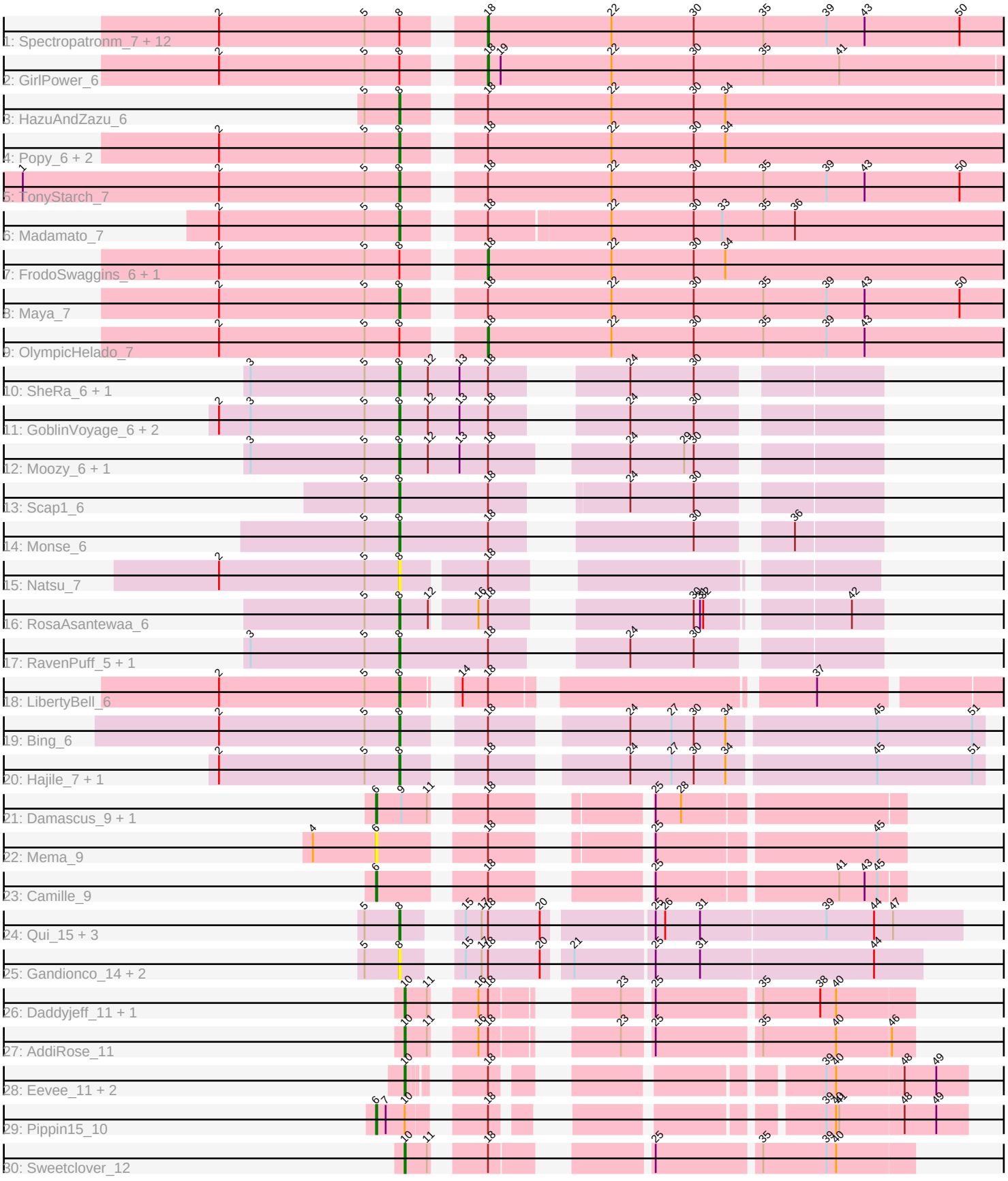
Pham 347647


1: Spectropatronm_7 + 12
2: GirlPower_6
3: HazuAndZazu_6
4: Popy_6 + 2
5: TonyStarch_7
6: Madamato_7
7: FrodoSwaggins_6 + 1
8: Maya_7
9: OlympicHelado_7
10: SheRa_6 + 1
11: GoblinVoyage_6 + 2
12: Moozy_6 + 1
13: Scap1_6
14: Monse_6
15: Natsu_7
16: RosaAsantewaa_6
17: RavenPuff_5 + 1
18: LibertyBell_6
19: Bing_6
20: Hajile_7 + 1
21: Damascus_9 + 1
22: Mema_9
23: Camille_9
24: Qui_15 + 3
25: Gandionco_14 + 2
26: Daddyjeff_11 + 1
27: AddiRose_11
28: Eevee_11 + 2
29: Pippin15_10
30: Sweetclover_12

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 347647 Report

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

Pham number 347647 has 60 members, 7 are drafts.

Phages represented in each track:
• Track 1 : Spectropatronm_7, TieDye_6, FidgetOrca_7, Esketit_7, CherryBlossom_7, TaidaOne_7, Namo_7, Hoshi_7, Jaylociraptor_7, IceWarrior_7, Meibysrarus_7, Rima_7, Indigenous_7
• Track 2 : GirlPower_6
• Track 3 : HazuAndZazu_6
• Track 4 : Popy_6, Espio_6, DrGrey_6
• Track 5 : TonyStarch_7
• Track 6 : Madamato_7
• Track 7 : FrodoSwaggins_6, Soshi_6
• Track 8 : Maya_7
• Track 9 : OlympicHelado_7
• Track 10 : SheRa_6, HotFries_5
• Track 11 : GoblinVoyage_6, Doxi13_6, Sangak_6
• Track 12 : Moozy_6, Annihilus_6
• Track 13 : Scap1_6
• Track 14 : Monse_6
• Track 15 : Natsu_7
• Track 16 : RosaAsantewaa_6
• Track 17 : RavenPuff_5, PherryCruz_5
• Track 18 : LibertyBell_6
• Track 19 : Bing_6
• Track 20 : Hajile_7, Wigberry_6
• Track 21 : Damascus_9, DizzyRudy_9
• Track 22 : Mema_9
• Track 23 : Camille_9
• Track 24 : Qui_15, JeNeSaisPas_14, Paella_15, Elver_15
• Track 25 : Gandionco_14, Kureo_16, Marianna39_15
• Track 26 : Daddyjeff_11, Serenabean_11
• Track 27 : AddiRose_11
• Track 28 : Eevee_11, JoyLin_11, Yotsuba_11
• Track 29 : Pippin15_10
• Track 30 : Sweetclover_12

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

The start number called the most often in the published annotations is 8, it was called in 25 of the 53 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Annihilus_6, Bing_6, Doxi13_6, DrGrey_6, Elver_15, Espio_6, Gandionco_14, GoblinVoyage_6, Hajile_7, HazuAndZazu_6, HotFries_5, JeNeSaisPas_14, Kureo_16, LibertyBell_6, Madamato_7, Marianna39_15, Maya_7, Monse_6, Moozy_6, Natsu_7, Paella_15, PherryCruz_5, Popy_6, Qui_15, RavenPuff_5, RosaAsantewaa_6, Sangak_6, Scap1_6, SheRa_6, TonyStarch_7, Wigberry_6,

Genes that have the "Most Annotated" start but do not call it:
• CherryBlossom_7, Esketit_7, FidgetOrca_7, FrodoSwaggins_6, GirlPower_6, Hoshi_7, IceWarrior_7, Indigenous_7, Jaylociraptor_7, Meibysrarus_7, Namo_7, OlympicHelado_7, Rima_7, Soshi_6, Spectropatronm_7, TaidaOne_7, TieDye_6,

Genes that do not have the "Most Annotated" start:
• AddiRose_11, Camille_9, Daddyjeff_11, Damascus_9, DizzyRudy_9, Eevee_11, JoyLin_11, Mema_9, Pippin15_10, Serenabean_11, Sweetclover_12, Yotsuba_11,

Summary by start number:

Start 6:
• Found in 5 of 60 (8.3%) of genes in pham
• Manual Annotations of this start: 4 of 53
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Camille_9 (EL), Damascus_9 (EL), DizzyRudy_9 (EL), Mema_9 (EL), Pippin15_10 (JA),

Start 8:
• Found in 48 of 60 (80.0%) of genes in pham
• Manual Annotations of this start: 25 of 53
• Called 64.6% of time when present
• Phage (with cluster) where this start called: Annihilus_6 (BI2), Bing_6 (BI5), Doxi13_6 (BI2), DrGrey_6 (BI1), Elver_15 (FK), Espio_6 (BI1), Gandionco_14 (FK), GoblinVoyage_6 (BI2), Hajile_7 (BI5), HazuAndZazu_6 (BI1), HotFries_5 (BI2), JeNeSaisPas_14 (FK), Kureo_16 (FK), LibertyBell_6 (BI3), Madamato_7 (BI1), Marianna39_15 (FK), Maya_7 (BI1), Monse_6 (BI2), Moozy_6 (BI2), Natsu_7 (BI2), Paella_15 (FK), PherryCruz_5 (BI2), Popy_6 (BI1), Qui_15 (FK), RavenPuff_5 (BI2), RosaAsantewaa_6 (BI2), Sangak_6 (BI2), Scap1_6 (BI2), SheRa_6 (BI2), TonyStarch_7 (BI1), Wigberry_6 (BI5),

Start 10:
• Found in 8 of 60 (13.3%) of genes in pham
• Manual Annotations of this start: 7 of 53
• Called 87.5% of time when present
• Phage (with cluster) where this start called: AddiRose_11 (JA), Daddyjeff_11 (JA), Eevee_11 (JA), JoyLin_11 (JA), Serenabean_11 (JA), Sweetclover_12 (JA), Yotsuba_11 (JA),

Start 18:
• Found in 60 of 60 (100.0%) of genes in pham
• Manual Annotations of this start: 17 of 53

• Called 28.3% of time when present
• Phage (with cluster) where this start called: CherryBlossom_7 (BI1), Esketit_7 (BI1), FidgetOrca_7 (BI1), FrodoSwaggins_6 (BI1), GirlPower_6 (BI1), Hoshi_7 (BI1), IceWarrior_7 (BI1), Indigenous_7 (BI1), Jaylociraptor_7 (BI1), Meibysrarus_7 (BI1), Namo_7 (BI1), OlympicHelado_7 (BI1), Rima_7 (BI1), Soshi_6 (BI1), Spectropatronm_7 (BI1), TaidaOne_7 (BI1), TieDye_6 (BI1),

Summary by clusters:

There are 7 clusters represented in this pham: EL, BI5, BI3, FK, BI2, JA, BI1,

Info for manual annotations of cluster BI1:
•Start number 8 was manually annotated 7 times for cluster BI1.
•Start number 18 was manually annotated 17 times for cluster BI1.

Info for manual annotations of cluster BI2:
•Start number 8 was manually annotated 11 times for cluster BI2.

Info for manual annotations of cluster BI3:
•Start number 8 was manually annotated 1 time for cluster BI3.

Info for manual annotations of cluster BI5:
•Start number 8 was manually annotated 2 times for cluster BI5.

Info for manual annotations of cluster EL:
•Start number 6 was manually annotated 3 times for cluster EL.

Info for manual annotations of cluster FK:
•Start number 8 was manually annotated 4 times for cluster FK.

Info for manual annotations of cluster JA:
•Start number 6 was manually annotated 1 time for cluster JA.
•Start number 10 was manually annotated 7 times for cluster JA.

Gene Information:

Gene: AddiRose_11 Start: 7020, Stop: 7418, Start Num: 10
Candidate Starts for AddiRose_11:
(Start: 10 @7020 has 7 MA's), (11, 7041), (16, 7068), (Start: 18 @7077 has 17 MA's), (23, 7161), (25, 7185), (35, 7278), (40, 7347), (46, 7398),

Gene: Annihilus_6 Start: 2251, Stop: 2646, Start Num: 8
Candidate Starts for Annihilus_6:
(3, 2110), (5, 2218), (Start: 8 @2251 has 25 MA's), (12, 2278), (13, 2308), (Start: 18 @2335 has 17 MA's), (24, 2434), (29, 2485), (30, 2494),

Gene: Bing_6 Start: 2300, Stop: 2794, Start Num: 8
Candidate Starts for Bing_6:
(2, 2129), (5, 2267), (Start: 8 @2300 has 25 MA's), (Start: 18 @2360 has 17 MA's), (24, 2468), (27, 2507), (30, 2528), (34, 2558), (45, 2693), (51, 2783),

Gene: Camille_9 Start: 3443, Stop: 3859, Start Num: 6
Candidate Starts for Camille_9:
(Start: 6 @3443 has 4 MA's), (Start: 18 @3527 has 17 MA's), (25, 3638), (41, 3800), (43, 3824), (45, 3836),

Gene: CherryBlossom_7 Start: 2641, Stop: 3147, Start Num: 18
Candidate Starts for CherryBlossom_7:
(2, 2410), (5, 2548), (Start: 8 @2581 has 25 MA's), (Start: 18 @2641 has 17 MA's), (22, 2758), (30, 2836), (35, 2902), (39, 2962), (43, 2998), (50, 3088),

Gene: Daddyjeff_11 Start: 7019, Stop: 7417, Start Num: 10
Candidate Starts for Daddyjeff_11:
(Start: 10 @7019 has 7 MA's), (11, 7040), (16, 7067), (Start: 18 @7076 has 17 MA's), (23, 7160), (25, 7184), (35, 7277), (38, 7331), (40, 7346),

Gene: Damascus_9 Start: 3418, Stop: 3831, Start Num: 6
Candidate Starts for Damascus_9:
(Start: 6 @3418 has 4 MA's), (9, 3442), (11, 3466), (Start: 18 @3502 has 17 MA's), (25, 3610), (28, 3634),

Gene: DizzyRudy_9 Start: 3416, Stop: 3829, Start Num: 6
Candidate Starts for DizzyRudy_9:
(Start: 6 @3416 has 4 MA's), (9, 3440), (11, 3464), (Start: 18 @3500 has 17 MA's), (25, 3608), (28, 3632),

Gene: Doxi13_6 Start: 2252, Stop: 2635, Start Num: 8
Candidate Starts for Doxi13_6:
(2, 2081), (3, 2111), (5, 2219), (Start: 8 @2252 has 25 MA's), (12, 2279), (13, 2309), (Start: 18 @2336 has 17 MA's), (24, 2423), (30, 2483),

Gene: DrGrey_6 Start: 2286, Stop: 2834, Start Num: 8
Candidate Starts for DrGrey_6:
(2, 2115), (5, 2253), (Start: 8 @2286 has 25 MA's), (Start: 18 @2346 has 17 MA's), (22, 2463), (30, 2541), (34, 2571),

Gene: Eevee_11 Start: 8231, Stop: 8647, Start Num: 10
Candidate Starts for Eevee_11:
(Start: 10 @8231 has 7 MA's), (Start: 18 @8279 has 17 MA's), (39, 8516), (40, 8525), (48, 8588), (49, 8618),

Gene: Elver_15 Start: 7089, Stop: 7571, Start Num: 8
Candidate Starts for Elver_15:
(5, 7056), (Start: 8 @7089 has 25 MA's), (15, 7122), (17, 7137), (Start: 18 @7143 has 17 MA's), (20, 7191), (25, 7284), (26, 7293), (31, 7326), (39, 7443), (44, 7488), (47, 7506),

Gene: Esketit_7 Start: 2624, Stop: 3130, Start Num: 18
Candidate Starts for Esketit_7:
(2, 2393), (5, 2531), (Start: 8 @2564 has 25 MA's), (Start: 18 @2624 has 17 MA's), (22, 2741), (30, 2819), (35, 2885), (39, 2945), (43, 2981), (50, 3071),

Gene: Espio_6 Start: 2286, Stop: 2834, Start Num: 8
Candidate Starts for Espio_6:

(2, 2115), (5, 2253), (Start: 8 @2286 has 25 MA's), (Start: 18 @2346 has 17 MA's), (22, 2463), (30, 2541), (34, 2571),

Gene: FidgetOrca_7 Start: 2624, Stop: 3130, Start Num: 18
Candidate Starts for FidgetOrca_7:
(2, 2393), (5, 2531), (Start: 8 @2564 has 25 MA's), (Start: 18 @2624 has 17 MA's), (22, 2741), (30, 2819), (35, 2885), (39, 2945), (43, 2981), (50, 3071),

Gene: FrodoSwaggins_6 Start: 2346, Stop: 2834, Start Num: 18
Candidate Starts for FrodoSwaggins_6:
(2, 2115), (5, 2253), (Start: 8 @2286 has 25 MA's), (Start: 18 @2346 has 17 MA's), (22, 2463), (30, 2541), (34, 2571),

Gene: Gandionco_14 Start: 7088, Stop: 7531, Start Num: 8
Candidate Starts for Gandionco_14:
(5, 7055), (Start: 8 @7088 has 25 MA's), (15, 7121), (17, 7136), (Start: 18 @7142 has 17 MA's), (20, 7190), (21, 7211), (25, 7283), (31, 7325), (44, 7487),

Gene: GirlPower_6 Start: 3196, Stop: 3699, Start Num: 18
Candidate Starts for GirlPower_6:
(2, 2965), (5, 3103), (Start: 8 @3136 has 25 MA's), (Start: 18 @3196 has 17 MA's), (19, 3208), (22, 3313), (30, 3391), (35, 3457), (41, 3529),

Gene: GoblinVoyage_6 Start: 2252, Stop: 2635, Start Num: 8
Candidate Starts for GoblinVoyage_6:
(2, 2081), (3, 2111), (5, 2219), (Start: 8 @2252 has 25 MA's), (12, 2279), (13, 2309), (Start: 18 @2336 has 17 MA's), (24, 2423), (30, 2483),

Gene: Hajile_7 Start: 2296, Stop: 2790, Start Num: 8
Candidate Starts for Hajile_7:
(2, 2125), (5, 2263), (Start: 8 @2296 has 25 MA's), (Start: 18 @2356 has 17 MA's), (24, 2464), (27, 2503), (30, 2524), (34, 2554), (45, 2689), (51, 2779),

Gene: HazuAndZazu_6 Start: 2286, Stop: 2834, Start Num: 8
Candidate Starts for HazuAndZazu_6:
(5, 2253), (Start: 8 @2286 has 25 MA's), (Start: 18 @2346 has 17 MA's), (22, 2463), (30, 2541), (34, 2571),

Gene: Hoshi_7 Start: 2624, Stop: 3130, Start Num: 18
Candidate Starts for Hoshi_7:
(2, 2393), (5, 2531), (Start: 8 @2564 has 25 MA's), (Start: 18 @2624 has 17 MA's), (22, 2741), (30, 2819), (35, 2885), (39, 2945), (43, 2981), (50, 3071),

Gene: HotFries_5 Start: 2251, Stop: 2634, Start Num: 8
Candidate Starts for HotFries_5:
(3, 2110), (5, 2218), (Start: 8 @2251 has 25 MA's), (12, 2278), (13, 2308), (Start: 18 @2335 has 17 MA's), (24, 2422), (30, 2482),

Gene: IceWarrior_7 Start: 2624, Stop: 3130, Start Num: 18
Candidate Starts for IceWarrior_7:
(2, 2393), (5, 2531), (Start: 8 @2564 has 25 MA's), (Start: 18 @2624 has 17 MA's), (22, 2741), (30, 2819), (35, 2885), (39, 2945), (43, 2981), (50, 3071),

Gene: Indigenous_7 Start: 2624, Stop: 3130, Start Num: 18
Candidate Starts for Indigenous_7:
(2, 2393), (5, 2531), (Start: 8 @2564 has 25 MA's), (Start: 18 @2624 has 17 MA's), (22, 2741), (30, 2819), (35, 2885), (39, 2945), (43, 2981), (50, 3071),

Gene: Jaylociraptor_7 Start: 2624, Stop: 3130, Start Num: 18
Candidate Starts for Jaylociraptor_7:
(2, 2393), (5, 2531), (Start: 8 @2564 has 25 MA's), (Start: 18 @2624 has 17 MA's), (22, 2741), (30, 2819), (35, 2885), (39, 2945), (43, 2981), (50, 3071),

Gene: JeNeSaisPas_14 Start: 7621, Stop: 8103, Start Num: 8
Candidate Starts for JeNeSaisPas_14:
(5, 7588), (Start: 8 @7621 has 25 MA's), (15, 7654), (17, 7669), (Start: 18 @7675 has 17 MA's), (20, 7723), (25, 7816), (26, 7825), (31, 7858), (39, 7975), (44, 8020), (47, 8038),

Gene: JoyLin_11 Start: 8231, Stop: 8647, Start Num: 10
Candidate Starts for JoyLin_11:
(Start: 10 @8231 has 7 MA's), (Start: 18 @8279 has 17 MA's), (39, 8516), (40, 8525), (48, 8588), (49, 8618),

Gene: Kureo_16 Start: 7492, Stop: 7935, Start Num: 8
Candidate Starts for Kureo_16:
(5, 7459), (Start: 8 @7492 has 25 MA's), (15, 7525), (17, 7540), (Start: 18 @7546 has 17 MA's), (20, 7594), (21, 7615), (25, 7687), (31, 7729), (44, 7891),

Gene: LibertyBell_6 Start: 2263, Stop: 2757, Start Num: 8
Candidate Starts for LibertyBell_6:
(2, 2092), (5, 2230), (Start: 8 @2263 has 25 MA's), (14, 2296), (Start: 18 @2320 has 17 MA's), (37, 2587),

Gene: Madamato_7 Start: 2562, Stop: 3104, Start Num: 8
Candidate Starts for Madamato_7:
(2, 2391), (5, 2529), (Start: 8 @2562 has 25 MA's), (Start: 18 @2622 has 17 MA's), (22, 2733), (30, 2811), (33, 2838), (35, 2877), (36, 2907),

Gene: Marianna39_15 Start: 7088, Stop: 7531, Start Num: 8
Candidate Starts for Marianna39_15:
(5, 7055), (Start: 8 @7088 has 25 MA's), (15, 7121), (17, 7136), (Start: 18 @7142 has 17 MA's), (20, 7190), (21, 7211), (25, 7283), (31, 7325), (44, 7487),

Gene: Maya_7 Start: 2572, Stop: 3138, Start Num: 8
Candidate Starts for Maya_7:
(2, 2401), (5, 2539), (Start: 8 @2572 has 25 MA's), (Start: 18 @2632 has 17 MA's), (22, 2749), (30, 2827), (35, 2893), (39, 2953), (43, 2989), (50, 3079),

Gene: Meibysrarus_7 Start: 2624, Stop: 3130, Start Num: 18
Candidate Starts for Meibysrarus_7:
(2, 2393), (5, 2531), (Start: 8 @2564 has 25 MA's), (Start: 18 @2624 has 17 MA's), (22, 2741), (30, 2819), (35, 2885), (39, 2945), (43, 2981), (50, 3071),

Gene: Mema_9 Start: 4320, Stop: 4736, Start Num: 6
Candidate Starts for Mema_9:
(4, 4260), (Start: 6 @4320 has 4 MA's), (Start: 18 @4404 has 17 MA's), (25, 4512), (45, 4710),

Gene: Monse_6 Start: 2308, Stop: 2691, Start Num: 8
Candidate Starts for Monse_6:
(5, 2275), (Start: 8 @2308 has 25 MA's), (Start: 18 @2392 has 17 MA's), (30, 2539), (36, 2611),

Gene: Moozy_6 Start: 2253, Stop: 2648, Start Num: 8
Candidate Starts for Moozy_6:
(3, 2112), (5, 2220), (Start: 8 @2253 has 25 MA's), (12, 2280), (13, 2310), (Start: 18 @2337 has 17 MA's), (24, 2436), (29, 2487), (30, 2496),

Gene: Namo_7 Start: 2624, Stop: 3130, Start Num: 18
Candidate Starts for Namo_7:
(2, 2393), (5, 2531), (Start: 8 @2564 has 25 MA's), (Start: 18 @2624 has 17 MA's), (22, 2741), (30, 2819), (35, 2885), (39, 2945), (43, 2981), (50, 3071),

Gene: Natsu_7 Start: 2504, Stop: 2875, Start Num: 8
Candidate Starts for Natsu_7:
(2, 2333), (5, 2471), (Start: 8 @2504 has 25 MA's), (Start: 18 @2576 has 17 MA's),

Gene: OlympicHelado_7 Start: 2624, Stop: 3130, Start Num: 18
Candidate Starts for OlympicHelado_7:
(2, 2393), (5, 2531), (Start: 8 @2564 has 25 MA's), (Start: 18 @2624 has 17 MA's), (22, 2741), (30, 2819), (35, 2885), (39, 2945), (43, 2981),

Gene: Paella_15 Start: 7088, Stop: 7570, Start Num: 8
Candidate Starts for Paella_15:
(5, 7055), (Start: 8 @7088 has 25 MA's), (15, 7121), (17, 7136), (Start: 18 @7142 has 17 MA's), (20, 7190), (25, 7283), (26, 7292), (31, 7325), (39, 7442), (44, 7487), (47, 7505),

Gene: PherryCruz_5 Start: 2251, Stop: 2634, Start Num: 8
Candidate Starts for PherryCruz_5:
(3, 2110), (5, 2218), (Start: 8 @2251 has 25 MA's), (Start: 18 @2335 has 17 MA's), (24, 2422), (30, 2482),

Gene: Pippin15_10 Start: 6517, Stop: 6963, Start Num: 6
Candidate Starts for Pippin15_10:
(Start: 6 @6517 has 4 MA's), (7, 6526), (Start: 10 @6544 has 7 MA's), (Start: 18 @6598 has 17 MA's), (39, 6832), (40, 6841), (41, 6844), (48, 6904), (49, 6934),

Gene: Popy_6 Start: 2286, Stop: 2834, Start Num: 8
Candidate Starts for Popy_6:
(2, 2115), (5, 2253), (Start: 8 @2286 has 25 MA's), (Start: 18 @2346 has 17 MA's), (22, 2463), (30, 2541), (34, 2571),

Gene: Qui_15 Start: 7088, Stop: 7570, Start Num: 8
Candidate Starts for Qui_15:
(5, 7055), (Start: 8 @7088 has 25 MA's), (15, 7121), (17, 7136), (Start: 18 @7142 has 17 MA's), (20, 7190), (25, 7283), (26, 7292), (31, 7325), (39, 7442), (44, 7487), (47, 7505),

Gene: RavenPuff_5 Start: 2251, Stop: 2634, Start Num: 8
Candidate Starts for RavenPuff_5:
(3, 2110), (5, 2218), (Start: 8 @2251 has 25 MA's), (Start: 18 @2335 has 17 MA's), (24, 2422), (30, 2482),

Gene: Rima_7 Start: 2624, Stop: 3130, Start Num: 18
Candidate Starts for Rima_7:
(2, 2393), (5, 2531), (Start: 8 @2564 has 25 MA's), (Start: 18 @2624 has 17 MA's), (22, 2741), (30, 2819), (35, 2885), (39, 2945), (43, 2981), (50, 3071),

Gene: RosaAsantewaa_6 Start: 2224, Stop: 2601, Start Num: 8
Candidate Starts for RosaAsantewaa_6:
(5, 2191), (Start: 8 @2224 has 25 MA's), (12, 2251), (16, 2287), (Start: 18 @2296 has 17 MA's), (30, 2446), (31, 2452), (32, 2455), (42, 2572),

Gene: Sangak_6 Start: 2253, Stop: 2636, Start Num: 8
Candidate Starts for Sangak_6:
(2, 2082), (3, 2112), (5, 2220), (Start: 8 @2253 has 25 MA's), (12, 2280), (13, 2310), (Start: 18 @2337 has 17 MA's), (24, 2424), (30, 2484),

Gene: Scap1_6 Start: 2256, Stop: 2636, Start Num: 8
Candidate Starts for Scap1_6:
(5, 2223), (Start: 8 @2256 has 25 MA's), (Start: 18 @2340 has 17 MA's), (24, 2424), (30, 2484),

Gene: Serenabean_11 Start: 7019, Stop: 7417, Start Num: 10
Candidate Starts for Serenabean_11:
(Start: 10 @7019 has 7 MA's), (11, 7040), (16, 7067), (Start: 18 @7076 has 17 MA's), (23, 7160), (25, 7184), (35, 7277), (38, 7331), (40, 7346),

Gene: SheRa_6 Start: 2251, Stop: 2634, Start Num: 8
Candidate Starts for SheRa_6:
(3, 2110), (5, 2218), (Start: 8 @2251 has 25 MA's), (12, 2278), (13, 2308), (Start: 18 @2335 has 17 MA's), (24, 2422), (30, 2482),

Gene: Soshi_6 Start: 2346, Stop: 2834, Start Num: 18
Candidate Starts for Soshi_6:
(2, 2115), (5, 2253), (Start: 8 @2286 has 25 MA's), (Start: 18 @2346 has 17 MA's), (22, 2463), (30, 2541), (34, 2571),

Gene: Spectropatronm_7 Start: 2624, Stop: 3130, Start Num: 18
Candidate Starts for Spectropatronm_7:
(2, 2393), (5, 2531), (Start: 8 @2564 has 25 MA's), (Start: 18 @2624 has 17 MA's), (22, 2741), (30, 2819), (35, 2885), (39, 2945), (43, 2981), (50, 3071),

Gene: Sweetclover_12 Start: 6954, Stop: 7355, Start Num: 10
Candidate Starts for Sweetclover_12:
(Start: 10 @6954 has 7 MA's), (11, 6975), (Start: 18 @7011 has 17 MA's), (25, 7122), (35, 7215), (39, 7275), (40, 7284),

Gene: TaidaOne_7 Start: 2624, Stop: 3130, Start Num: 18
Candidate Starts for TaidaOne_7:
(2, 2393), (5, 2531), (Start: 8 @2564 has 25 MA's), (Start: 18 @2624 has 17 MA's), (22, 2741), (30, 2819), (35, 2885), (39, 2945), (43, 2981), (50, 3071),

Gene: TieDye_6 Start: 2334, Stop: 2840, Start Num: 18
Candidate Starts for TieDye_6:

(2, 2103), (5, 2241), (Start: 8 @2274 has 25 MA's), (Start: 18 @2334 has 17 MA's), (22, 2451), (30, 2529), (35, 2595), (39, 2655), (43, 2691), (50, 2781),

Gene: TonyStarch_7 Start: 2564, Stop: 3130, Start Num: 8
Candidate Starts for TonyStarch_7:
(1, 2207), (2, 2393), (5, 2531), (Start: 8 @2564 has 25 MA's), (Start: 18 @2624 has 17 MA's), (22, 2741), (30, 2819), (35, 2885), (39, 2945), (43, 2981), (50, 3071),

Gene: Wigberry_6 Start: 2296, Stop: 2790, Start Num: 8
Candidate Starts for Wigberry_6:
(2, 2125), (5, 2263), (Start: 8 @2296 has 25 MA's), (Start: 18 @2356 has 17 MA's), (24, 2464), (27, 2503), (30, 2524), (34, 2554), (45, 2689), (51, 2779),

Gene: Yotsuba_11 Start: 8231, Stop: 8647, Start Num: 10
Candidate Starts for Yotsuba_11:
(Start: 10 @8231 has 7 MA's), (Start: 18 @8279 has 17 MA's), (39, 8516), (40, 8525), (48, 8588), (49, 8618),