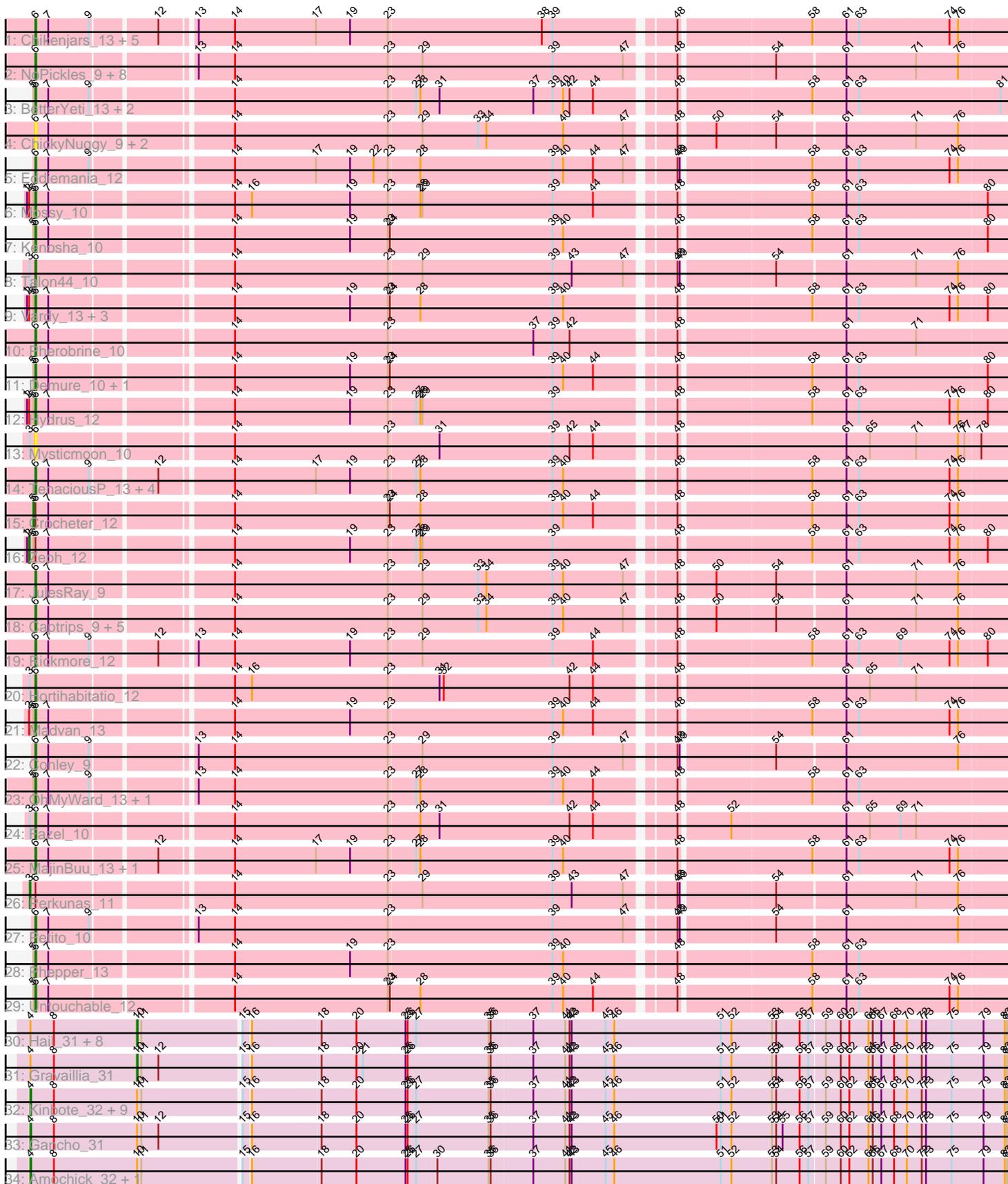


Pham 291068



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 291068 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291068 has 84 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Chikenjars_13, EndAve_13, Duffington_13, Nithya_13, Citrus_12, AlainaMarie_13
- Track 2 : NoPickles_9, Gill_9, Capybara_9, Odesza_9, Magel_9, Roney_9, Kerry_9, Tanis_9, Gravy_9
- Track 3 : BetterYeti_13, ShaggyRogers_13, Gusicorn_13
- Track 4 : ChickyNuggy_9, Bugg_10, Football_9
- Track 5 : Eddiemania_12
- Track 6 : Mossy_10
- Track 7 : Kenosha_10
- Track 8 : Talon44_10
- Track 9 : Vardy_13, Burley_13, Nadmeg_13, Runhaar_13
- Track 10 : Pherobrine_10
- Track 11 : Demure_10, Arataki_10
- Track 12 : Hydrus_12
- Track 13 : Mysticmoon_10
- Track 14 : TenaciousP_13, Aflac_13, OlgasClover_13, Jodelie19_13, Figliar_13
- Track 15 : Crocheter_12
- Track 16 : Zeph_12
- Track 17 : JulesRay_9
- Track 18 : Captrips_9, Dancer_9, FortCran_9, Tairn4Wing_10, Artorias_9, Avazak_9
- Track 19 : Rickmore_12
- Track 20 : Hortihabitatio_12
- Track 21 : Madvan_13
- Track 22 : Conley_9
- Track 23 : OhMyWard_13, Blanky_9
- Track 24 : Fazel_10
- Track 25 : MajinBuu_13, BluerMoon_13
- Track 26 : Perkunas_11
- Track 27 : Petite_10
- Track 28 : Phepper_13
- Track 29 : Untouchable_12
- Track 30 : Hail_31, Hadrien_32, Wishmaker_31, Dewey_31, Forge_31, Giles_31, Luke_32, Ubuntu_32, Luna22_31
- Track 31 : Gravallia_31
- Track 32 : Kinbote_32, Evanesce_31, Amymech_32, OBUpride_32, DeepSoil15_32, Ein37_32, HH92_31, LilHazelNut_32, BloominB_32, Webster2_32
- Track 33 : Gancho_31

- Track 34 : Amochick_32, Daegal_33

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 51 of the 76 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aflac_13, AlainaMarie_13, Arataki_10, Artorias_9, Avazak_9, BetterYeti_13, Blanky_9, BluerMoon_13, Bugg_10, Burley_13, Captrips_9, Copybara_9, ChickyNugget_9, Chikenjars_13, Citrus_12, Conley_9, Dancer_9, Demure_10, Duffington_13, Eddiemania_12, EndAve_13, Fazel_10, Figliar_13, Football_9, FortCran_9, Gill_9, Gravy_9, Gusicorn_13, Hortihabitatio_12, Hydrus_12, Jodelie19_13, JulesRay_9, Kenosha_10, Kerry_9, Madvan_13, Magel_9, MajinBuu_13, Mossy_10, Mysticmoon_10, Nadmeg_13, Nithya_13, NoPickles_9, Odesza_9, OhMyWard_13, OlgasClover_13, Petite_10, Phepper_13, Pherobrine_10, Rickmore_12, Roney_9, Runhaar_13, ShaggyRogers_13, Tairn4Wing_10, Talon44_10, Tanis_9, TenaciousP_13, Untouchable_12, Vardy_13,

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

- Crocheter_12, Perkunas_11, Zeph_12,

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

- Amochick_32, Amymech_32, BloominB_32, Daegal_33, DeepSoil15_32, Dewey_31, Ein37_32, Evanesce_31, Forge_31, Gancho_31, Giles_31, Gravallia_31, HH92_31, Hadrien_32, Hail_31, Kinbote_32, LilHazelNut_32, Luke_32, Luna22_31, OBUpide_32, Ubuntu_32, Webster2_32, Wishmaker_31,

Summary by start number:

Start 2:

- Found in 8 of 84 (9.5%) of genes in pham
- Manual Annotations of this start: 1 of 76
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Zeph_12 (DJ),

Start 3:

- Found in 5 of 84 (6.0%) of genes in pham
- Manual Annotations of this start: 1 of 76
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Perkunas_11 (DJ),

Start 4:

- Found in 23 of 84 (27.4%) of genes in pham
- Manual Annotations of this start: 12 of 76
- Called 56.5% of time when present
- Phage (with cluster) where this start called: Amochick_32 (Q), Amymech_32 (Q), BloominB_32 (Q), Daegal_33 (Q), DeepSoil15_32 (Q), Ein37_32 (Q), Evanesce_31 (Q), Gancho_31 (Q), HH92_31 (Q), Kinbote_32 (Q), LilHazelNut_32 (Q), OBUpide_32 (Q), Webster2_32 (Q),

Start 5:

- Found in 19 of 84 (22.6%) of genes in pham
- Manual Annotations of this start: 1 of 76
- Called 5.3% of time when present
- Phage (with cluster) where this start called: Crocheter_12 (DJ),

Start 6:

- Found in 61 of 84 (72.6%) of genes in pham
- Manual Annotations of this start: 51 of 76
- Called 95.1% of time when present
- Phage (with cluster) where this start called: Aflac_13 (DJ), AlainaMarie_13 (DJ), Arataki_10 (DJ), Artorias_9 (DJ), Avazak_9 (DJ), BetterYeti_13 (DJ), Blanky_9 (DJ), BluerMoon_13 (DJ), Bugg_10 (DJ), Burley_13 (DJ), Captrips_9 (DJ), Copybara_9 (DJ), ChickyNuggy_9 (DJ), Chikenjars_13 (DJ), Citrus_12 (DJ), Conley_9 (DJ), Dancer_9 (DJ), Demure_10 (DJ), Duffington_13 (DJ), Eddiemania_12 (DJ), EndAve_13 (DJ), Fazel_10 (DJ), Figliar_13 (DJ), Football_9 (DJ), FortCran_9 (DJ), Gill_9 (DJ), Gravy_9 (DJ), Gusicorn_13 (DJ), Hortihabitatio_12 (DJ), Hydrus_12 (DJ), Jodelie19_13 (DJ), JulesRay_9 (DJ), Kenosha_10 (DJ), Kerry_9 (DJ), Madvan_13 (DJ), Magel_9 (DJ), MajinBuu_13 (DJ), Mossy_10 (DJ), Mysticmoon_10 (DJ), Nadmeg_13 (DJ), Nithya_13 (DJ), NoPickles_9 (DJ), Odesza_9 (DJ), OhMyWard_13 (DJ), OlgasClover_13 (DJ), Petite_10 (DJ), Phepper_13 (DJ), Pherobrine_10 (DJ), Rickmore_12 (DJ), Roney_9 (DJ), Runhaar_13 (DJ), ShaggyRogers_13 (DJ), Tairn4Wing_10 (DJ), Talon44_10 (DJ), Tanis_9 (DJ), TenaciousP_13 (DJ), Untouchable_12 (DJ), Vardy_13 (DJ),

Start 10:

- Found in 23 of 84 (27.4%) of genes in pham
- Manual Annotations of this start: 10 of 76
- Called 43.5% of time when present
- Phage (with cluster) where this start called: Dewey_31 (Q), Forge_31 (Q), Giles_31 (Q), Gravallia_31 (Q), Hadrien_32 (Q), Hail_31 (Q), Luke_32 (Q), Luna22_31 (Q), Ubuntu_32 (Q), Wishmaker_31 (Q),

Summary by clusters:

There are 2 clusters represented in this pham: Q, DJ,

Info for manual annotations of cluster DJ:

- Start number 2 was manually annotated 1 time for cluster DJ.
- Start number 3 was manually annotated 1 time for cluster DJ.
- Start number 5 was manually annotated 1 time for cluster DJ.
- Start number 6 was manually annotated 51 times for cluster DJ.

Info for manual annotations of cluster Q:

- Start number 4 was manually annotated 12 times for cluster Q.
- Start number 10 was manually annotated 10 times for cluster Q.

Gene Information:

Gene: Aflac_13 Start: 6653, Stop: 7939, Start Num: 6

Candidate Starts for Aflac_13:

(Start: 6 @6653 has 51 MA's), (7, 6671), (9, 6725), (12, 6809), (14, 6902), (17, 7016), (19, 7064), (23, 7115), (27, 7151), (28, 7157), (39, 7343), (40, 7358), (48, 7496), (58, 7673), (61, 7718), (63, 7736), (74, 7859), (76, 7871),

Gene: AlainaMarie_13 Start: 6643, Stop: 7929, Start Num: 6

Candidate Starts for AlainaMarie_13:

(Start: 6 @6643 has 51 MA's), (7, 6661), (9, 6715), (12, 6799), (13, 6841), (14, 6892), (17, 7006), (19, 7054), (23, 7105), (38, 7318), (39, 7333), (48, 7486), (58, 7663), (61, 7708), (63, 7726), (74, 7849), (76, 7861),

Gene: Amochick_32 Start: 26987, Stop: 28345, Start Num: 4

Candidate Starts for Amochick_32:

(Start: 4 @26987 has 12 MA's), (8, 27020), (Start: 10 @27137 has 10 MA's), (11, 27143), (15, 27278), (16, 27287), (18, 27380), (20, 27428), (25, 27497), (26, 27500), (27, 27512), (30, 27542), (35, 27614), (36, 27617), (37, 27674), (41, 27719), (42, 27725), (43, 27728), (45, 27776), (46, 27788), (51, 27938), (52, 27953), (53, 28010), (54, 28016), (56, 28049), (57, 28061), (59, 28082), (60, 28103), (62, 28115), (64, 28142), (66, 28148), (67, 28160), (68, 28178), (70, 28196), (72, 28217), (73, 28223), (75, 28259), (79, 28304), (82, 28334), (83, 28337),

Gene: Amymech_32 Start: 26981, Stop: 28339, Start Num: 4

Candidate Starts for Amymech_32:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: Arataki_10 Start: 4235, Stop: 5521, Start Num: 6

Candidate Starts for Arataki_10:

(Start: 5 @4232 has 1 MA's), (Start: 6 @4235 has 51 MA's), (7, 4253), (14, 4484), (19, 4646), (23, 4697), (24, 4700), (39, 4925), (40, 4940), (44, 4982), (48, 5078), (58, 5255), (61, 5300), (63, 5318), (80, 5492),

Gene: Artorias_9 Start: 3802, Stop: 5085, Start Num: 6

Candidate Starts for Artorias_9:

(Start: 6 @3802 has 51 MA's), (7, 3820), (14, 4051), (23, 4264), (29, 4309), (33, 4387), (34, 4399), (39, 4492), (40, 4507), (47, 4591), (48, 4645), (50, 4690), (54, 4771), (61, 4864), (71, 4960), (76, 5017),

Gene: Avazak_9 Start: 3805, Stop: 5088, Start Num: 6

Candidate Starts for Avazak_9:

(Start: 6 @3805 has 51 MA's), (7, 3823), (14, 4054), (23, 4267), (29, 4312), (33, 4390), (34, 4402), (39, 4495), (40, 4510), (47, 4594), (48, 4648), (50, 4693), (54, 4774), (61, 4867), (71, 4963), (76, 5020),

Gene: BetterYeti_13 Start: 6443, Stop: 7729, Start Num: 6

Candidate Starts for BetterYeti_13:

(Start: 5 @6440 has 1 MA's), (Start: 6 @6443 has 51 MA's), (7, 6461), (9, 6515), (14, 6692), (23, 6905), (27, 6941), (28, 6947), (31, 6974), (37, 7106), (39, 7133), (40, 7148), (42, 7157), (44, 7190), (48, 7286), (58, 7463), (61, 7508), (63, 7526), (81, 7718),

Gene: Blanky_9 Start: 4291, Stop: 5577, Start Num: 6

Candidate Starts for Blanky_9:

(Start: 5 @4288 has 1 MA's), (Start: 6 @4291 has 51 MA's), (7, 4309), (9, 4363), (13, 4489), (14, 4540), (23, 4753), (27, 4789), (28, 4795), (39, 4981), (40, 4996), (44, 5038), (48, 5134), (58, 5311), (61, 5356), (63, 5374),

Gene: BloominB_32 Start: 26981, Stop: 28339, Start Num: 4

Candidate Starts for BloominB_32:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: BluerMoon_13 Start: 6647, Stop: 7933, Start Num: 6

Candidate Starts for BluerMoon_13:

(Start: 6 @6647 has 51 MA's), (7, 6665), (12, 6803), (14, 6896), (17, 7010), (19, 7058), (23, 7109), (27, 7145), (28, 7151), (39, 7337), (40, 7352), (48, 7490), (58, 7667), (61, 7712), (63, 7730), (74, 7853), (76, 7865),

Gene: Bugg_10 Start: 3815, Stop: 5098, Start Num: 6

Candidate Starts for Bugg_10:

(Start: 6 @3815 has 51 MA's), (7, 3833), (14, 4064), (23, 4277), (29, 4322), (33, 4400), (34, 4412), (40, 4520), (47, 4604), (48, 4658), (50, 4703), (54, 4784), (61, 4877), (71, 4973), (76, 5030),

Gene: Burley_13 Start: 6444, Stop: 7730, Start Num: 6

Candidate Starts for Burley_13:

(1, 6432), (Start: 2 @6435 has 1 MA's), (Start: 5 @6441 has 1 MA's), (Start: 6 @6444 has 51 MA's), (7, 6462), (14, 6693), (19, 6855), (23, 6906), (24, 6909), (28, 6948), (39, 7134), (40, 7149), (48, 7287), (58, 7464), (61, 7509), (63, 7527), (74, 7650), (76, 7662), (80, 7701),

Gene: Captrips_9 Start: 3805, Stop: 5088, Start Num: 6

Candidate Starts for Captrips_9:

(Start: 6 @3805 has 51 MA's), (7, 3823), (14, 4054), (23, 4267), (29, 4312), (33, 4390), (34, 4402), (39, 4495), (40, 4510), (47, 4594), (48, 4648), (50, 4693), (54, 4774), (61, 4867), (71, 4963), (76, 5020),

Gene: Capybara_9 Start: 3518, Stop: 4801, Start Num: 6

Candidate Starts for Capybara_9:

(Start: 6 @3518 has 51 MA's), (13, 3716), (14, 3767), (23, 3980), (29, 4025), (39, 4208), (47, 4307), (48, 4361), (54, 4487), (61, 4580), (71, 4676), (76, 4733),

Gene: ChickyNuggy_9 Start: 3520, Stop: 4803, Start Num: 6

Candidate Starts for ChickyNuggy_9:

(Start: 6 @3520 has 51 MA's), (7, 3538), (14, 3769), (23, 3982), (29, 4027), (33, 4105), (34, 4117), (40, 4225), (47, 4309), (48, 4363), (50, 4408), (54, 4489), (61, 4582), (71, 4678), (76, 4735),

Gene: Chikenjars_13 Start: 6643, Stop: 7929, Start Num: 6

Candidate Starts for Chikenjars_13:

(Start: 6 @6643 has 51 MA's), (7, 6661), (9, 6715), (12, 6799), (13, 6841), (14, 6892), (17, 7006), (19, 7054), (23, 7105), (38, 7318), (39, 7333), (48, 7486), (58, 7663), (61, 7708), (63, 7726), (74, 7849), (76, 7861),

Gene: Citrus_12 Start: 6650, Stop: 7936, Start Num: 6

Candidate Starts for Citrus_12:

(Start: 6 @6650 has 51 MA's), (7, 6668), (9, 6722), (12, 6806), (13, 6848), (14, 6899), (17, 7013), (19, 7061), (23, 7112), (38, 7325), (39, 7340), (48, 7493), (58, 7670), (61, 7715), (63, 7733), (74, 7856), (76, 7868),

Gene: Conley_9 Start: 3832, Stop: 5115, Start Num: 6

Candidate Starts for Conley_9:

(Start: 6 @3832 has 51 MA's), (7, 3850), (9, 3904), (13, 4030), (14, 4081), (23, 4294), (29, 4339), (39, 4522), (47, 4621), (48, 4675), (49, 4678), (54, 4801), (61, 4894), (76, 5047),

Gene: Crocheter_12 Start: 5368, Stop: 6657, Start Num: 5

Candidate Starts for Crocheter_12:

(Start: 5 @5368 has 1 MA's), (Start: 6 @5371 has 51 MA's), (7, 5389), (14, 5620), (23, 5833), (24, 5836), (28, 5875), (39, 6061), (40, 6076), (44, 6118), (48, 6214), (58, 6391), (61, 6436), (63, 6454), (74, 6577), (76, 6589),

Gene: Daegal_33 Start: 27275, Stop: 28633, Start Num: 4

Candidate Starts for Daegal_33:

(Start: 4 @27275 has 12 MA's), (8, 27308), (Start: 10 @27425 has 10 MA's), (11, 27431), (15, 27566), (16, 27575), (18, 27668), (20, 27716), (25, 27785), (26, 27788), (27, 27800), (30, 27830), (35, 27902), (36, 27905), (37, 27962), (41, 28007), (42, 28013), (43, 28016), (45, 28064), (46, 28076), (51, 28226), (52, 28241), (53, 28298), (54, 28304), (56, 28337), (57, 28349), (59, 28370), (60, 28391), (62, 28403), (64, 28430), (66, 28436), (67, 28448), (68, 28466), (70, 28484), (72, 28505), (73, 28511), (75, 28547), (79, 28592), (82, 28622), (83, 28625),

Gene: Dancer_9 Start: 3508, Stop: 4791, Start Num: 6

Candidate Starts for Dancer_9:

(Start: 6 @3508 has 51 MA's), (7, 3526), (14, 3757), (23, 3970), (29, 4015), (33, 4093), (34, 4105), (39, 4198), (40, 4213), (47, 4297), (48, 4351), (50, 4396), (54, 4477), (61, 4570), (71, 4666), (76, 4723),

Gene: DeepSoil15_32 Start: 26981, Stop: 28339, Start Num: 4

Candidate Starts for DeepSoil15_32:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: Demure_10 Start: 4235, Stop: 5521, Start Num: 6

Candidate Starts for Demure_10:

(Start: 5 @4232 has 1 MA's), (Start: 6 @4235 has 51 MA's), (7, 4253), (14, 4484), (19, 4646), (23, 4697), (24, 4700), (39, 4925), (40, 4940), (44, 4982), (48, 5078), (58, 5255), (61, 5300), (63, 5318), (80, 5492),

Gene: Dewey_31 Start: 27131, Stop: 28339, Start Num: 10

Candidate Starts for Dewey_31:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: Duffington_13 Start: 6628, Stop: 7914, Start Num: 6

Candidate Starts for Duffington_13:

(Start: 6 @6628 has 51 MA's), (7, 6646), (9, 6700), (12, 6784), (13, 6826), (14, 6877), (17, 6991), (19, 7039), (23, 7090), (38, 7303), (39, 7318), (48, 7471), (58, 7648), (61, 7693), (63, 7711), (74, 7834), (76, 7846),

Gene: Eddiemania_12 Start: 5836, Stop: 7122, Start Num: 6

Candidate Starts for Eddiemania_12:

(Start: 6 @5836 has 51 MA's), (7, 5854), (9, 5908), (14, 6085), (17, 6199), (19, 6247), (22, 6280), (23, 6298), (28, 6340), (39, 6526), (40, 6541), (44, 6583), (47, 6625), (48, 6679), (49, 6682), (58, 6856), (61, 6901), (63, 6919), (74, 7042), (76, 7054),

Gene: Ein37_32 Start: 26981, Stop: 28339, Start Num: 4

Candidate Starts for Ein37_32:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: EndAve_13 Start: 6643, Stop: 7929, Start Num: 6

Candidate Starts for EndAve_13:

(Start: 6 @6643 has 51 MA's), (7, 6661), (9, 6715), (12, 6799), (13, 6841), (14, 6892), (17, 7006), (19, 7054), (23, 7105), (38, 7318), (39, 7333), (48, 7486), (58, 7663), (61, 7708), (63, 7726), (74, 7849), (76, 7861),

Gene: Evanesce_31 Start: 26981, Stop: 28339, Start Num: 4

Candidate Starts for Evanesce_31:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: Fazel_10 Start: 5376, Stop: 6665, Start Num: 6

Candidate Starts for Fazel_10:

(Start: 3 @5376 has 1 MA's), (Start: 6 @5376 has 51 MA's), (7, 5394), (14, 5625), (23, 5838), (28, 5880), (31, 5907), (42, 6090), (44, 6123), (48, 6219), (52, 6285), (61, 6444), (65, 6477), (69, 6519), (71, 6540),

Gene: Figliar_13 Start: 6653, Stop: 7939, Start Num: 6

Candidate Starts for Figliar_13:

(Start: 6 @6653 has 51 MA's), (7, 6671), (9, 6725), (12, 6809), (14, 6902), (17, 7016), (19, 7064), (23, 7115), (27, 7151), (28, 7157), (39, 7343), (40, 7358), (48, 7496), (58, 7673), (61, 7718), (63, 7736), (74, 7859), (76, 7871),

Gene: Football_9 Start: 3520, Stop: 4803, Start Num: 6

Candidate Starts for Football_9:

(Start: 6 @3520 has 51 MA's), (7, 3538), (14, 3769), (23, 3982), (29, 4027), (33, 4105), (34, 4117), (40, 4225), (47, 4309), (48, 4363), (50, 4408), (54, 4489), (61, 4582), (71, 4678), (76, 4735),

Gene: Forge_31 Start: 27131, Stop: 28339, Start Num: 10

Candidate Starts for Forge_31:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: FortCran_9 Start: 3802, Stop: 5085, Start Num: 6

Candidate Starts for FortCran_9:

(Start: 6 @3802 has 51 MA's), (7, 3820), (14, 4051), (23, 4264), (29, 4309), (33, 4387), (34, 4399), (39, 4492), (40, 4507), (47, 4591), (48, 4645), (50, 4690), (54, 4771), (61, 4864), (71, 4960), (76, 5017),

Gene: Gancho_31 Start: 26704, Stop: 28062, Start Num: 4

Candidate Starts for Gancho_31:

(Start: 4 @26704 has 12 MA's), (8, 26737), (Start: 10 @26854 has 10 MA's), (11, 26860), (12, 26884), (15, 26995), (16, 27004), (18, 27097), (20, 27145), (25, 27214), (26, 27217), (27, 27229), (35, 27331), (36, 27334), (37, 27391), (41, 27436), (42, 27442), (43, 27445), (45, 27493), (46, 27505), (50, 27649), (51, 27655), (52, 27670), (53, 27727), (54, 27733), (55, 27742), (56, 27766), (57, 27778), (59, 27799), (60, 27820), (62, 27832), (64, 27859), (66, 27865), (67, 27877), (68, 27895), (70, 27913), (72, 27934), (73, 27940), (75, 27976), (79, 28021), (82, 28051), (83, 28054),

Gene: Giles_31 Start: 27131, Stop: 28339, Start Num: 10

Candidate Starts for Giles_31:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: Gill_9 Start: 3518, Stop: 4801, Start Num: 6

Candidate Starts for Gill_9:

(Start: 6 @3518 has 51 MA's), (13, 3716), (14, 3767), (23, 3980), (29, 4025), (39, 4208), (47, 4307), (48, 4361), (54, 4487), (61, 4580), (71, 4676), (76, 4733),

Gene: Gravaillia_31 Start: 26860, Stop: 28068, Start Num: 10

Candidate Starts for Gravaillia_31:

(Start: 4 @26710 has 12 MA's), (8, 26743), (Start: 10 @26860 has 10 MA's), (11, 26866), (12, 26890), (15, 27001), (16, 27010), (18, 27103), (20, 27151), (21, 27160), (25, 27220), (26, 27223), (35, 27337), (36, 27340), (37, 27397), (41, 27442), (42, 27448), (43, 27451), (45, 27499), (46, 27511), (51, 27661), (52, 27676), (53, 27733), (54, 27739), (56, 27772), (57, 27784), (59, 27805), (60, 27826), (62, 27838), (64, 27865), (66, 27871), (67, 27883), (68, 27901), (70, 27919), (72, 27940), (73, 27946), (75, 27982), (79, 28027), (82, 28057), (83, 28060),

Gene: Gravy_9 Start: 3518, Stop: 4801, Start Num: 6

Candidate Starts for Gravy_9:

(Start: 6 @3518 has 51 MA's), (13, 3716), (14, 3767), (23, 3980), (29, 4025), (39, 4208), (47, 4307), (48, 4361), (54, 4487), (61, 4580), (71, 4676), (76, 4733),

Gene: Gusicorn_13 Start: 6443, Stop: 7729, Start Num: 6

Candidate Starts for Gusicorn_13:

(Start: 5 @6440 has 1 MA's), (Start: 6 @6443 has 51 MA's), (7, 6461), (9, 6515), (14, 6692), (23, 6905), (27, 6941), (28, 6947), (31, 6974), (37, 7106), (39, 7133), (40, 7148), (42, 7157), (44, 7190), (48, 7286), (58, 7463), (61, 7508), (63, 7526), (81, 7718),

Gene: HH92_31 Start: 26981, Stop: 28339, Start Num: 4

Candidate Starts for HH92_31:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: Hadrien_32 Start: 27131, Stop: 28339, Start Num: 10

Candidate Starts for Hadrien_32:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: Hail_31 Start: 27131, Stop: 28339, Start Num: 10

Candidate Starts for Hail_31:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: Hortihabitatio_12 Start: 5735, Stop: 7024, Start Num: 6

Candidate Starts for Hortihabitatio_12:

(Start: 3 @5729 has 1 MA's), (Start: 6 @5735 has 51 MA's), (14, 5984), (16, 6008), (23, 6197), (31, 6266), (32, 6272), (42, 6449), (44, 6482), (48, 6578), (61, 6803), (65, 6836), (71, 6899),

Gene: Hydrus_12 Start: 5629, Stop: 6915, Start Num: 6

Candidate Starts for Hydrus_12:

(1, 5617), (Start: 2 @5620 has 1 MA's), (Start: 5 @5626 has 1 MA's), (Start: 6 @5629 has 51 MA's), (7, 5647), (14, 5878), (19, 6040), (23, 6091), (27, 6127), (28, 6133), (29, 6136), (39, 6319), (48, 6472), (58, 6649), (61, 6694), (63, 6712), (74, 6835), (76, 6847), (80, 6886),

Gene: Jodelie19_13 Start: 6647, Stop: 7933, Start Num: 6

Candidate Starts for Jodelie19_13:

(Start: 6 @6647 has 51 MA's), (7, 6665), (9, 6719), (12, 6803), (14, 6896), (17, 7010), (19, 7058), (23, 7109), (27, 7145), (28, 7151), (39, 7337), (40, 7352), (48, 7490), (58, 7667), (61, 7712), (63, 7730), (74, 7853), (76, 7865),

Gene: JulesRay_9 Start: 3802, Stop: 5085, Start Num: 6

Candidate Starts for JulesRay_9:

(Start: 6 @3802 has 51 MA's), (7, 3820), (14, 4051), (23, 4264), (29, 4309), (33, 4387), (34, 4399), (39, 4492), (40, 4507), (47, 4591), (48, 4645), (50, 4690), (54, 4771), (61, 4864), (71, 4960), (76, 5017),

Gene: Kenosha_10 Start: 4230, Stop: 5516, Start Num: 6

Candidate Starts for Kenosha_10:

(Start: 5 @4227 has 1 MA's), (Start: 6 @4230 has 51 MA's), (7, 4248), (14, 4479), (19, 4641), (23, 4692), (24, 4695), (39, 4920), (40, 4935), (48, 5073), (58, 5250), (61, 5295), (63, 5313), (80, 5487),

Gene: Kerry_9 Start: 3518, Stop: 4801, Start Num: 6

Candidate Starts for Kerry_9:

(Start: 6 @3518 has 51 MA's), (13, 3716), (14, 3767), (23, 3980), (29, 4025), (39, 4208), (47, 4307), (48, 4361), (54, 4487), (61, 4580), (71, 4676), (76, 4733),

Gene: Kinbote_32 Start: 26981, Stop: 28339, Start Num: 4

Candidate Starts for Kinbote_32:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: LilHazelnut_32 Start: 26981, Stop: 28339, Start Num: 4

Candidate Starts for LilHazelnut_32:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: Luke_32 Start: 27086, Stop: 28294, Start Num: 10

Candidate Starts for Luke_32:

(Start: 4 @26936 has 12 MA's), (8, 26969), (Start: 10 @27086 has 10 MA's), (11, 27092), (15, 27227), (16, 27236), (18, 27329), (20, 27377), (25, 27446), (26, 27449), (27, 27461), (35, 27563), (36, 27566), (37, 27623), (41, 27668), (42, 27674), (43, 27677), (45, 27725), (46, 27737), (51, 27887), (52, 27902), (53, 27959), (54, 27965), (56, 27998), (57, 28010), (59, 28031), (60, 28052), (62, 28064), (64, 28091), (66, 28097), (67, 28109), (68, 28127), (70, 28145), (72, 28166), (73, 28172), (75, 28208), (79, 28253), (82, 28283), (83, 28286),

Gene: Luna22_31 Start: 27131, Stop: 28339, Start Num: 10

Candidate Starts for Luna22_31:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: Madvan_13 Start: 6444, Stop: 7730, Start Num: 6

Candidate Starts for Madvan_13:

(Start: 2 @6435 has 1 MA's), (Start: 5 @6441 has 1 MA's), (Start: 6 @6444 has 51 MA's), (7, 6462), (14, 6693), (19, 6855), (23, 6906), (39, 7134), (40, 7149), (44, 7191), (48, 7287), (58, 7464), (61, 7509), (63, 7527), (74, 7650), (76, 7662),

Gene: Magel_9 Start: 3518, Stop: 4801, Start Num: 6

Candidate Starts for Magel_9:

(Start: 6 @3518 has 51 MA's), (13, 3716), (14, 3767), (23, 3980), (29, 4025), (39, 4208), (47, 4307), (48, 4361), (54, 4487), (61, 4580), (71, 4676), (76, 4733),

Gene: MajinBuu_13 Start: 6648, Stop: 7934, Start Num: 6

Candidate Starts for MajinBuu_13:

(Start: 6 @6648 has 51 MA's), (7, 6666), (12, 6804), (14, 6897), (17, 7011), (19, 7059), (23, 7110), (27, 7146), (28, 7152), (39, 7338), (40, 7353), (48, 7491), (58, 7668), (61, 7713), (63, 7731), (74, 7854), (76, 7866),

Gene: Mossy_10 Start: 4506, Stop: 5792, Start Num: 6

Candidate Starts for Mossy_10:

(1, 4494), (Start: 2 @4497 has 1 MA's), (Start: 5 @4503 has 1 MA's), (Start: 6 @4506 has 51 MA's), (7, 4524), (14, 4755), (16, 4779), (19, 4917), (23, 4968), (28, 5010), (29, 5013), (39, 5196), (44, 5253), (48, 5349), (58, 5526), (61, 5571), (63, 5589), (80, 5763),

Gene: Mysticmoon_10 Start: 4209, Stop: 5498, Start Num: 6

Candidate Starts for Mysticmoon_10:

(Start: 3 @4203 has 1 MA's), (Start: 6 @4209 has 51 MA's), (14, 4458), (23, 4671), (31, 4740), (39, 4899), (42, 4923), (44, 4956), (48, 5052), (61, 5277), (65, 5310), (71, 5373), (76, 5430), (77, 5439), (78, 5460),

Gene: Nadmeg_13 Start: 6445, Stop: 7731, Start Num: 6

Candidate Starts for Nadmeg_13:

(1, 6433), (Start: 2 @6436 has 1 MA's), (Start: 5 @6442 has 1 MA's), (Start: 6 @6445 has 51 MA's), (7, 6463), (14, 6694), (19, 6856), (23, 6907), (24, 6910), (28, 6949), (39, 7135), (40, 7150), (48, 7288), (58, 7465), (61, 7510), (63, 7528), (74, 7651), (76, 7663), (80, 7702),

Gene: Nithya_13 Start: 6643, Stop: 7929, Start Num: 6

Candidate Starts for Nithya_13:

(Start: 6 @6643 has 51 MA's), (7, 6661), (9, 6715), (12, 6799), (13, 6841), (14, 6892), (17, 7006), (19, 7054), (23, 7105), (38, 7318), (39, 7333), (48, 7486), (58, 7663), (61, 7708), (63, 7726), (74, 7849), (76, 7861),

Gene: NoPickles_9 Start: 3518, Stop: 4801, Start Num: 6

Candidate Starts for NoPickles_9:

(Start: 6 @3518 has 51 MA's), (13, 3716), (14, 3767), (23, 3980), (29, 4025), (39, 4208), (47, 4307), (48, 4361), (54, 4487), (61, 4580), (71, 4676), (76, 4733),

Gene: OBUpride_32 Start: 26975, Stop: 28333, Start Num: 4

Candidate Starts for OBUpride_32:

(Start: 4 @26975 has 12 MA's), (8, 27008), (Start: 10 @27125 has 10 MA's), (11, 27131), (15, 27266), (16, 27275), (18, 27368), (20, 27416), (25, 27485), (26, 27488), (27, 27500), (35, 27602), (36, 27605), (37, 27662), (41, 27707), (42, 27713), (43, 27716), (45, 27764), (46, 27776), (51, 27926), (52, 27941), (53, 27998), (54, 28004), (56, 28037), (57, 28049), (59, 28070), (60, 28091), (62, 28103), (64, 28130), (66, 28136), (67, 28148), (68, 28166), (70, 28184), (72, 28205), (73, 28211), (75, 28247), (79, 28292), (82, 28322), (83, 28325),

Gene: Odesza_9 Start: 3518, Stop: 4801, Start Num: 6

Candidate Starts for Odesza_9:

(Start: 6 @3518 has 51 MA's), (13, 3716), (14, 3767), (23, 3980), (29, 4025), (39, 4208), (47, 4307), (48, 4361), (54, 4487), (61, 4580), (71, 4676), (76, 4733),

Gene: OhMyWard_13 Start: 6444, Stop: 7730, Start Num: 6

Candidate Starts for OhMyWard_13:

(Start: 5 @6441 has 1 MA's), (Start: 6 @6444 has 51 MA's), (7, 6462), (9, 6516), (13, 6642), (14, 6693), (23, 6906), (27, 6942), (28, 6948), (39, 7134), (40, 7149), (44, 7191), (48, 7287), (58, 7464), (61, 7509), (63, 7527),

Gene: OlgasClover_13 Start: 6644, Stop: 7930, Start Num: 6

Candidate Starts for OlgasClover_13:

(Start: 6 @6644 has 51 MA's), (7, 6662), (9, 6716), (12, 6800), (14, 6893), (17, 7007), (19, 7055), (23, 7106), (27, 7142), (28, 7148), (39, 7334), (40, 7349), (48, 7487), (58, 7664), (61, 7709), (63, 7727), (74, 7850), (76, 7862),

Gene: Perkunas_11 Start: 4324, Stop: 5613, Start Num: 3

Candidate Starts for Perkunas_11:

(Start: 3 @4324 has 1 MA's), (Start: 6 @4330 has 51 MA's), (14, 4579), (23, 4792), (29, 4837), (39, 5020), (43, 5047), (47, 5119), (48, 5173), (49, 5176), (54, 5299), (61, 5392), (71, 5488), (76, 5545),

Gene: Petito_10 Start: 4026, Stop: 5309, Start Num: 6

Candidate Starts for Petito_10:

(Start: 6 @4026 has 51 MA's), (7, 4044), (9, 4098), (13, 4224), (14, 4275), (23, 4488), (39, 4716), (47, 4815), (48, 4869), (49, 4872), (54, 4995), (61, 5088), (76, 5241),

Gene: Phepper_13 Start: 6443, Stop: 7729, Start Num: 6

Candidate Starts for Phepper_13:

(Start: 5 @6440 has 1 MA's), (Start: 6 @6443 has 51 MA's), (7, 6461), (14, 6692), (19, 6854), (23, 6905), (39, 7133), (40, 7148), (48, 7286), (58, 7463), (61, 7508), (63, 7526),

Gene: Pherobrine_10 Start: 4207, Stop: 5496, Start Num: 6

Candidate Starts for Pherobrine_10:

(Start: 6 @4207 has 51 MA's), (7, 4225), (14, 4456), (23, 4669), (37, 4870), (39, 4897), (42, 4921), (48, 5050), (61, 5275), (71, 5371),

Gene: Rickmore_12 Start: 5213, Stop: 6499, Start Num: 6

Candidate Starts for Rickmore_12:

(Start: 6 @5213 has 51 MA's), (7, 5231), (9, 5285), (12, 5369), (13, 5411), (14, 5462), (19, 5624), (23, 5675), (29, 5720), (39, 5903), (44, 5960), (48, 6056), (58, 6233), (61, 6278), (63, 6296), (69, 6353), (74, 6419), (76, 6431), (80, 6470),

Gene: Roney_9 Start: 3518, Stop: 4801, Start Num: 6

Candidate Starts for Roney_9:

(Start: 6 @3518 has 51 MA's), (13, 3716), (14, 3767), (23, 3980), (29, 4025), (39, 4208), (47, 4307), (48, 4361), (54, 4487), (61, 4580), (71, 4676), (76, 4733),

Gene: Runhaar_13 Start: 6445, Stop: 7731, Start Num: 6

Candidate Starts for Runhaar_13:

(1, 6433), (Start: 2 @6436 has 1 MA's), (Start: 5 @6442 has 1 MA's), (Start: 6 @6445 has 51 MA's), (7, 6463), (14, 6694), (19, 6856), (23, 6907), (24, 6910), (28, 6949), (39, 7135), (40, 7150), (48, 7288), (58, 7465), (61, 7510), (63, 7528), (74, 7651), (76, 7663), (80, 7702),

Gene: ShaggyRogers_13 Start: 6442, Stop: 7728, Start Num: 6

Candidate Starts for ShaggyRogers_13:

(Start: 5 @6439 has 1 MA's), (Start: 6 @6442 has 51 MA's), (7, 6460), (9, 6514), (14, 6691), (23, 6904), (27, 6940), (28, 6946), (31, 6973), (37, 7105), (39, 7132), (40, 7147), (42, 7156), (44, 7189), (48,

7285), (58, 7462), (61, 7507), (63, 7525), (81, 7717),

Gene: Tairn4Wing_10 Start: 3802, Stop: 5085, Start Num: 6

Candidate Starts for Tairn4Wing_10:

(Start: 6 @3802 has 51 MA's), (7, 3820), (14, 4051), (23, 4264), (29, 4309), (33, 4387), (34, 4399), (39, 4492), (40, 4507), (47, 4591), (48, 4645), (50, 4690), (54, 4771), (61, 4864), (71, 4960), (76, 5017),

Gene: Talon44_10 Start: 4006, Stop: 5289, Start Num: 6

Candidate Starts for Talon44_10:

(Start: 3 @4000 has 1 MA's), (Start: 6 @4006 has 51 MA's), (14, 4255), (23, 4468), (29, 4513), (39, 4696), (43, 4723), (47, 4795), (48, 4849), (49, 4852), (54, 4975), (61, 5068), (71, 5164), (76, 5221),

Gene: Tanis_9 Start: 3368, Stop: 4651, Start Num: 6

Candidate Starts for Tanis_9:

(Start: 6 @3368 has 51 MA's), (13, 3566), (14, 3617), (23, 3830), (29, 3875), (39, 4058), (47, 4157), (48, 4211), (54, 4337), (61, 4430), (71, 4526), (76, 4583),

Gene: TenaciousP_13 Start: 6647, Stop: 7933, Start Num: 6

Candidate Starts for TenaciousP_13:

(Start: 6 @6647 has 51 MA's), (7, 6665), (9, 6719), (12, 6803), (14, 6896), (17, 7010), (19, 7058), (23, 7109), (27, 7145), (28, 7151), (39, 7337), (40, 7352), (48, 7490), (58, 7667), (61, 7712), (63, 7730), (74, 7853), (76, 7865),

Gene: Ubuntu_32 Start: 27131, Stop: 28339, Start Num: 10

Candidate Starts for Ubuntu_32:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: Untouchable_12 Start: 5370, Stop: 6656, Start Num: 6

Candidate Starts for Untouchable_12:

(Start: 5 @5367 has 1 MA's), (Start: 6 @5370 has 51 MA's), (7, 5388), (14, 5619), (23, 5832), (24, 5835), (28, 5874), (39, 6060), (40, 6075), (44, 6117), (48, 6213), (58, 6390), (61, 6435), (63, 6453), (74, 6576), (76, 6588),

Gene: Vardy_13 Start: 6443, Stop: 7729, Start Num: 6

Candidate Starts for Vardy_13:

(1, 6431), (Start: 2 @6434 has 1 MA's), (Start: 5 @6440 has 1 MA's), (Start: 6 @6443 has 51 MA's), (7, 6461), (14, 6692), (19, 6854), (23, 6905), (24, 6908), (28, 6947), (39, 7133), (40, 7148), (48, 7286), (58, 7463), (61, 7508), (63, 7526), (74, 7649), (76, 7661), (80, 7700),

Gene: Webster2_32 Start: 26981, Stop: 28339, Start Num: 4

Candidate Starts for Webster2_32:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: Wishmaker_31 Start: 27131, Stop: 28339, Start Num: 10

Candidate Starts for Wishmaker_31:

(Start: 4 @26981 has 12 MA's), (8, 27014), (Start: 10 @27131 has 10 MA's), (11, 27137), (15, 27272), (16, 27281), (18, 27374), (20, 27422), (25, 27491), (26, 27494), (27, 27506), (35, 27608), (36, 27611), (37, 27668), (41, 27713), (42, 27719), (43, 27722), (45, 27770), (46, 27782), (51, 27932), (52, 27947), (53, 28004), (54, 28010), (56, 28043), (57, 28055), (59, 28076), (60, 28097), (62, 28109), (64, 28136), (66, 28142), (67, 28154), (68, 28172), (70, 28190), (72, 28211), (73, 28217), (75, 28253), (79, 28298), (82, 28328), (83, 28331),

Gene: Zeph_12 Start: 5620, Stop: 6915, Start Num: 2

Candidate Starts for Zeph_12:

(1, 5617), (Start: 2 @5620 has 1 MA's), (Start: 5 @5626 has 1 MA's), (Start: 6 @5629 has 51 MA's), (7, 5647), (14, 5878), (19, 6040), (23, 6091), (27, 6127), (28, 6133), (29, 6136), (39, 6319), (48, 6472), (58, 6649), (61, 6694), (63, 6712), (74, 6835), (76, 6847), (80, 6886),