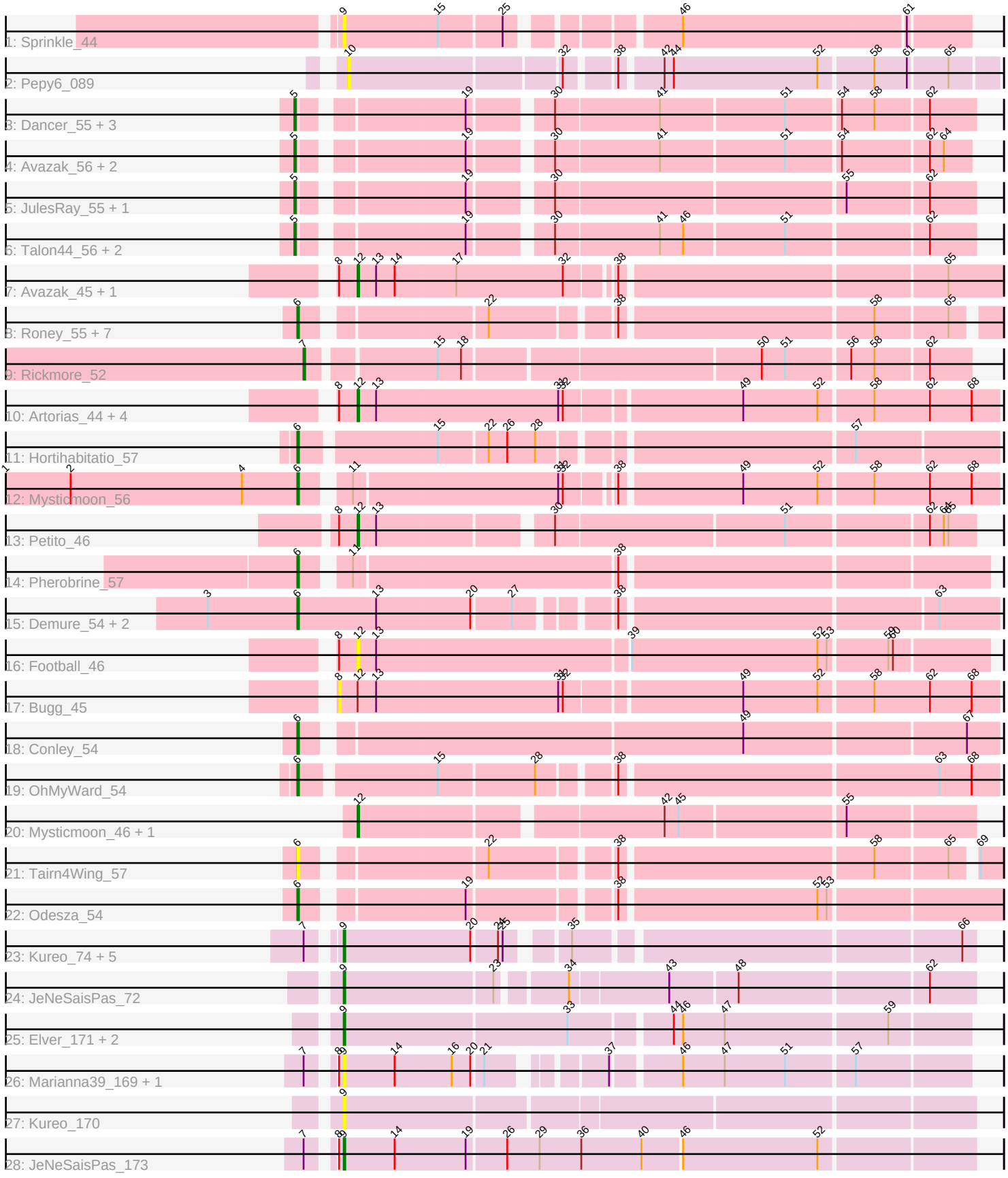
Pham 347654


1: Sprinkle_44
2: Pepy6_089
3: Dancer_55 + 3
4: Avazak_56 + 2
5: JulesRay_55 + 1
6: Talon44_56 + 2
7: Avazak_45 + 1
8: Roney_55 + 7
9: Rickmore_52
10: Artorias_44 + 4
11: Hortihabitatio_57
12: Mysticmoon_56
13: Petito_46
14: Pherobrine_57
15: Demure_54 + 2
16: Football_46
17: Bugg_45
18: Conley_54
19: OhMyWard_54
20: Mysticmoon_46 + 1
21: Tairn4Wing_57
22: Odesza_54
23: Kureo_74 + 5
24: JeNeSaisPas_72
25: Elver_171 + 2
26: Marianna39_169 + 1
27: Kureo_170
28: JeNeSaisPas_173

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 347654 Report

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

Pham number 347654 has 59 members, 16 are drafts.

Phages represented in each track:
• Track 1 : Sprinkle_44
• Track 2 : Pepy6_089
• Track 3 : Dancer_55, Bugg_57, Artorias_55, FortCran_55
• Track 4 : Avazak_56, Trufflozitus_56, Captrips_54
• Track 5 : JulesRay_55, ChickyNuggy_57
• Track 6 : Talon44_56, SweetCrkHerbs_56, Perkunas_56
• Track 7 : Avazak_45, Trufflozitus_45
• Track 8 : Roney_55, Kerry_54, Tanis_55, Capybara_55, Gravy_54, Gill_55, NoPickles_54, Magel_56
• Track 9 : Rickmore_52
• Track 10 : Artorias_44, FortCran_44, JulesRay_44, Dancer_44, ChickyNuggy_46
• Track 11 : Hortihabitatio_57
• Track 12 : Mysticmoon_56
• Track 13 : Petito_46
• Track 14 : Pherobrine_57
• Track 15 : Demure_54, Untouchable_57, Arataki_54
• Track 16 : Football_46
• Track 17 : Bugg_45
• Track 18 : Conley_54
• Track 19 : OhMyWard_54
• Track 20 : Mysticmoon_46, Pherobrine_47
• Track 21 : Tairn4Wing_57
• Track 22 : Odesza_54
• Track 23 : Kureo_74, Gandionco_72, Qui_75, Paella_75, Marianna39_74, Elver_73
• Track 24 : JeNeSaisPas_72
• Track 25 : Elver_171, Paella_172, Qui_172
• Track 26 : Marianna39_169, Gandionco_169
• Track 27 : Kureo_170
• Track 28 : JeNeSaisPas_173

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

The start number called the most often in the published annotations is 6, it was called in 16 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arataki_54, Capybara_55, Conley_54, Demure_54, Gill_55, Gravy_54, Hortihabitatio_57, Kerry_54, Magel_56, Mysticmoon_56, NoPickles_54, Odesza_54, OhMyWard_54, Pherobrine_57, Roney_55, Tairn4Wing_57, Tanis_55, Untouchable_57,

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

Genes that do not have the "Most Annotated" start:
• Artorias_44, Artorias_55, Avazak_45, Avazak_56, Bugg_45, Bugg_57, Captrips_54, ChickyNuggy_46, ChickyNuggy_57, Dancer_44, Dancer_55, Elver_171, Elver_73, Football_46, FortCran_44, FortCran_55, Gandionco_169, Gandionco_72, JeNeSaisPas_173, JeNeSaisPas_72, JulesRay_44, JulesRay_55, Kureo_170, Kureo_74, Marianna39_169, Marianna39_74, Mysticmoon_46, Paella_172, Paella_75, Pepy6_089, Perkunas_56, Petito_46, Pherobrine_47, Qui_172, Qui_75, Rickmore_52, Sprinkle_44, SweetCrkHerbs_56, Talon44_56, Trufflozitus_45, Trufflozitus_56,

Summary by start number:

Start 5:
• Found in 12 of 59 (20.3%) of genes in pham
• Manual Annotations of this start: 9 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Artorias_55 (DJ), Avazak_56 (DJ), Bugg_57 (DJ), Captrips_54 (DJ), ChickyNuggy_57 (DJ), Dancer_55 (DJ), FortCran_55 (DJ), JulesRay_55 (DJ), Perkunas_56 (DJ), SweetCrkHerbs_56 (DJ), Talon44_56 (DJ), Trufflozitus_56 (DJ),

Start 6:
• Found in 18 of 59 (30.5%) of genes in pham
• Manual Annotations of this start: 16 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arataki_54 (DJ), Capybara_55 (DJ), Conley_54 (DJ), Demure_54 (DJ), Gill_55 (DJ), Gravy_54 (DJ), Hortihabitatio_57 (DJ), Kerry_54 (DJ), Magel_56 (DJ), Mysticmoon_56 (DJ), NoPickles_54 (DJ), Odesza_54 (DJ), OhMyWard_54 (DJ), Pherobrine_57 (DJ), Roney_55 (DJ), Tairn4Wing_57 (DJ), Tanis_55 (DJ), Untouchable_57 (DJ),

Start 7:
• Found in 10 of 59 (16.9%) of genes in pham
• Manual Annotations of this start: 1 of 43
• Called 10.0% of time when present
• Phage (with cluster) where this start called: Rickmore_52 (DJ),

Start 8:
• Found in 13 of 59 (22.0%) of genes in pham
• No Manual Annotations of this start.
• Called 7.7% of time when present
• Phage (with cluster) where this start called: Bugg_45 (DJ),

Start 9:
• Found in 15 of 59 (25.4%) of genes in pham
• Manual Annotations of this start: 8 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Elver_171 (FK), Elver_73 (FK), Gandionco_169 (FK), Gandionco_72 (FK), JeNeSaisPas_173 (FK), JeNeSaisPas_72 (FK), Kureo_170 (FK), Kureo_74 (FK), Marianna39_169 (FK), Marianna39_74 (FK), Paella_172 (FK), Paella_75 (FK), Qui_172 (FK), Qui_75 (FK), Sprinkle_44 (AW),

Start 10:
• Found in 1 of 59 (1.7%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Pepy6_089 (CC),

Start 12:
• Found in 12 of 59 (20.3%) of genes in pham
• Manual Annotations of this start: 9 of 43
• Called 91.7% of time when present
• Phage (with cluster) where this start called: Artorias_44 (DJ), Avazak_45 (DJ), ChickyNuggy_46 (DJ), Dancer_44 (DJ), Football_46 (DJ), FortCran_44 (DJ), JulesRay_44 (DJ), Mysticmoon_46 (DJ), Petito_46 (DJ), Pherobrine_47 (DJ), Trufflozitus_45 (DJ),

Summary by clusters:

There are 4 clusters represented in this pham: CC, FK, DJ, AW,

Info for manual annotations of cluster DJ:
•Start number 5 was manually annotated 9 times for cluster DJ.
•Start number 6 was manually annotated 16 times for cluster DJ.
•Start number 7 was manually annotated 1 time for cluster DJ.
•Start number 12 was manually annotated 9 times for cluster DJ.

Info for manual annotations of cluster FK:
•Start number 9 was manually annotated 8 times for cluster FK.

Gene Information:

Gene: Arataki_54 Start: 37557, Stop: 37976, Start Num: 6
Candidate Starts for Arataki_54:
(3, 37500), (Start: 6 @37557 has 16 MA's), (13, 37608), (20, 37668), (27, 37692), (38, 37743), (63, 37938),

Gene: Artorias_44 Start: 31882, Stop: 32283, Start Num: 12
Candidate Starts for Artorias_44:
(8, 31870), (Start: 12 @31882 has 9 MA's), (13, 31894), (31, 32011), (32, 32014), (49, 32122), (52, 32170), (58, 32203), (62, 32239), (68, 32266),

Gene: Artorias_55 Start: 37739, Stop: 38137, Start Num: 5
Candidate Starts for Artorias_55:
(Start: 5 @37739 has 9 MA's), (19, 37832), (30, 37877), (41, 37943), (51, 38021), (54, 38054), (58, 38075), (62, 38108),

Gene: Avazak_56 Start: 38066, Stop: 38461, Start Num: 5
Candidate Starts for Avazak_56:
(Start: 5 @38066 has 9 MA's), (19, 38159), (30, 38204), (41, 38270), (51, 38348), (54, 38381), (62, 38435), (64, 38444),

Gene: Avazak_45 Start: 32247, Stop: 32642, Start Num: 12
Candidate Starts for Avazak_45:
(8, 32235), (Start: 12 @32247 has 9 MA's), (13, 32259), (14, 32271), (17, 32310), (32, 32379), (38, 32406), (65, 32607),

Gene: Bugg_57 Start: 37784, Stop: 38182, Start Num: 5
Candidate Starts for Bugg_57:
(Start: 5 @37784 has 9 MA's), (19, 37877), (30, 37922), (41, 37988), (51, 38066), (54, 38099), (58, 38120), (62, 38153),

Gene: Bugg_45 Start: 31915, Stop: 32328, Start Num: 8
Candidate Starts for Bugg_45:
(8, 31915), (Start: 12 @31927 has 9 MA's), (13, 31939), (31, 32056), (32, 32059), (49, 32167), (52, 32215), (58, 32248), (62, 32284), (68, 32311),

Gene: Captrips_54 Start: 37214, Stop: 37609, Start Num: 5
Candidate Starts for Captrips_54:
(Start: 5 @37214 has 9 MA's), (19, 37307), (30, 37352), (41, 37418), (51, 37496), (54, 37529), (62, 37583), (64, 37592),

Gene: Capybara_55 Start: 37547, Stop: 37951, Start Num: 6
Candidate Starts for Capybara_55:
(Start: 6 @37547 has 16 MA's), (22, 37652), (38, 37724), (58, 37880), (65, 37925),

Gene: ChickyNuggy_57 Start: 37823, Stop: 38221, Start Num: 5
Candidate Starts for ChickyNuggy_57:
(Start: 5 @37823 has 9 MA's), (19, 37916), (30, 37961), (55, 38141), (62, 38192),

Gene: ChickyNuggy_46 Start: 31989, Stop: 32390, Start Num: 12
Candidate Starts for ChickyNuggy_46:
(8, 31977), (Start: 12 @31989 has 9 MA's), (13, 32001), (31, 32118), (32, 32121), (49, 32229), (52, 32277), (58, 32310), (62, 32346), (68, 32373),

Gene: Conley_54 Start: 38363, Stop: 38791, Start Num: 6
Candidate Starts for Conley_54:
(Start: 6 @38363 has 16 MA's), (49, 38633), (67, 38771),

Gene: Dancer_55 Start: 37474, Stop: 37872, Start Num: 5
Candidate Starts for Dancer_55:
(Start: 5 @37474 has 9 MA's), (19, 37567), (30, 37612), (41, 37678), (51, 37756), (54, 37789), (58, 37810), (62, 37843),

Gene: Dancer_44 Start: 31620, Stop: 32021, Start Num: 12

Candidate Starts for Dancer_44:
(8, 31608), (Start: 12 @31620 has 9 MA's), (13, 31632), (31, 31749), (32, 31752), (49, 31860), (52, 31908), (58, 31941), (62, 31977), (68, 32004),

Gene: Demure_54 Start: 37557, Stop: 37976, Start Num: 6
Candidate Starts for Demure_54:
(3, 37500), (Start: 6 @37557 has 16 MA's), (13, 37608), (20, 37668), (27, 37692), (38, 37743), (63, 37938),

Gene: Elver_171 Start: 84470, Stop: 84856, Start Num: 9
Candidate Starts for Elver_171:
(Start: 9 @84470 has 8 MA's), (33, 84611), (44, 84671), (46, 84677), (47, 84704), (59, 84806),

Gene: Elver_73 Start: 45601, Stop: 45972, Start Num: 9
Candidate Starts for Elver_73:
(Start: 7 @45586 has 1 MA's), (Start: 9 @45601 has 8 MA's), (20, 45682), (24, 45697), (25, 45700), (35, 45730), (66, 45964),

Gene: Football_46 Start: 31626, Stop: 32021, Start Num: 12
Candidate Starts for Football_46:
(8, 31614), (Start: 12 @31626 has 9 MA's), (13, 31638), (39, 31797), (52, 31917), (53, 31923), (59, 31959), (60, 31962),

Gene: FortCran_44 Start: 31882, Stop: 32283, Start Num: 12
Candidate Starts for FortCran_44:
(8, 31870), (Start: 12 @31882 has 9 MA's), (13, 31894), (31, 32011), (32, 32014), (49, 32122), (52, 32170), (58, 32203), (62, 32239), (68, 32266),

Gene: FortCran_55 Start: 37739, Stop: 38137, Start Num: 5
Candidate Starts for FortCran_55:
(Start: 5 @37739 has 9 MA's), (19, 37832), (30, 37877), (41, 37943), (51, 38021), (54, 38054), (58, 38075), (62, 38108),

Gene: Gandionco_72 Start: 45499, Stop: 45870, Start Num: 9
Candidate Starts for Gandionco_72:
(Start: 7 @45484 has 1 MA's), (Start: 9 @45499 has 8 MA's), (20, 45580), (24, 45595), (25, 45598), (35, 45628), (66, 45862),

Gene: Gandionco_169 Start: 83689, Stop: 84054, Start Num: 9
Candidate Starts for Gandionco_169:
(Start: 7 @83674 has 1 MA's), (8, 83686), (Start: 9 @83689 has 8 MA's), (14, 83722), (16, 83758), (20, 83770), (21, 83776), (37, 83836), (46, 83875), (47, 83902), (51, 83941), (57, 83983),

Gene: Gill_55 Start: 37564, Stop: 37968, Start Num: 6
Candidate Starts for Gill_55:
(Start: 6 @37564 has 16 MA's), (22, 37669), (38, 37741), (58, 37897), (65, 37942),

Gene: Gravy_54 Start: 37237, Stop: 37641, Start Num: 6
Candidate Starts for Gravy_54:
(Start: 6 @37237 has 16 MA's), (22, 37342), (38, 37414), (58, 37570), (65, 37615),

Gene: Hortihabitatio_57 Start: 38657, Stop: 39073, Start Num: 6
Candidate Starts for Hortihabitatio_57:

(Start: 6 @38657 has 16 MA's), (15, 38738), (22, 38768), (26, 38780), (28, 38798), (57, 38984),

Gene: JeNeSaisPas_72 Start: 46135, Stop: 46515, Start Num: 9
Candidate Starts for JeNeSaisPas_72:
(Start: 9 @46135 has 8 MA's), (23, 46228), (34, 46267), (43, 46327), (48, 46369), (62, 46486),

Gene: JeNeSaisPas_173 Start: 84285, Stop: 84680, Start Num: 9
Candidate Starts for JeNeSaisPas_173:
(Start: 7 @84270 has 1 MA's), (8, 84282), (Start: 9 @84285 has 8 MA's), (14, 84318), (19, 84363), (26, 84387), (29, 84408), (36, 84435), (40, 84474), (46, 84498), (52, 84585),

Gene: JulesRay_55 Start: 37748, Stop: 38146, Start Num: 5
Candidate Starts for JulesRay_55:
(Start: 5 @37748 has 9 MA's), (19, 37841), (30, 37886), (55, 38066), (62, 38117),

Gene: JulesRay_44 Start: 31914, Stop: 32315, Start Num: 12
Candidate Starts for JulesRay_44:
(8, 31902), (Start: 12 @31914 has 9 MA's), (13, 31926), (31, 32043), (32, 32046), (49, 32154), (52, 32202), (58, 32235), (62, 32271), (68, 32298),

Gene: Kerry_54 Start: 37237, Stop: 37641, Start Num: 6
Candidate Starts for Kerry_54:
(Start: 6 @37237 has 16 MA's), (22, 37342), (38, 37414), (58, 37570), (65, 37615),

Gene: Kureo_74 Start: 44899, Stop: 45270, Start Num: 9
Candidate Starts for Kureo_74:
(Start: 7 @44884 has 1 MA's), (Start: 9 @44899 has 8 MA's), (20, 44980), (24, 44995), (25, 44998), (35, 45028), (66, 45262),

Gene: Kureo_170 Start: 83921, Stop: 84307, Start Num: 9
Candidate Starts for Kureo_170:
(Start: 9 @83921 has 8 MA's),

Gene: Magel_56 Start: 37480, Stop: 37884, Start Num: 6
Candidate Starts for Magel_56:
(Start: 6 @37480 has 16 MA's), (22, 37585), (38, 37657), (58, 37813), (65, 37858),

Gene: Marianna39_169 Start: 84294, Stop: 84659, Start Num: 9
Candidate Starts for Marianna39_169:
(Start: 7 @84279 has 1 MA's), (8, 84291), (Start: 9 @84294 has 8 MA's), (14, 84327), (16, 84363), (20, 84375), (21, 84381), (37, 84441), (46, 84480), (47, 84507), (51, 84546), (57, 84588),

Gene: Marianna39_74 Start: 46074, Stop: 46445, Start Num: 9
Candidate Starts for Marianna39_74:
(Start: 7 @46059 has 1 MA's), (Start: 9 @46074 has 8 MA's), (20, 46155), (24, 46170), (25, 46173), (35, 46203), (66, 46437),

Gene: Mysticmoon_56 Start: 39107, Stop: 39526, Start Num: 6
Candidate Starts for Mysticmoon_56:
(1, 38918), (2, 38960), (4, 39071), (Start: 6 @39107 has 16 MA's), (11, 39131), (31, 39260), (32, 39263), (38, 39290), (49, 39365), (52, 39413), (58, 39446), (62, 39482), (68, 39509),

Gene: Mysticmoon_46 Start: 34606, Stop: 34980, Start Num: 12

Candidate Starts for Mysticmoon_46:
(Start: 12 @34606 has 9 MA's), (42, 34789), (45, 34798), (55, 34900),

Gene: NoPickles_54 Start: 36902, Stop: 37306, Start Num: 6
Candidate Starts for NoPickles_54:
(Start: 6 @36902 has 16 MA's), (22, 37007), (38, 37079), (58, 37235), (65, 37280),

Gene: Odesza_54 Start: 37310, Stop: 37723, Start Num: 6
Candidate Starts for Odesza_54:
(Start: 6 @37310 has 16 MA's), (19, 37403), (38, 37487), (52, 37610), (53, 37616),

Gene: OhMyWard_54 Start: 39448, Stop: 39867, Start Num: 6
Candidate Starts for OhMyWard_54:
(Start: 6 @39448 has 16 MA's), (15, 39529), (28, 39589), (38, 39631), (63, 39829), (68, 39850),

Gene: Paella_172 Start: 85344, Stop: 85730, Start Num: 9
Candidate Starts for Paella_172:
(Start: 9 @85344 has 8 MA's), (33, 85485), (44, 85545), (46, 85551), (47, 85578), (59, 85680),

Gene: Paella_75 Start: 46194, Stop: 46565, Start Num: 9
Candidate Starts for Paella_75:
(Start: 7 @46179 has 1 MA's), (Start: 9 @46194 has 8 MA's), (20, 46275), (24, 46290), (25, 46293), (35, 46323), (66, 46557),

Gene: Pepy6_089 Start: 48054, Stop: 48440, Start Num: 10
Candidate Starts for Pepy6_089:
(10, 48054), (32, 48183), (38, 48210), (42, 48234), (44, 48240), (52, 48333), (58, 48366), (61, 48387), (65, 48411),

Gene: Perkunas_56 Start: 37604, Stop: 38002, Start Num: 5
Candidate Starts for Perkunas_56:
(Start: 5 @37604 has 9 MA's), (19, 37697), (30, 37742), (41, 37808), (46, 37823), (51, 37886), (62, 37973),

Gene: Petito_46 Start: 33391, Stop: 33765, Start Num: 12
Candidate Starts for Petito_46:
(8, 33379), (Start: 12 @33391 has 9 MA's), (13, 33403), (30, 33505), (51, 33649), (62, 33736), (64, 33745), (65, 33748),

Gene: Pherobrine_57 Start: 39398, Stop: 39814, Start Num: 6
Candidate Starts for Pherobrine_57:
(Start: 6 @39398 has 16 MA's), (11, 39422), (38, 39587),

Gene: Pherobrine_47 Start: 34910, Stop: 35284, Start Num: 12
Candidate Starts for Pherobrine_47:
(Start: 12 @34910 has 9 MA's), (42, 35093), (45, 35102), (55, 35204),

Gene: Qui_75 Start: 46194, Stop: 46565, Start Num: 9
Candidate Starts for Qui_75:
(Start: 7 @46179 has 1 MA's), (Start: 9 @46194 has 8 MA's), (20, 46275), (24, 46290), (25, 46293), (35, 46323), (66, 46557),

Gene: Qui_172 Start: 85342, Stop: 85728, Start Num: 9

Candidate Starts for Qui_172:
(Start: 9 @85342 has 8 MA's), (33, 85483), (44, 85543), (46, 85549), (47, 85576), (59, 85678),

Gene: Rickmore_52 Start: 36287, Stop: 36688, Start Num: 7
Candidate Starts for Rickmore_52:
(Start: 7 @36287 has 1 MA's), (15, 36362), (18, 36377), (50, 36560), (51, 36575), (56, 36614), (58, 36629), (62, 36662),

Gene: Roney_55 Start: 37590, Stop: 37994, Start Num: 6
Candidate Starts for Roney_55:
(Start: 6 @37590 has 16 MA's), (22, 37695), (38, 37767), (58, 37923), (65, 37968),

Gene: Sprinkle_44 Start: 32018, Stop: 32386, Start Num: 9
Candidate Starts for Sprinkle_44:
(Start: 9 @32018 has 8 MA's), (15, 32078), (25, 32117), (46, 32207), (61, 32348),

Gene: SweetCrkHerbs_56 Start: 37296, Stop: 37694, Start Num: 5
Candidate Starts for SweetCrkHerbs_56:
(Start: 5 @37296 has 9 MA's), (19, 37389), (30, 37434), (41, 37500), (46, 37515), (51, 37578), (62, 37665),

Gene: Tairn4Wing_57 Start: 37567, Stop: 37971, Start Num: 6
Candidate Starts for Tairn4Wing_57:
(Start: 6 @37567 has 16 MA's), (22, 37672), (38, 37744), (58, 37900), (65, 37945), (69, 37957),

Gene: Talon44_56 Start: 37638, Stop: 38036, Start Num: 5
Candidate Starts for Talon44_56:
(Start: 5 @37638 has 9 MA's), (19, 37731), (30, 37776), (41, 37842), (46, 37857), (51, 37920), (62, 38007),

Gene: Tanis_55 Start: 37410, Stop: 37814, Start Num: 6
Candidate Starts for Tanis_55:
(Start: 6 @37410 has 16 MA's), (22, 37515), (38, 37587), (58, 37743), (65, 37788),

Gene: Trufflozitus_56 Start: 38090, Stop: 38485, Start Num: 5
Candidate Starts for Trufflozitus_56:
(Start: 5 @38090 has 9 MA's), (19, 38183), (30, 38228), (41, 38294), (51, 38372), (54, 38405), (62, 38459), (64, 38468),

Gene: Trufflozitus_45 Start: 32271, Stop: 32666, Start Num: 12
Candidate Starts for Trufflozitus_45:
(8, 32259), (Start: 12 @32271 has 9 MA's), (13, 32283), (14, 32295), (17, 32334), (32, 32403), (38, 32430), (65, 32631),

Gene: Untouchable_57 Start: 38856, Stop: 39275, Start Num: 6
Candidate Starts for Untouchable_57:
(3, 38799), (Start: 6 @38856 has 16 MA's), (13, 38907), (20, 38967), (27, 38991), (38, 39042), (63, 39237),