208
- Track 16 : Enygma_207
- Track 17 : Bordeaux_200, Battuta_199
- Track 18 : Tomas_199
- Track 19 : LukeCage_204
- Track 20 : Belfort_139, SparkleGoddess_137, Stigma_136, Comrade_135, Karp_135, Westy_140
- Track 21 : Francob_139
- Track 22 : Phredrick_142, Forrest_145, Kenrey_145
- Track 23 : Jada_141
- Track 24 : Annadreamy_126, Limpid_133
- Track 25 : Emma1919_142
- Track 26 : Patelgo_142, Moab_139
- Track 27 : Blueeyedbeauty_133
- Track 28 : Sham_135

- Track 29 : MeganTheeKilla_140
- Track 30 : SeresaTree_135, Faust_134
- Track 31 : TunaTartare_138
- Track 32 : Gilson_142
- Track 33 : Beuffert_132
- Track 34 : BillNye_161, Circinus_162
- Track 35 : Wakanda_171, Muntaha_173
- Track 36 : GodonK_176
- Track 37 : Phendrix_165
- Track 38 : Nanosmite_124

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 67 of the 94 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amabiko_206, Anedea_198, Angela_194, Bartholomune_192, Battuta_199, Birchlyn_200, BlueOtter_192, Bmoc_197, BoomerJR_197, Bordeaux_200, Braelyn_189, CeilingFan_213, Cross_192, Cursive_193, Daubenski_185, Elmer_208, Enygma_207, Evy_186, Genie2_197, Gibbi_209, HangryHippo_192, IchabodCrane_197, Jada_141, Jay2Jay_198, JimJam_209, Jollison_199, Karimac_202, KentuckyRacer_208, Larnav_193, Leo04_194, Liandry_191, LilMartin_192, LukeCage_204, Lululemon_191, Marsus_202, MeganTheeKilla_140, Mildred21_201, MindFlayer_195, Mugiwara_211, MulchMansion_195, Nanosmite_124, Navo_186, NootNoot_188, PacManQ_191, Paradiddles_185, Pepperwood_192, Persimmon_193, PinkiePie_191, PumpkinSpice_204, Quarant19_202, Rikishi_209, Riptide_194, SaltySpittoon_201, Samisti12_195, Scheme_197, Shuckle_194, Sollertia_198, Spelly_205, Spilled_208, Squillium_194, Stanimal_197, StarPlatinum_208, Starbow_199, Sushi23_193, Targaryen_192, Teutsch_191, TomSawyer_206, Tomas_199, Tribute_190, Warpy_196, Watermoore_192, WhereRU_192, Wipeout_193, Wofford_200, Yaboi_202,

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

- Emma1919_142, Forrest_145, Francob_139, Gilson_142, GodonK_176, Kenrey_145, Peebs_190, Phendrix_165, Phredrick_142,

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

- Annadreamy_126, Belfort_139, Beuffert_132, BillNye_161, Blueeyedbeauty_133, Circinus_162, Comrade_135, Faust_134, Karp_135, Limpid_133, Moab_139, Muntaha_173, Patelgo_142, SeresaTree_135, Sham_135, SparkleGoddess_137, Stigma_136, TunaTartare_138, Wakanda_171, Westy_140,

Summary by start number:

Start 1:

- Found in 2 of 104 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 94
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Phendrix_165 (DK),

Start 7:

- Found in 2 of 104 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 94
- Called 50.0% of time when present
- Phage (with cluster) where this start called: GodonK_176 (DK),

Start 8:

- Found in 31 of 104 (29.8%) of genes in pham
- Manual Annotations of this start: 1 of 94
- Called 3.2% of time when present
- Phage (with cluster) where this start called: Peebs_190 (BE1),

Start 10:

- Found in 84 of 104 (80.8%) of genes in pham
- Manual Annotations of this start: 67 of 94
- Called 89.3% of time when present
- Phage (with cluster) where this start called: Amabiko_206 (BE2), Anedea_198 (BE1), Angela_194 (BE1), Bartholomune_192 (BE1), Battuta_199 (BE2), Birchlyn_200 (BE2), BlueOtter_192 (BE1), Bmoc_197 (BE1), BoomerJR_197 (BE2), Bordeaux_200 (BE2), Braelyn_189 (BE1), CeilingFan_213 (BE2), Cross_192 (BE1), Cursive_193 (BE1), Daubenski_185 (BE1), Elmer_208 (BE2), Enygma_207 (BE2), Evy_186 (BE1), Genie2_197 (BE2), Gibbi_209 (BE2), HangryHippo_192 (BE1), IchabodCrane_197 (BE2), Jada_141 (BK1), Jay2Jay_198 (BE1), JimJam_209 (BE2), Jollison_199 (BE2), Karimac_202 (BE2), KentuckyRacer_208 (BE2), Larnav_193 (BE1), Leo04_194 (BE1), Liandry_191 (BE1), LilMartin_192 (BE1), LukeCage_204 (BE2), Lululemon_191 (BE1), Marsus_202 (BE1), MeganTheeKilla_140 (BK1), Mildred21_201 (BE1), MindFlayer_195 (BE2), Mugiwara_211 (BE2), MulchMansion_195 (BE1), Nanosmite_124 (M3), Navo_186 (BE1), NootNoot_188 (BE1), PacManQ_191 (BE1), Paradiddles_185 (BE1), Pepperwood_192 (BE1), Persimmon_193 (BE1), PinkiePie_191 (BE1), PumpkinSpice_204 (BE2), Quarant19_202 (BE2), Rikishi_209 (BE2), Riptide_194 (BE1), SaltySpittoon_201 (BE2), Samisti12_195 (BE1), Scheme_197 (BE1), Shuckle_194 (BE1), Sollertia_198 (BE2), Spelly_205 (BE2), Spilled_208 (BE2), Squillium_194 (BE1), Stanimal_197 (BE2), StarPlatinum_208 (BE2), Starbow_199 (BE2), Sushi23_193 (BE1), Targaryen_192 (BE1), Teutsch_191 (BE1), TomSawyer_206 (BE2), Tomas_199 (BE2), Tribute_190 (BE1), Warpy_196 (BE1), Watermoore_192 (BE1), WhereRU_192 (BE1), Wipeout_193 (BE2), Wofford_200 (BE2), Yaboi_202 (BE2),

Start 11:

- Found in 4 of 104 (3.8%) of genes in pham
- Manual Annotations of this start: 2 of 94
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Francob_139 (BK1), Gilson_142 (BK1),

Start 13:

- Found in 26 of 104 (25.0%) of genes in pham
- Manual Annotations of this start: 20 of 94
- Called 84.6% of time when present
- Phage (with cluster) where this start called: Annadreamy_126 (BK1), Belfort_139 (BK1), Beuffert_132 (BK1), BillNye_161 (BK2), Blueeyedbeauty_133 (BK1), Circinus_162 (BK2), Comrade_135 (BK1), Emma1919_142 (BK1), Faust_134 (BK1), Forrest_145 (BK1), Karp_135 (BK1), Kenrey_145 (BK1), Limpid_133 (BK1),

Moab_139 (BK1), Patelgo_142 (BK1), Phredrick_142 (BK1), SeresaTree_135 (BK1), Sham_135 (BK1), SparkleGoddess_137 (BK1), Stigma_136 (BK1), TunaTartare_138 (BK1), Westy_140 (BK1),

Start 14:

- Found in 2 of 104 (1.9%) of genes in pham
- Manual Annotations of this start: 2 of 94
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Muntaha_173 (BK2), Wakanda_171 (BK2),

Summary by clusters:

There are 6 clusters represented in this pham: BK2, BK1, M3, BE2, BE1, DK,

Info for manual annotations of cluster BE1:

- Start number 8 was manually annotated 1 time for cluster BE1.
- Start number 10 was manually annotated 35 times for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 10 was manually annotated 29 times for cluster BE2.

Info for manual annotations of cluster BK1:

- Start number 10 was manually annotated 2 times for cluster BK1.
- Start number 11 was manually annotated 2 times for cluster BK1.
- Start number 13 was manually annotated 18 times for cluster BK1.

Info for manual annotations of cluster BK2:

- Start number 13 was manually annotated 2 times for cluster BK2.
- Start number 14 was manually annotated 2 times for cluster BK2.

Info for manual annotations of cluster DK:

- Start number 1 was manually annotated 1 time for cluster DK.
- Start number 7 was manually annotated 1 time for cluster DK.

Info for manual annotations of cluster M3:

- Start number 10 was manually annotated 1 time for cluster M3.

Gene Information:

Gene: Amabiko_206 Start: 100831, Stop: 101094, Start Num: 10

Candidate Starts for Amabiko_206:

(Start: 10 @100831 has 67 MA's), (22, 100936), (26, 100960), (30, 101026), (33, 101053), (36, 101080),

Gene: Anedea_198 Start: 100661, Stop: 100924, Start Num: 10

Candidate Starts for Anedea_198:

(Start: 10 @100661 has 67 MA's), (20, 100751), (22, 100766), (26, 100790), (32, 100871),

Gene: Angela_194 Start: 100141, Stop: 100404, Start Num: 10

Candidate Starts for Angela_194:

(Start: 10 @100141 has 67 MA's), (20, 100231), (22, 100246), (26, 100270), (32, 100351),

Gene: Annadreamy_126 Start: 74517, Stop: 74774, Start Num: 13

Candidate Starts for Annadreamy_126:

(9, 74502), (Start: 13 @74517 has 20 MA's), (17, 74586), (18, 74589), (22, 74610), (26, 74634), (28, 74679), (29, 74682), (36, 74754),

Gene: Bartholomune_192 Start: 99992, Stop: 100270, Start Num: 10

Candidate Starts for Bartholomune_192:

(Start: 8 @99983 has 1 MA's), (Start: 10 @99992 has 67 MA's), (20, 100082), (22, 100097), (26, 100121), (32, 100202),

Gene: Battuta_199 Start: 100147, Stop: 100410, Start Num: 10

Candidate Starts for Battuta_199:

(Start: 10 @100147 has 67 MA's), (22, 100252), (26, 100276), (33, 100369), (36, 100396),

Gene: Belfort_139 Start: 80989, Stop: 81246, Start Num: 13

Candidate Starts for Belfort_139:

(Start: 13 @80989 has 20 MA's), (15, 81028), (17, 81058), (22, 81082), (26, 81106), (31, 81178), (36, 81226),

Gene: Beuffert_132 Start: 79015, Stop: 79272, Start Num: 13

Candidate Starts for Beuffert_132:

(Start: 13 @79015 has 20 MA's), (17, 79084), (18, 79087), (22, 79108), (26, 79132), (36, 79252),

Gene: BillNye_161 Start: 92156, Stop: 92404, Start Num: 13

Candidate Starts for BillNye_161:

(Start: 13 @92156 has 20 MA's), (15, 92195), (17, 92225), (22, 92249), (26, 92273), (36, 92393),

Gene: Birchlyn_200 Start: 98079, Stop: 98342, Start Num: 10

Candidate Starts for Birchlyn_200:

(Start: 10 @98079 has 67 MA's), (22, 98184), (26, 98208), (30, 98274), (33, 98301), (36, 98328),

Gene: BlueOtter_192 Start: 100785, Stop: 101048, Start Num: 10

Candidate Starts for BlueOtter_192:

(Start: 8 @100776 has 1 MA's), (Start: 10 @100785 has 67 MA's), (20, 100875), (22, 100890), (26, 100914), (32, 100995),

Gene: Blueeyedbeauty_133 Start: 78271, Stop: 78528, Start Num: 13

Candidate Starts for Blueeyedbeauty_133:

(Start: 13 @78271 has 20 MA's), (17, 78340), (18, 78343), (22, 78364), (24, 78373), (26, 78388), (36, 78508),

Gene: Bmoc_197 Start: 100809, Stop: 101072, Start Num: 10

Candidate Starts for Bmoc_197:

(Start: 10 @100809 has 67 MA's), (20, 100899), (22, 100914), (26, 100938), (32, 101019),

Gene: BoomerJR_197 Start: 100364, Stop: 100627, Start Num: 10

Candidate Starts for BoomerJR_197:

(Start: 10 @100364 has 67 MA's), (22, 100469), (26, 100493), (30, 100559), (33, 100586), (36, 100613),

Gene: Bordeaux_200 Start: 100730, Stop: 100993, Start Num: 10

Candidate Starts for Bordeaux_200:

(Start: 10 @100730 has 67 MA's), (22, 100835), (26, 100859), (33, 100952), (36, 100979),

Gene: Braelyn_189 Start: 99645, Stop: 99908, Start Num: 10

Candidate Starts for Braelyn_189:

(4, 99609), (Start: 10 @99645 has 67 MA's), (20, 99735), (22, 99750), (26, 99774), (32, 99855),

Gene: CeilingFan_213 Start: 101524, Stop: 101787, Start Num: 10

Candidate Starts for CeilingFan_213:

(Start: 10 @101524 has 67 MA's), (22, 101629), (26, 101653), (30, 101719), (33, 101746), (36, 101773),

Gene: Circinus_162 Start: 92122, Stop: 92370, Start Num: 13

Candidate Starts for Circinus_162:

(Start: 13 @92122 has 20 MA's), (15, 92161), (17, 92191), (22, 92215), (26, 92239), (36, 92359),

Gene: Comrade_135 Start: 80308, Stop: 80565, Start Num: 13

Candidate Starts for Comrade_135:

(Start: 13 @80308 has 20 MA's), (15, 80347), (17, 80377), (22, 80401), (26, 80425), (31, 80497), (36, 80545),

Gene: Cross_192 Start: 101430, Stop: 101693, Start Num: 10

Candidate Starts for Cross_192:

(Start: 8 @101421 has 1 MA's), (Start: 10 @101430 has 67 MA's), (20, 101520), (22, 101535), (26, 101559), (32, 101640),

Gene: Cursive_193 Start: 100332, Stop: 100595, Start Num: 10

Candidate Starts for Cursive_193:

(Start: 8 @100323 has 1 MA's), (Start: 10 @100332 has 67 MA's), (20, 100422), (22, 100437), (26, 100461), (32, 100542),

Gene: Daubenski_185 Start: 101054, Stop: 101317, Start Num: 10

Candidate Starts for Daubenski_185:

(Start: 8 @101045 has 1 MA's), (Start: 10 @101054 has 67 MA's), (20, 101144), (22, 101159), (26, 101183), (32, 101264),

Gene: Elmer_208 Start: 103794, Stop: 104057, Start Num: 10

Candidate Starts for Elmer_208:

(Start: 10 @103794 has 67 MA's), (20, 103884), (22, 103899), (26, 103923), (32, 104004),

Gene: Emma1919_142 Start: 80355, Stop: 80630, Start Num: 13

Candidate Starts for Emma1919_142:

(Start: 10 @80343 has 67 MA's), (Start: 11 @80346 has 2 MA's), (Start: 13 @80355 has 20 MA's), (17, 80427), (22, 80451), (26, 80475), (31, 80547), (36, 80595), (38, 80598),

Gene: Enygma_207 Start: 103354, Stop: 103617, Start Num: 10

Candidate Starts for Enygma_207:

(Start: 8 @103345 has 1 MA's), (Start: 10 @103354 has 67 MA's), (19, 103441), (22, 103459), (26, 103483), (33, 103576), (36, 103603),

Gene: Evy_186 Start: 101476, Stop: 101739, Start Num: 10

Candidate Starts for Evy_186:

(Start: 8 @101467 has 1 MA's), (Start: 10 @101476 has 67 MA's), (22, 101581), (25, 101599), (26, 101605), (32, 101686),

Gene: Faust_134 Start: 81120, Stop: 81377, Start Num: 13

Candidate Starts for Faust_134:

(5, 81078), (Start: 13 @81120 has 20 MA's), (17, 81189), (22, 81213), (26, 81237), (36, 81357),

Gene: Forrest_145 Start: 81572, Stop: 81832, Start Num: 13

Candidate Starts for Forrest_145:

(Start: 10 @81560 has 67 MA's), (Start: 13 @81572 has 20 MA's), (17, 81644), (22, 81668), (26, 81692), (31, 81764), (36, 81812), (40, 81821),

Gene: Francob_139 Start: 80533, Stop: 80802, Start Num: 11

Candidate Starts for Francob_139:

(Start: 10 @80530 has 67 MA's), (Start: 11 @80533 has 2 MA's), (Start: 13 @80542 has 20 MA's), (17, 80614), (22, 80638), (26, 80662), (31, 80734), (36, 80782),

Gene: Genie2_197 Start: 100478, Stop: 100741, Start Num: 10

Candidate Starts for Genie2_197:

(Start: 10 @100478 has 67 MA's), (22, 100583), (26, 100607), (30, 100673), (33, 100700), (36, 100727),

Gene: Gibbi_209 Start: 101017, Stop: 101280, Start Num: 10

Candidate Starts for Gibbi_209:

(Start: 10 @101017 has 67 MA's), (22, 101122), (26, 101146), (30, 101212), (33, 101239), (36, 101266),

Gene: Gilson_142 Start: 80308, Stop: 80592, Start Num: 11

Candidate Starts for Gilson_142:

(Start: 10 @80305 has 67 MA's), (Start: 11 @80308 has 2 MA's), (Start: 13 @80317 has 20 MA's), (17, 80389), (22, 80413), (26, 80437), (31, 80509), (36, 80557), (38, 80560),

Gene: GodonK_176 Start: 87943, Stop: 87668, Start Num: 7

Candidate Starts for GodonK_176:

(Start: 1 @87979 has 1 MA's), (2, 87973), (3, 87970), (Start: 7 @87943 has 1 MA's), (Start: 10 @87931 has 67 MA's), (16, 87862), (18, 87844), (23, 87817), (26, 87799), (27, 87757), (34, 87703),

Gene: HangryHippo_192 Start: 100785, Stop: 101048, Start Num: 10

Candidate Starts for HangryHippo_192:

(Start: 8 @100776 has 1 MA's), (Start: 10 @100785 has 67 MA's), (20, 100875), (22, 100890), (26, 100914), (32, 100995),

Gene: IchabodCrane_197 Start: 100532, Stop: 100795, Start Num: 10

Candidate Starts for IchabodCrane_197:

(Start: 10 @100532 has 67 MA's), (22, 100637), (26, 100661), (30, 100727), (33, 100754), (36, 100781),

Gene: Jada_141 Start: 80490, Stop: 80762, Start Num: 10

Candidate Starts for Jada_141:

(Start: 10 @80490 has 67 MA's), (Start: 13 @80502 has 20 MA's), (17, 80574), (22, 80598), (26, 80622), (31, 80694), (36, 80742), (40, 80751),

Gene: Jay2Jay_198 Start: 101628, Stop: 101891, Start Num: 10

Candidate Starts for Jay2Jay_198:

(Start: 8 @101619 has 1 MA's), (Start: 10 @101628 has 67 MA's), (22, 101733), (25, 101751), (26, 101757), (32, 101838),

Gene: JimJam_209 Start: 102453, Stop: 102716, Start Num: 10

Candidate Starts for JimJam_209:

(Start: 10 @102453 has 67 MA's), (22, 102558), (26, 102582), (30, 102648), (33, 102675), (36, 102702),

Gene: Jollison_199 Start: 100663, Stop: 100926, Start Num: 10

Candidate Starts for Jollison_199:

(Start: 10 @100663 has 67 MA's), (22, 100768), (26, 100792), (30, 100858), (33, 100885), (36, 100912),

Gene: Karimac_202 Start: 100857, Stop: 101120, Start Num: 10

Candidate Starts for Karimac_202:

(Start: 10 @100857 has 67 MA's), (22, 100962), (26, 100986), (30, 101052), (33, 101079), (36, 101106),

Gene: Karp_135 Start: 80416, Stop: 80673, Start Num: 13

Candidate Starts for Karp_135:

(Start: 13 @80416 has 20 MA's), (15, 80455), (17, 80485), (22, 80509), (26, 80533), (31, 80605), (36, 80653),

Gene: Kenrey_145 Start: 81846, Stop: 82106, Start Num: 13

Candidate Starts for Kenrey_145:

(Start: 10 @81834 has 67 MA's), (Start: 13 @81846 has 20 MA's), (17, 81918), (22, 81942), (26, 81966), (31, 82038), (36, 82086), (40, 82095),

Gene: KentuckyRacer_208 Start: 102368, Stop: 102631, Start Num: 10

Candidate Starts for KentuckyRacer_208:

(Start: 10 @102368 has 67 MA's), (22, 102473), (26, 102497), (30, 102563), (33, 102590), (36, 102617),

Gene: Larnav_193 Start: 101405, Stop: 101668, Start Num: 10

Candidate Starts for Larnav_193:

(Start: 8 @101396 has 1 MA's), (Start: 10 @101405 has 67 MA's), (20, 101495), (22, 101510), (26, 101534), (32, 101615),

Gene: Leo04_194 Start: 101796, Stop: 102059, Start Num: 10

Candidate Starts for Leo04_194:

(Start: 8 @101787 has 1 MA's), (Start: 10 @101796 has 67 MA's), (20, 101886), (22, 101901), (26, 101925), (32, 102006),

Gene: Liandry_191 Start: 100311, Stop: 100589, Start Num: 10

Candidate Starts for Liandry_191:

(Start: 8 @100302 has 1 MA's), (Start: 10 @100311 has 67 MA's), (20, 100401), (22, 100416), (26, 100440), (32, 100521),

Gene: LilMartin_192 Start: 99758, Stop: 100021, Start Num: 10

Candidate Starts for LilMartin_192:

(Start: 10 @99758 has 67 MA's), (20, 99848), (22, 99863), (26, 99887), (32, 99968), (35, 99998),

Gene: Limpid_133 Start: 79825, Stop: 80082, Start Num: 13
Candidate Starts for Limpid_133:
(9, 79810), (Start: 13 @79825 has 20 MA's), (17, 79894), (18, 79897), (22, 79918), (26, 79942), (28, 79987), (29, 79990), (36, 80062),

Gene: LukeCage_204 Start: 102124, Stop: 102387, Start Num: 10
Candidate Starts for LukeCage_204:
(Start: 10 @102124 has 67 MA's), (22, 102229), (26, 102253), (36, 102373),

Gene: Lululemon_191 Start: 100166, Stop: 100429, Start Num: 10
Candidate Starts for Lululemon_191:
(Start: 8 @100157 has 1 MA's), (Start: 10 @100166 has 67 MA's), (20, 100256), (22, 100271), (26, 100295), (32, 100376),

Gene: Marsus_202 Start: 100841, Stop: 101107, Start Num: 10
Candidate Starts for Marsus_202:
(6, 100820), (Start: 10 @100841 has 67 MA's), (20, 100931), (22, 100946), (26, 100970), (32, 101051),

Gene: MeganTheeKilla_140 Start: 80385, Stop: 80657, Start Num: 10
Candidate Starts for MeganTheeKilla_140:
(Start: 10 @80385 has 67 MA's), (Start: 11 @80388 has 2 MA's), (Start: 13 @80397 has 20 MA's), (17, 80469), (22, 80493), (26, 80517), (36, 80637), (40, 80646),

Gene: Mildred21_201 Start: 99089, Stop: 99349, Start Num: 10
Candidate Starts for Mildred21_201:
(6, 99068), (Start: 10 @99089 has 67 MA's), (22, 99194), (26, 99218), (32, 99299), (35, 99329), (36, 99338),

Gene: MindFlayer_195 Start: 100048, Stop: 100311, Start Num: 10
Candidate Starts for MindFlayer_195:
(Start: 10 @100048 has 67 MA's), (22, 100153), (26, 100177), (30, 100243), (33, 100270), (36, 100297),

Gene: Moab_139 Start: 82509, Stop: 82769, Start Num: 13
Candidate Starts for Moab_139:
(Start: 13 @82509 has 20 MA's), (17, 82581), (22, 82605), (26, 82629), (29, 82677), (36, 82749),

Gene: Mugiwara_211 Start: 102753, Stop: 103013, Start Num: 10
Candidate Starts for Mugiwara_211:
(Start: 10 @102753 has 67 MA's), (22, 102858), (26, 102882), (33, 102975), (36, 103002), (39, 103008),

Gene: MulchMansion_195 Start: 101140, Stop: 101403, Start Num: 10
Candidate Starts for MulchMansion_195:
(Start: 10 @101140 has 67 MA's), (20, 101230), (22, 101245), (26, 101269), (32, 101350),

Gene: Muntaha_173 Start: 91246, Stop: 91491, Start Num: 14
Candidate Starts for Muntaha_173:
(Start: 14 @91246 has 2 MA's), (15, 91282), (17, 91312), (22, 91336), (26, 91360), (36, 91480),

Gene: Nanosmite_124 Start: 63561, Stop: 63848, Start Num: 10
Candidate Starts for Nanosmite_124:
(Start: 10 @63561 has 67 MA's), (23, 63675), (26, 63693), (28, 63738),

Gene: Navo_186 Start: 98849, Stop: 99112, Start Num: 10

Candidate Starts for Navo_186:

(Start: 8 @98840 has 1 MA's), (Start: 10 @98849 has 67 MA's), (20, 98939), (22, 98954), (26, 98978), (32, 99059),

Gene: NootNoot_188 Start: 99100, Stop: 99378, Start Num: 10

Candidate Starts for NootNoot_188:

(Start: 8 @99091 has 1 MA's), (Start: 10 @99100 has 67 MA's), (20, 99190), (22, 99205), (26, 99229), (32, 99310),

Gene: PacManQ_191 Start: 100166, Stop: 100429, Start Num: 10

Candidate Starts for PacManQ_191:

(Start: 8 @100157 has 1 MA's), (Start: 10 @100166 has 67 MA's), (20, 100256), (22, 100271), (26, 100295), (32, 100376),

Gene: Paradiddles_185 Start: 101772, Stop: 102035, Start Num: 10

Candidate Starts for Paradiddles_185:

(Start: 8 @101763 has 1 MA's), (Start: 10 @101772 has 67 MA's), (20, 101862), (22, 101877), (26, 101901), (32, 101982),

Gene: Patelgo_142 Start: 83201, Stop: 83461, Start Num: 13

Candidate Starts for Patelgo_142:

(Start: 13 @83201 has 20 MA's), (17, 83273), (22, 83297), (26, 83321), (29, 83369), (36, 83441),

Gene: Peebs_190 Start: 101069, Stop: 101341, Start Num: 8

Candidate Starts for Peebs_190:

(Start: 8 @101069 has 1 MA's), (Start: 10 @101078 has 67 MA's), (20, 101168), (22, 101183), (26, 101207), (32, 101288),

Gene: Pepperwood_192 Start: 101036, Stop: 101299, Start Num: 10

Candidate Starts for Pepperwood_192:

(Start: 8 @101027 has 1 MA's), (Start: 10 @101036 has 67 MA's), (20, 101126), (22, 101141), (26, 101165), (32, 101246),

Gene: Persimmon_193 Start: 99221, Stop: 99484, Start Num: 10

Candidate Starts for Persimmon_193:

(4, 99185), (Start: 10 @99221 has 67 MA's), (20, 99311), (22, 99326), (26, 99350), (32, 99431),

Gene: Phendrix_165 Start: 87076, Stop: 86765, Start Num: 1

Candidate Starts for Phendrix_165:

(Start: 1 @87076 has 1 MA's), (2, 87070), (3, 87067), (Start: 7 @87040 has 1 MA's), (Start: 10 @87028 has 67 MA's), (16, 86959), (18, 86941), (23, 86914), (26, 86896), (27, 86854), (34, 86800),

Gene: Phredrick_142 Start: 80158, Stop: 80418, Start Num: 13

Candidate Starts for Phredrick_142:

(Start: 10 @80146 has 67 MA's), (Start: 13 @80158 has 20 MA's), (17, 80230), (22, 80254), (26, 80278), (31, 80350), (36, 80398), (40, 80407),

Gene: PinkiePie_191 Start: 100311, Stop: 100589, Start Num: 10

Candidate Starts for PinkiePie_191:

(Start: 8 @100302 has 1 MA's), (Start: 10 @100311 has 67 MA's), (20, 100401), (22, 100416), (26, 100440), (32, 100521),

Gene: PumpkinSpice_204 Start: 101269, Stop: 101532, Start Num: 10

Candidate Starts for PumpkinSpice_204:

(Start: 10 @101269 has 67 MA's), (22, 101374), (26, 101398), (30, 101464), (33, 101491), (36, 101518),

Gene: Quaran19_202 Start: 100710, Stop: 100973, Start Num: 10

Candidate Starts for Quaran19_202:

(Start: 10 @100710 has 67 MA's), (22, 100815), (26, 100839), (30, 100905), (33, 100932), (36, 100959),

Gene: Rikishi_209 Start: 100991, Stop: 101254, Start Num: 10

Candidate Starts for Rikishi_209:

(Start: 10 @100991 has 67 MA's), (22, 101096), (26, 101120), (30, 101186), (33, 101213), (36, 101240),

Gene: Riptide_194 Start: 99300, Stop: 99563, Start Num: 10

Candidate Starts for Riptide_194:

(Start: 10 @99300 has 67 MA's), (20, 99390), (22, 99405), (26, 99429), (32, 99510),

Gene: SaltySpittoon_201 Start: 100252, Stop: 100515, Start Num: 10

Candidate Starts for SaltySpittoon_201:

(Start: 10 @100252 has 67 MA's), (22, 100357), (26, 100381), (30, 100447), (33, 100474), (36, 100501),

Gene: Samisti12_195 Start: 102489, Stop: 102749, Start Num: 10

Candidate Starts for Samisti12_195:

(Start: 8 @102480 has 1 MA's), (Start: 10 @102489 has 67 MA's), (20, 102579), (22, 102594), (26, 102618), (32, 102699), (37, 102738),

Gene: Scheme_197 Start: 102673, Stop: 102936, Start Num: 10

Candidate Starts for Scheme_197:

(Start: 8 @102664 has 1 MA's), (Start: 10 @102673 has 67 MA's), (20, 102763), (22, 102778), (26, 102802), (32, 102883),

Gene: SeresaTree_135 Start: 80502, Stop: 80759, Start Num: 13

Candidate Starts for SeresaTree_135:

(5, 80460), (Start: 13 @80502 has 20 MA's), (17, 80571), (22, 80595), (26, 80619), (36, 80739),

Gene: Sham_135 Start: 81398, Stop: 81649, Start Num: 13

Candidate Starts for Sham_135:

(Start: 13 @81398 has 20 MA's), (17, 81470), (22, 81494), (26, 81518), (31, 81590), (36, 81638),

Gene: Shuckle_194 Start: 101142, Stop: 101414, Start Num: 10

Candidate Starts for Shuckle_194:

(Start: 8 @101133 has 1 MA's), (Start: 10 @101142 has 67 MA's), (20, 101232), (22, 101247), (26, 101271), (32, 101352),

Gene: Sollertia_198 Start: 100478, Stop: 100741, Start Num: 10

Candidate Starts for Sollertia_198:

(Start: 10 @100478 has 67 MA's), (22, 100583), (26, 100607), (30, 100673), (33, 100700), (36, 100727),

Gene: SparkleGoddess_137 Start: 80608, Stop: 80865, Start Num: 13
Candidate Starts for SparkleGoddess_137:
(Start: 13 @80608 has 20 MA's), (15, 80647), (17, 80677), (22, 80701), (26, 80725), (31, 80797), (36, 80845),

Gene: Spelly_205 Start: 100181, Stop: 100444, Start Num: 10
Candidate Starts for Spelly_205:
(Start: 10 @100181 has 67 MA's), (22, 100286), (26, 100310), (30, 100376), (33, 100403), (36, 100430),

Gene: Spilled_208 Start: 101385, Stop: 101648, Start Num: 10
Candidate Starts for Spilled_208:
(Start: 10 @101385 has 67 MA's), (22, 101490), (26, 101514), (30, 101580), (33, 101607), (36, 101634),

Gene: Squillium_194 Start: 100313, Stop: 100591, Start Num: 10
Candidate Starts for Squillium_194:
(Start: 8 @100304 has 1 MA's), (Start: 10 @100313 has 67 MA's), (20, 100403), (26, 100442), (32, 100523),

Gene: Stanimal_197 Start: 100839, Stop: 101102, Start Num: 10
Candidate Starts for Stanimal_197:
(Start: 10 @100839 has 67 MA's), (22, 100944), (26, 100968), (30, 101034), (33, 101061), (36, 101088),

Gene: StarPlatinum_208 Start: 102661, Stop: 102921, Start Num: 10
Candidate Starts for StarPlatinum_208:
(Start: 10 @102661 has 67 MA's), (22, 102766), (26, 102790), (36, 102910), (39, 102916),

Gene: Starbow_199 Start: 100225, Stop: 100488, Start Num: 10
Candidate Starts for Starbow_199:
(Start: 10 @100225 has 67 MA's), (22, 100330), (26, 100354), (30, 100420), (33, 100447), (36, 100474),

Gene: Stigma_136 Start: 80753, Stop: 81010, Start Num: 13
Candidate Starts for Stigma_136:
(Start: 13 @80753 has 20 MA's), (15, 80792), (17, 80822), (22, 80846), (26, 80870), (31, 80942), (36, 80990),

Gene: Sushi23_193 Start: 102142, Stop: 102405, Start Num: 10
Candidate Starts for Sushi23_193:
(Start: 8 @102133 has 1 MA's), (Start: 10 @102142 has 67 MA's), (20, 102232), (22, 102247), (26, 102271), (32, 102352),

Gene: Targaryen_192 Start: 102157, Stop: 102420, Start Num: 10
Candidate Starts for Targaryen_192:
(Start: 8 @102148 has 1 MA's), (Start: 10 @102157 has 67 MA's), (22, 102262), (25, 102280), (26, 102286), (32, 102367),

Gene: Teutsch_191 Start: 101590, Stop: 101853, Start Num: 10
Candidate Starts for Teutsch_191:
(Start: 8 @101581 has 1 MA's), (Start: 10 @101590 has 67 MA's), (20, 101680), (22, 101695), (26, 101719), (32, 101800),

Gene: TomSawyer_206 Start: 102696, Stop: 102959, Start Num: 10
Candidate Starts for TomSawyer_206:
(Start: 10 @102696 has 67 MA's), (22, 102801), (26, 102825), (30, 102891), (33, 102918), (36, 102945),

Gene: Tomas_199 Start: 101284, Stop: 101553, Start Num: 10
Candidate Starts for Tomas_199:
(Start: 8 @101275 has 1 MA's), (Start: 10 @101284 has 67 MA's), (21, 101380), (22, 101389), (26, 101413), (32, 101494),

Gene: Tribute_190 Start: 101607, Stop: 101870, Start Num: 10
Candidate Starts for Tribute_190:
(Start: 8 @101598 has 1 MA's), (Start: 10 @101607 has 67 MA's), (20, 101697), (22, 101712), (26, 101736), (32, 101817),

Gene: TunaTartare_138 Start: 83131, Stop: 83382, Start Num: 13
Candidate Starts for TunaTartare_138:
(12, 83128), (Start: 13 @83131 has 20 MA's), (15, 83173), (17, 83203), (22, 83227), (26, 83251), (36, 83371),

Gene: Wakanda_171 Start: 90926, Stop: 91171, Start Num: 14
Candidate Starts for Wakanda_171:
(Start: 14 @90926 has 2 MA's), (15, 90962), (17, 90992), (22, 91016), (26, 91040), (36, 91160),

Gene: Warpy_196 Start: 101069, Stop: 101332, Start Num: 10
Candidate Starts for Warpy_196:
(Start: 8 @101060 has 1 MA's), (Start: 10 @101069 has 67 MA's), (22, 101174), (25, 101192), (26, 101198), (32, 101279),

Gene: Watermoore_192 Start: 102428, Stop: 102691, Start Num: 10
Candidate Starts for Watermoore_192:
(Start: 8 @102419 has 1 MA's), (Start: 10 @102428 has 67 MA's), (20, 102518), (22, 102533), (26, 102557), (32, 102638),

Gene: Westy_140 Start: 81642, Stop: 81899, Start Num: 13
Candidate Starts for Westy_140:
(Start: 13 @81642 has 20 MA's), (15, 81681), (17, 81711), (22, 81735), (26, 81759), (31, 81831), (36, 81879),

Gene: WhereRU_192 Start: 99973, Stop: 100236, Start Num: 10
Candidate Starts for WhereRU_192:
(4, 99937), (Start: 10 @99973 has 67 MA's), (20, 100063), (22, 100078), (26, 100102), (32, 100183),

Gene: Wipeout_193 Start: 101648, Stop: 101911, Start Num: 10
Candidate Starts for Wipeout_193:
(Start: 10 @101648 has 67 MA's), (22, 101753), (26, 101777), (30, 101843), (33, 101870), (36, 101897),

Gene: Wofford_200 Start: 103662, Stop: 103925, Start Num: 10
Candidate Starts for Wofford_200:
(Start: 10 @103662 has 67 MA's), (20, 103752), (22, 103767), (26, 103791), (32, 103872),

Gene: Yaboi_202 Start: 100413, Stop: 100676, Start Num: 10

Candidate Starts for Yaboi_202:

(Start: 10 @100413 has 67 MA's), (22, 100518), (26, 100542), (30, 100608), (33, 100635), (36, 100662),