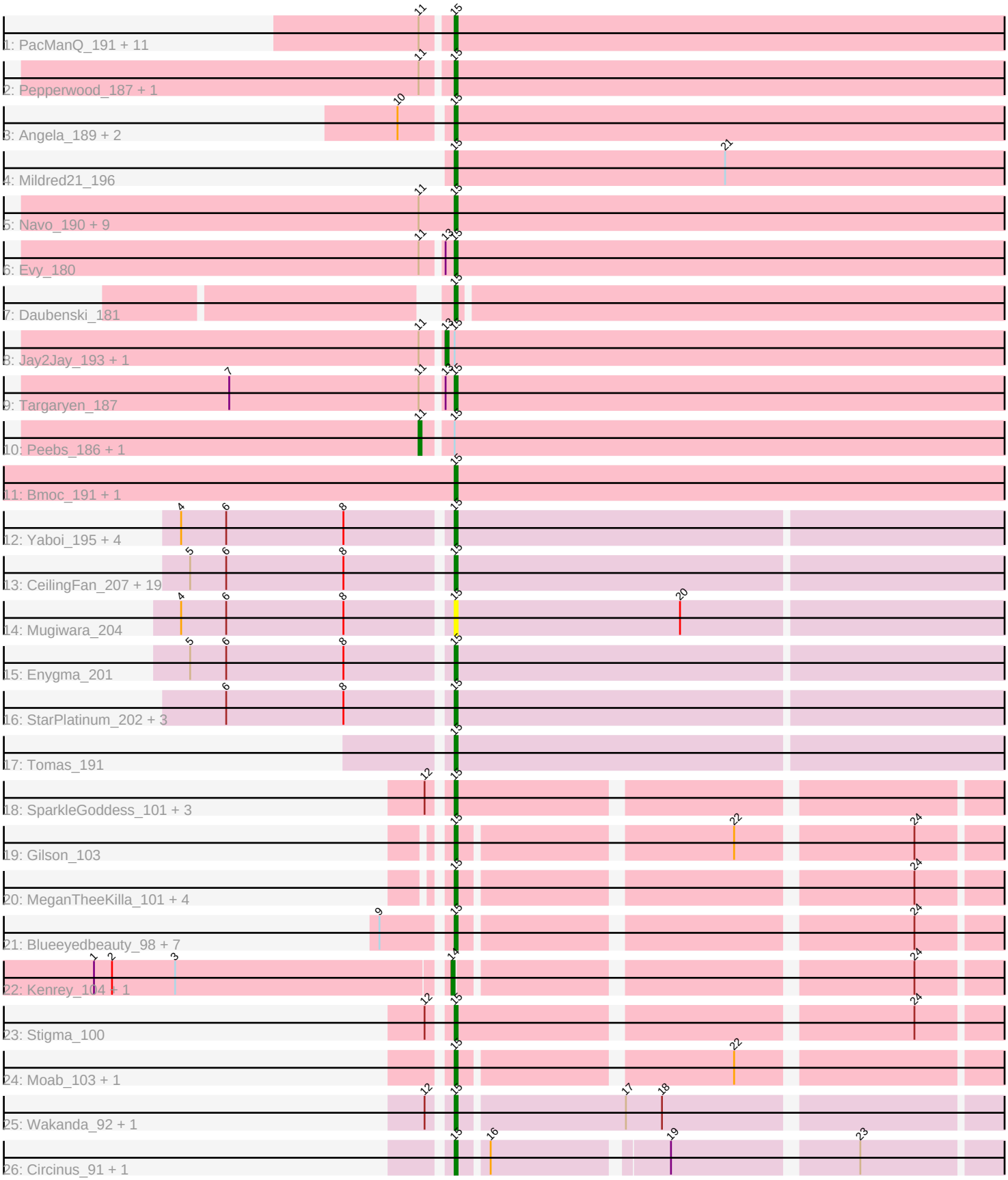
Pham 1331


1: PacManQ_191 + 11
2: Pepperwood_187 + 1
3: Angela_189 + 2
4: Mildred21_196
5: Navo_190 + 9
6: Evy_180
7: Daubenski_181
8: Jay2Jay_193 + 1
9: Targaryen_187
10: Peebs_186 + 1
11: Bmoc_191 + 1
12: Yaboi_195 + 4
13: CeilingFan_207 + 19
14: Mugiwara_204
15: Enygma_201
16: StarPlatinum_202 + 3
17: Tomas_191
18: SparkleGoddess_101 + 3
19: Gilson_103
20: MeganTheeKilla_101 + 4
21: Blueeyedbeauty_98 + 7
22: Kenrey_104 + 1
23: Stigma_100
24: Moab_103 + 1
25: Wakanda_92 + 1
26: Circinus_91 + 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 1331 Report

This analysis was run 04/28/24 on database version 559.

Pham number 1331 has 96 members, 15 are drafts.

Phages represented in each track:
• Track 1 : PacManQ_191, Leo04_189, HangryHippo_191, Cross_187, Larnav_197, BlueOtter_191, Cursive_188, Samisti12_190, Sushi23_188, Teutsch_186, Tribute_185, Lululemon_190
• Track 2 : Pepperwood_187, EGole_191
• Track 3 : Angela_189, MulchMansion_190, LilMartin_187
• Track 4 : Mildred21_196
• Track 5 : Navo_190, WhereRU_193, PinkiePie_186, Bartholomune_186, Squillium_189, Watermoore_186, NootNoot_183, Persimmon_189, Paradiddles_180, Liandry_186
• Track 6 : Evy_180
• Track 7 : Daubenski_181
• Track 8 : Jay2Jay_193, Warpy_191
• Track 9 : Targaryen_187
• Track 10 : Peebs_186, Braelyn_185
• Track 11 : Bmoc_191, Anedea_191
• Track 12 : Yaboi_195, Sollertia_192, BoomerJR_191, Stanimal_191, Genie2_191
• Track 13 : CeilingFan_207, JimJam_203, Gibbi_204, SaltySpitoon_195, Bordeaux_195, Karimac_196, Quaran19_196, IchabodCrane_192, Birchlyn_195, TomSawyer_201, Battuta_194, KentuckyRacer_207, Amabiko_200, PumpkinSpice_198, Spelly_199, MindFlayer_189, Starbow_194, Wipeout_188, Jollison_199, Spilled_202
• Track 14 : Mugiwara_204
• Track 15 : Enygma_201
• Track 16 : StarPlatinum_202, Elmer_209, Wofford_195, LukeCage_197
• Track 17 : Tomas_191
• Track 18 : SparkleGoddess_101, Karp_99, Comrade_100, Belfort_103
• Track 19 : Gilson_103
• Track 20 : MeganTheeKilla_101, Francob_101, Forrest_108, Jada_103, Emma1919_104
• Track 21 : Blueeyedbeauty_98, Annadreamy_96, Faust_100, SeresaTree_100, Beuffert_96, Limpid_95, TunaTartare_99, Sham_96
• Track 22 : Kenrey_104, Phredrick_102
• Track 23 : Stigma_100
• Track 24 : Moab_103, Patelgo_102
• Track 25 : Wakanda_92, Muntaha_94
• Track 26 : Circinus_91, BillNye_90

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

The start number called the most often in the published annotations is 15, it was called in 75 of the 81 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Amabiko_200, Anedea_191, Angela_189, Annadreamy_96, Bartholomune_186, Battuta_194, Belfort_103, Beuffert_96, BillNye_90, Birchlyn_195, BlueOtter_191, Blueeyedbeauty_98, Bmoc_191, BoomerJR_191, Bordeaux_195, CeilingFan_207, Circinus_91, Comrade_100, Cross_187, Cursive_188, Daubenski_181, EGole_191, Elmer_209, Emma1919_104, Enygma_201, Evy_180, Faust_100, Forrest_108, Francob_101, Genie2_191, Gibbi_204, Gilson_103, HangryHippo_191, IchabodCrane_192, Jada_103, JimJam_203, Jollison_199, Karimac_196, Karp_99, KentuckyRacer_207, Larnav_197, Leo04_189, Liandry_186, LilMartin_187, Limpid_95, LukeCage_197, Lululemon_190, MeganTheeKilla_101, Mildred21_196, MindFlayer_189, Moab_103, Mugiwara_204, MulchMansion_190, Muntaha_94, Navo_190, NootNoot_183, PacManQ_191, Paradiddles_180, Patelgo_102, Pepperwood_187, Persimmon_189, PinkiePie_186, PumpkinSpice_198, Quaran19_196, SaltySpitoon_195, Samisti12_190, SeresaTree_100, Sham_96, Sollertia_192, SparkleGoddess_101, Spelly_199, Spilled_202, Squillium_189, Stanimal_191, StarPlatinum_202, Starbow_194, Stigma_100, Sushi23_188, Targaryen_187, Teutsch_186, TomSawyer_201, Tomas_191, Tribute_185, TunaTartare_99, Wakanda_92, Watermoore_186, WhereRU_193, Wipeout_188, Wofford_195, Yaboi_195,

Genes that have the "Most Annotated" start but do not call it:
• Braelyn_185, Jay2Jay_193, Peebs_186, Warpy_191,

Genes that do not have the "Most Annotated" start:
• Kenrey_104, Phredrick_102,

Summary by start number:

Start 11:
• Found in 30 of 96 (31.2%) of genes in pham
• Manual Annotations of this start: 2 of 81
• Called 6.7% of time when present
• Phage (with cluster) where this start called: Braelyn_185 (BE1), Peebs_186 (BE1),

Start 13:
• Found in 4 of 96 (4.2%) of genes in pham
• Manual Annotations of this start: 2 of 81
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Jay2Jay_193 (BE1), Warpy_191 (BE1),

Start 14:
• Found in 2 of 96 (2.1%) of genes in pham
• Manual Annotations of this start: 2 of 81
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Kenrey_104 (BK1), Phredrick_102 (BK1),

Start 15:
• Found in 94 of 96 (97.9%) of genes in pham
• Manual Annotations of this start: 75 of 81
• Called 95.7% of time when present
• Phage (with cluster) where this start called: Amabiko_200 (BE2), Anedea_191 (BE1), Angela_189 (BE1), Annadreamy_96 (BK1), Bartholomune_186 (BE1), Battuta_194 (BE2), Belfort_103 (BK1), Beuffert_96 (BK1), BillNye_90 (BK2), Birchlyn_195 (BE2), BlueOtter_191 (BE1), Blueeyedbeauty_98 (BK1), Bmoc_191 (BE1), BoomerJR_191 (BE2), Bordeaux_195 (BE2), CeilingFan_207 (BE2), Circinus_91 (BK2), Comrade_100 (BK1), Cross_187 (BE1), Cursive_188 (BE1), Daubenski_181 (BE1), EGole_191 (BE1), Elmer_209 (BE2), Emma1919_104 (BK1), Enygma_201 (BE2), Evy_180 (BE1), Faust_100 (BK1), Forrest_108 (BK1), Francob_101 (BK1), Genie2_191 (BE2), Gibbi_204 (BE2), Gilson_103 (BK1), HangryHippo_191 (BE1), IchabodCrane_192 (BE2), Jada_103 (BK1), JimJam_203 (BE2), Jollison_199 (BE2), Karimac_196 (BE2), Karp_99 (BK1), KentuckyRacer_207 (BE2), Larnav_197 (BE1), Leo04_189 (BE1), Liandry_186 (BE1), LilMartin_187 (BE1), Limpid_95 (BK1), LukeCage_197 (BE2), Lululemon_190 (BE1), MeganTheeKilla_101 (BK1), Mildred21_196 (BE1), MindFlayer_189 (BE2), Moab_103 (BK1), Mugiwara_204 (BE2), MulchMansion_190 (BE1), Muntaha_94 (BK2), Navo_190 (BE1), NootNoot_183 (BE1), PacManQ_191 (BE1), Paradiddles_180 (BE1), Patelgo_102 (BK1), Pepperwood_187 (BE1), Persimmon_189 (BE1), PinkiePie_186 (BE1), PumpkinSpice_198 (BE2), Quaran19_196 (BE2), SaltySpitoon_195 (BE2), Samisti12_190 (BE1), SeresaTree_100 (BK1), Sham_96 (BK1), Sollertia_192 (BE2), SparkleGoddess_101 (BK1), Spelly_199 (BE2), Spilled_202 (BE2), Squillium_189 (BE1), Stanimal_191 (BE2), StarPlatinum_202 (BE2), Starbow_194 (BE2), Stigma_100 (BK1), Sushi23_188 (BE1), Targaryen_187 (BE1), Teutsch_186 (BE1), TomSawyer_201 (BE2), Tomas_191 (BE2), Tribute_185 (BE1), TunaTartare_99 (BK1), Wakanda_92 (BK2), Watermoore_186 (BE1), WhereRU_193 (BE1), Wipeout_188 (BE2), Wofford_195 (BE2), Yaboi_195 (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 11 was manually annotated 2 times for cluster BE1.
•Start number 13 was manually annotated 2 times for cluster BE1.
•Start number 15 was manually annotated 25 times for cluster BE1.

Info for manual annotations of cluster BE2:
•Start number 15 was manually annotated 26 times for cluster BE2.

Info for manual annotations of cluster BK1:
•Start number 14 was manually annotated 2 times for cluster BK1.
•Start number 15 was manually annotated 20 times for cluster BK1.

Info for manual annotations of cluster BK2:
•Start number 15 was manually annotated 4 times for cluster BK2.

Gene Information:

Gene: Amabiko_200 Start: 99032, Stop: 99247, Start Num: 15
Candidate Starts for Amabiko_200:
(5, 98948), (6, 98960), (8, 98999), (Start: 15 @99032 has 75 MA's),

Gene: Anedea_191 Start: 98561, Stop: 98779, Start Num: 15
Candidate Starts for Anedea_191:
(Start: 15 @98561 has 75 MA's),

Gene: Angela_189 Start: 98548, Stop: 98766, Start Num: 15
Candidate Starts for Angela_189:
(10, 98533), (Start: 15 @98548 has 75 MA's),

Gene: Annadreamy_96 Start: 66745, Stop: 66948, Start Num: 15
Candidate Starts for Annadreamy_96:
(9, 66724), (Start: 15 @66745 has 75 MA's), (24, 66883),

Gene: Bartholomune_186 Start: 97821, Stop: 98039, Start Num: 15
Candidate Starts for Bartholomune_186:
(Start: 11 @97809 has 2 MA's), (Start: 15 @97821 has 75 MA's),

Gene: Battuta_194 Start: 98348, Stop: 98563, Start Num: 15
Candidate Starts for Battuta_194:
(5, 98264), (6, 98276), (8, 98315), (Start: 15 @98348 has 75 MA's),

Gene: Belfort_103 Start: 68983, Stop: 69186, Start Num: 15
Candidate Starts for Belfort_103:
(12, 68977), (Start: 15 @68983 has 75 MA's),

Gene: Beuffert_96 Start: 67305, Stop: 67508, Start Num: 15
Candidate Starts for Beuffert_96:
(9, 67284), (Start: 15 @67305 has 75 MA's), (24, 67443),

Gene: BillNye_90 Start: 68326, Stop: 68529, Start Num: 15
Candidate Starts for BillNye_90:
(Start: 15 @68326 has 75 MA's), (16, 68335), (19, 68389), (23, 68446),

Gene: Birchlyn_195 Start: 96280, Stop: 96495, Start Num: 15
Candidate Starts for Birchlyn_195:
(5, 96196), (6, 96208), (8, 96247), (Start: 15 @96280 has 75 MA's),

Gene: BlueOtter_191 Start: 99062, Stop: 99280, Start Num: 15
Candidate Starts for BlueOtter_191:
(Start: 11 @99053 has 2 MA's), (Start: 15 @99062 has 75 MA's),

Gene: Blueeyedbeauty_98 Start: 66703, Stop: 66906, Start Num: 15
Candidate Starts for Blueeyedbeauty_98:
(9, 66682), (Start: 15 @66703 has 75 MA's), (24, 66841),

Gene: Bmoc_191 Start: 99061, Stop: 99279, Start Num: 15

Candidate Starts for Bmoc_191:
(Start: 15 @99061 has 75 MA's),

Gene: BoomerJR_191 Start: 98324, Stop: 98539, Start Num: 15
Candidate Starts for BoomerJR_191:
(4, 98237), (6, 98252), (8, 98291), (Start: 15 @98324 has 75 MA's),

Gene: Bordeaux_195 Start: 98931, Stop: 99146, Start Num: 15
Candidate Starts for Bordeaux_195:
(5, 98847), (6, 98859), (8, 98898), (Start: 15 @98931 has 75 MA's),

Gene: Braelyn_185 Start: 98572, Stop: 98802, Start Num: 11
Candidate Starts for Braelyn_185:
(Start: 11 @98572 has 2 MA's), (Start: 15 @98584 has 75 MA's),

Gene: CeilingFan_207 Start: 99725, Stop: 99940, Start Num: 15
Candidate Starts for CeilingFan_207:
(5, 99641), (6, 99653), (8, 99692), (Start: 15 @99725 has 75 MA's),

Gene: Circinus_91 Start: 68314, Stop: 68517, Start Num: 15
Candidate Starts for Circinus_91:
(Start: 15 @68314 has 75 MA's), (16, 68323), (19, 68377), (23, 68434),

Gene: Comrade_100 Start: 68300, Stop: 68503, Start Num: 15
Candidate Starts for Comrade_100:
(12, 68294), (Start: 15 @68300 has 75 MA's),

Gene: Cross_187 Start: 99707, Stop: 99925, Start Num: 15
Candidate Starts for Cross_187:
(Start: 11 @99698 has 2 MA's), (Start: 15 @99707 has 75 MA's),

Gene: Cursive_188 Start: 98609, Stop: 98827, Start Num: 15
Candidate Starts for Cursive_188:
(Start: 11 @98600 has 2 MA's), (Start: 15 @98609 has 75 MA's),

Gene: Daubenski_181 Start: 99485, Stop: 99700, Start Num: 15
Candidate Starts for Daubenski_181:
(Start: 15 @99485 has 75 MA's),

Gene: EGole_191 Start: 101362, Stop: 101580, Start Num: 15
Candidate Starts for EGole_191:
(Start: 11 @101353 has 2 MA's), (Start: 15 @101362 has 75 MA's),

Gene: Elmer_209 Start: 101831, Stop: 102046, Start Num: 15
Candidate Starts for Elmer_209:
(6, 101759), (8, 101798), (Start: 15 @101831 has 75 MA's),

Gene: Emma1919_104 Start: 67765, Stop: 67965, Start Num: 15
Candidate Starts for Emma1919_104:
(Start: 15 @67765 has 75 MA's), (24, 67903),

Gene: Enygma_201 Start: 101562, Stop: 101777, Start Num: 15
Candidate Starts for Enygma_201:

(5, 101478), (6, 101490), (8, 101529), (Start: 15 @101562 has 75 MA's),

Gene: Evy_180 Start: 99539, Stop: 99757, Start Num: 15
Candidate Starts for Evy_180:
(Start: 11 @99530 has 2 MA's), (Start: 13 @99536 has 2 MA's), (Start: 15 @99539 has 75 MA's),

Gene: Faust_100 Start: 68401, Stop: 68598, Start Num: 15
Candidate Starts for Faust_100:
(9, 68380), (Start: 15 @68401 has 75 MA's), (24, 68539),

Gene: Forrest_108 Start: 70074, Stop: 70274, Start Num: 15
Candidate Starts for Forrest_108:
(Start: 15 @70074 has 75 MA's), (24, 70212),

Gene: Francob_101 Start: 67940, Stop: 68137, Start Num: 15
Candidate Starts for Francob_101:
(Start: 15 @67940 has 75 MA's), (24, 68078),

Gene: Genie2_191 Start: 98438, Stop: 98653, Start Num: 15
Candidate Starts for Genie2_191:
(4, 98351), (6, 98366), (8, 98405), (Start: 15 @98438 has 75 MA's),

Gene: Gibbi_204 Start: 99218, Stop: 99433, Start Num: 15
Candidate Starts for Gibbi_204:
(5, 99134), (6, 99146), (8, 99185), (Start: 15 @99218 has 75 MA's),

Gene: Gilson_103 Start: 67727, Stop: 67927, Start Num: 15
Candidate Starts for Gilson_103:
(Start: 15 @67727 has 75 MA's), (22, 67811), (24, 67865),

Gene: HangryHippo_191 Start: 99062, Stop: 99280, Start Num: 15
Candidate Starts for HangryHippo_191:
(Start: 11 @99053 has 2 MA's), (Start: 15 @99062 has 75 MA's),

Gene: IchabodCrane_192 Start: 98733, Stop: 98948, Start Num: 15
Candidate Starts for IchabodCrane_192:
(5, 98649), (6, 98661), (8, 98700), (Start: 15 @98733 has 75 MA's),

Gene: Jada_103 Start: 68240, Stop: 68440, Start Num: 15
Candidate Starts for Jada_103:
(Start: 15 @68240 has 75 MA's), (24, 68378),

Gene: Jay2Jay_193 Start: 100038, Stop: 100259, Start Num: 13
Candidate Starts for Jay2Jay_193:
(Start: 11 @100032 has 2 MA's), (Start: 13 @100038 has 2 MA's), (Start: 15 @100041 has 75 MA's),

Gene: JimJam_203 Start: 100654, Stop: 100869, Start Num: 15
Candidate Starts for JimJam_203:
(5, 100570), (6, 100582), (8, 100621), (Start: 15 @100654 has 75 MA's),

Gene: Jollison_199 Start: 98864, Stop: 99079, Start Num: 15
Candidate Starts for Jollison_199:
(5, 98780), (6, 98792), (8, 98831), (Start: 15 @98864 has 75 MA's),

Gene: Karimac_196 Start: 99058, Stop: 99273, Start Num: 15
Candidate Starts for Karimac_196:
(5, 98974), (6, 98986), (8, 99025), (Start: 15 @99058 has 75 MA's),

Gene: Karp_99 Start: 68271, Stop: 68474, Start Num: 15
Candidate Starts for Karp_99:
(12, 68265), (Start: 15 @68271 has 75 MA's),

Gene: Kenrey_104 Start: 67956, Stop: 68156, Start Num: 14
Candidate Starts for Kenrey_104:
(1, 67842), (2, 67848), (3, 67869), (Start: 14 @67956 has 2 MA's), (24, 68094),

Gene: KentuckyRacer_207 Start: 100569, Stop: 100784, Start Num: 15
Candidate Starts for KentuckyRacer_207:
(5, 100485), (6, 100497), (8, 100536), (Start: 15 @100569 has 75 MA's),

Gene: Larnav_197 Start: 99682, Stop: 99900, Start Num: 15
Candidate Starts for Larnav_197:
(Start: 11 @99673 has 2 MA's), (Start: 15 @99682 has 75 MA's),

Gene: Leo04_189 Start: 100073, Stop: 100291, Start Num: 15
Candidate Starts for Leo04_189:
(Start: 11 @100064 has 2 MA's), (Start: 15 @100073 has 75 MA's),

Gene: Liandry_186 Start: 98564, Stop: 98782, Start Num: 15
Candidate Starts for Liandry_186:
(Start: 11 @98552 has 2 MA's), (Start: 15 @98564 has 75 MA's),

Gene: LilMartin_187 Start: 98167, Stop: 98385, Start Num: 15
Candidate Starts for LilMartin_187:
(10, 98152), (Start: 15 @98167 has 75 MA's),

Gene: Limpid_95 Start: 66744, Stop: 66947, Start Num: 15
Candidate Starts for Limpid_95:
(9, 66723), (Start: 15 @66744 has 75 MA's), (24, 66882),

Gene: LukeCage_197 Start: 100163, Stop: 100378, Start Num: 15
Candidate Starts for LukeCage_197:
(6, 100091), (8, 100130), (Start: 15 @100163 has 75 MA's),

Gene: Lululemon_190 Start: 98443, Stop: 98661, Start Num: 15
Candidate Starts for Lululemon_190:
(Start: 11 @98434 has 2 MA's), (Start: 15 @98443 has 75 MA's),

Gene: MeganTheeKilla_101 Start: 67084, Stop: 67284, Start Num: 15
Candidate Starts for MeganTheeKilla_101:
(Start: 15 @67084 has 75 MA's), (24, 67222),

Gene: Mildred21_196 Start: 97684, Stop: 97902, Start Num: 15
Candidate Starts for Mildred21_196:
(Start: 15 @97684 has 75 MA's), (21, 97774),

Gene: MindFlayer_189 Start: 98249, Stop: 98464, Start Num: 15
Candidate Starts for MindFlayer_189:
(5, 98165), (6, 98177), (8, 98216), (Start: 15 @98249 has 75 MA's),

Gene: Moab_103 Start: 70248, Stop: 70445, Start Num: 15
Candidate Starts for Moab_103:
(Start: 15 @70248 has 75 MA's), (22, 70332),

Gene: Mugiwara_204 Start: 100391, Stop: 100606, Start Num: 15
Candidate Starts for Mugiwara_204:
(4, 100304), (6, 100319), (8, 100358), (Start: 15 @100391 has 75 MA's), (20, 100466),

Gene: MulchMansion_190 Start: 99547, Stop: 99765, Start Num: 15
Candidate Starts for MulchMansion_190:
(10, 99532), (Start: 15 @99547 has 75 MA's),

Gene: Muntaha_94 Start: 67161, Stop: 67370, Start Num: 15
Candidate Starts for Muntaha_94:
(12, 67155), (Start: 15 @67161 has 75 MA's), (17, 67215), (18, 67227),

Gene: Navo_190 Start: 97965, Stop: 98183, Start Num: 15
Candidate Starts for Navo_190:
(Start: 11 @97953 has 2 MA's), (Start: 15 @97965 has 75 MA's),

Gene: NootNoot_183 Start: 97353, Stop: 97571, Start Num: 15
Candidate Starts for NootNoot_183:
(Start: 11 @97341 has 2 MA's), (Start: 15 @97353 has 75 MA's),

Gene: PacManQ_191 Start: 98443, Stop: 98661, Start Num: 15
Candidate Starts for PacManQ_191:
(Start: 11 @98434 has 2 MA's), (Start: 15 @98443 has 75 MA's),

Gene: Paradiddles_180 Start: 100166, Stop: 100384, Start Num: 15
Candidate Starts for Paradiddles_180:
(Start: 11 @100154 has 2 MA's), (Start: 15 @100166 has 75 MA's),

Gene: Patelgo_102 Start: 69334, Stop: 69531, Start Num: 15
Candidate Starts for Patelgo_102:
(Start: 15 @69334 has 75 MA's), (22, 69418),

Gene: Peebs_186 Start: 99346, Stop: 99573, Start Num: 11
Candidate Starts for Peebs_186:
(Start: 11 @99346 has 2 MA's), (Start: 15 @99355 has 75 MA's),

Gene: Pepperwood_187 Start: 99313, Stop: 99531, Start Num: 15
Candidate Starts for Pepperwood_187:
(Start: 11 @99304 has 2 MA's), (Start: 15 @99313 has 75 MA's),

Gene: Persimmon_189 Start: 98160, Stop: 98378, Start Num: 15
Candidate Starts for Persimmon_189:
(Start: 11 @98148 has 2 MA's), (Start: 15 @98160 has 75 MA's),

Gene: Phredrick_102 Start: 67056, Stop: 67256, Start Num: 14

Candidate Starts for Phredrick_102:
(1, 66942), (2, 66948), (3, 66969), (Start: 14 @67056 has 2 MA's), (24, 67194),

Gene: PinkiePie_186 Start: 98564, Stop: 98782, Start Num: 15
Candidate Starts for PinkiePie_186:
(Start: 11 @98552 has 2 MA's), (Start: 15 @98564 has 75 MA's),

Gene: PumpkinSpice_198 Start: 99470, Stop: 99685, Start Num: 15
Candidate Starts for PumpkinSpice_198:
(5, 99386), (6, 99398), (8, 99437), (Start: 15 @99470 has 75 MA's),

Gene: Quaran19_196 Start: 98911, Stop: 99126, Start Num: 15
Candidate Starts for Quaran19_196:
(5, 98827), (6, 98839), (8, 98878), (Start: 15 @98911 has 75 MA's),

Gene: SaltySpitoon_195 Start: 98453, Stop: 98668, Start Num: 15
Candidate Starts for SaltySpitoon_195:
(5, 98369), (6, 98381), (8, 98420), (Start: 15 @98453 has 75 MA's),

Gene: Samisti12_190 Start: 100769, Stop: 100987, Start Num: 15
Candidate Starts for Samisti12_190:
(Start: 11 @100760 has 2 MA's), (Start: 15 @100769 has 75 MA's),

Gene: SeresaTree_100 Start: 67783, Stop: 67980, Start Num: 15
Candidate Starts for SeresaTree_100:
(9, 67762), (Start: 15 @67783 has 75 MA's), (24, 67921),

Gene: Sham_96 Start: 67973, Stop: 68173, Start Num: 15
Candidate Starts for Sham_96:
(9, 67952), (Start: 15 @67973 has 75 MA's), (24, 68111),

Gene: Sollertia_192 Start: 98438, Stop: 98653, Start Num: 15
Candidate Starts for Sollertia_192:
(4, 98351), (6, 98366), (8, 98405), (Start: 15 @98438 has 75 MA's),

Gene: SparkleGoddess_101 Start: 68600, Stop: 68803, Start Num: 15
Candidate Starts for SparkleGoddess_101:
(12, 68594), (Start: 15 @68600 has 75 MA's),

Gene: Spelly_199 Start: 98382, Stop: 98597, Start Num: 15
Candidate Starts for Spelly_199:
(5, 98298), (6, 98310), (8, 98349), (Start: 15 @98382 has 75 MA's),

Gene: Spilled_202 Start: 99586, Stop: 99801, Start Num: 15
Candidate Starts for Spilled_202:
(5, 99502), (6, 99514), (8, 99553), (Start: 15 @99586 has 75 MA's),

Gene: Squillium_189 Start: 98566, Stop: 98784, Start Num: 15
Candidate Starts for Squillium_189:
(Start: 11 @98554 has 2 MA's), (Start: 15 @98566 has 75 MA's),

Gene: Stanimal_191 Start: 98799, Stop: 99014, Start Num: 15
Candidate Starts for Stanimal_191:

(4, 98712), (6, 98727), (8, 98766), (Start: 15 @98799 has 75 MA's),

Gene: StarPlatinum_202 Start: 100852, Stop: 101067, Start Num: 15
Candidate Starts for StarPlatinum_202:
(6, 100780), (8, 100819), (Start: 15 @100852 has 75 MA's),

Gene: Starbow_194 Start: 98426, Stop: 98641, Start Num: 15
Candidate Starts for Starbow_194:
(5, 98342), (6, 98354), (8, 98393), (Start: 15 @98426 has 75 MA's),

Gene: Stigma_100 Start: 68608, Stop: 68811, Start Num: 15
Candidate Starts for Stigma_100:
(12, 68602), (Start: 15 @68608 has 75 MA's), (24, 68749),

Gene: Sushi23_188 Start: 100419, Stop: 100637, Start Num: 15
Candidate Starts for Sushi23_188:
(Start: 11 @100410 has 2 MA's), (Start: 15 @100419 has 75 MA's),

Gene: Targaryen_187 Start: 100570, Stop: 100788, Start Num: 15
Candidate Starts for Targaryen_187:
(7, 100498), (Start: 11 @100561 has 2 MA's), (Start: 13 @100567 has 2 MA's), (Start: 15 @100570 has 75 MA's),

Gene: Teutsch_186 Start: 99867, Stop: 100085, Start Num: 15
Candidate Starts for Teutsch_186:
(Start: 11 @99858 has 2 MA's), (Start: 15 @99867 has 75 MA's),

Gene: TomSawyer_201 Start: 100897, Stop: 101112, Start Num: 15
Candidate Starts for TomSawyer_201:
(5, 100813), (6, 100825), (8, 100864), (Start: 15 @100897 has 75 MA's),

Gene: Tomas_191 Start: 98725, Stop: 98940, Start Num: 15
Candidate Starts for Tomas_191:
(Start: 15 @98725 has 75 MA's),

Gene: Tribute_185 Start: 99884, Stop: 100102, Start Num: 15
Candidate Starts for Tribute_185:
(Start: 11 @99875 has 2 MA's), (Start: 15 @99884 has 75 MA's),

Gene: TunaTartare_99 Start: 69137, Stop: 69337, Start Num: 15
Candidate Starts for TunaTartare_99:
(9, 69116), (Start: 15 @69137 has 75 MA's), (24, 69275),

Gene: Wakanda_92 Start: 67003, Stop: 67212, Start Num: 15
Candidate Starts for Wakanda_92:
(12, 66997), (Start: 15 @67003 has 75 MA's), (17, 67057), (18, 67069),

Gene: Warpy_191 Start: 99479, Stop: 99700, Start Num: 13
Candidate Starts for Warpy_191:
(Start: 11 @99473 has 2 MA's), (Start: 13 @99479 has 2 MA's), (Start: 15 @99482 has 75 MA's),

Gene: Watermoore_186 Start: 100281, Stop: 100499, Start Num: 15
Candidate Starts for Watermoore_186:

(Start: 11 @100269 has 2 MA's), (Start: 15 @100281 has 75 MA's),

Gene: WhereRU_193 Start: 98912, Stop: 99130, Start Num: 15
Candidate Starts for WhereRU_193:
(Start: 11 @98900 has 2 MA's), (Start: 15 @98912 has 75 MA's),

Gene: Wipeout_188 Start: 99849, Stop: 100064, Start Num: 15
Candidate Starts for Wipeout_188:
(5, 99765), (6, 99777), (8, 99816), (Start: 15 @99849 has 75 MA's),

Gene: Wofford_195 Start: 101791, Stop: 102006, Start Num: 15
Candidate Starts for Wofford_195:
(6, 101719), (8, 101758), (Start: 15 @101791 has 75 MA's),

Gene: Yaboi_195 Start: 98373, Stop: 98588, Start Num: 15
Candidate Starts for Yaboi_195:
(4, 98286), (6, 98301), (8, 98340), (Start: 15 @98373 has 75 MA's),