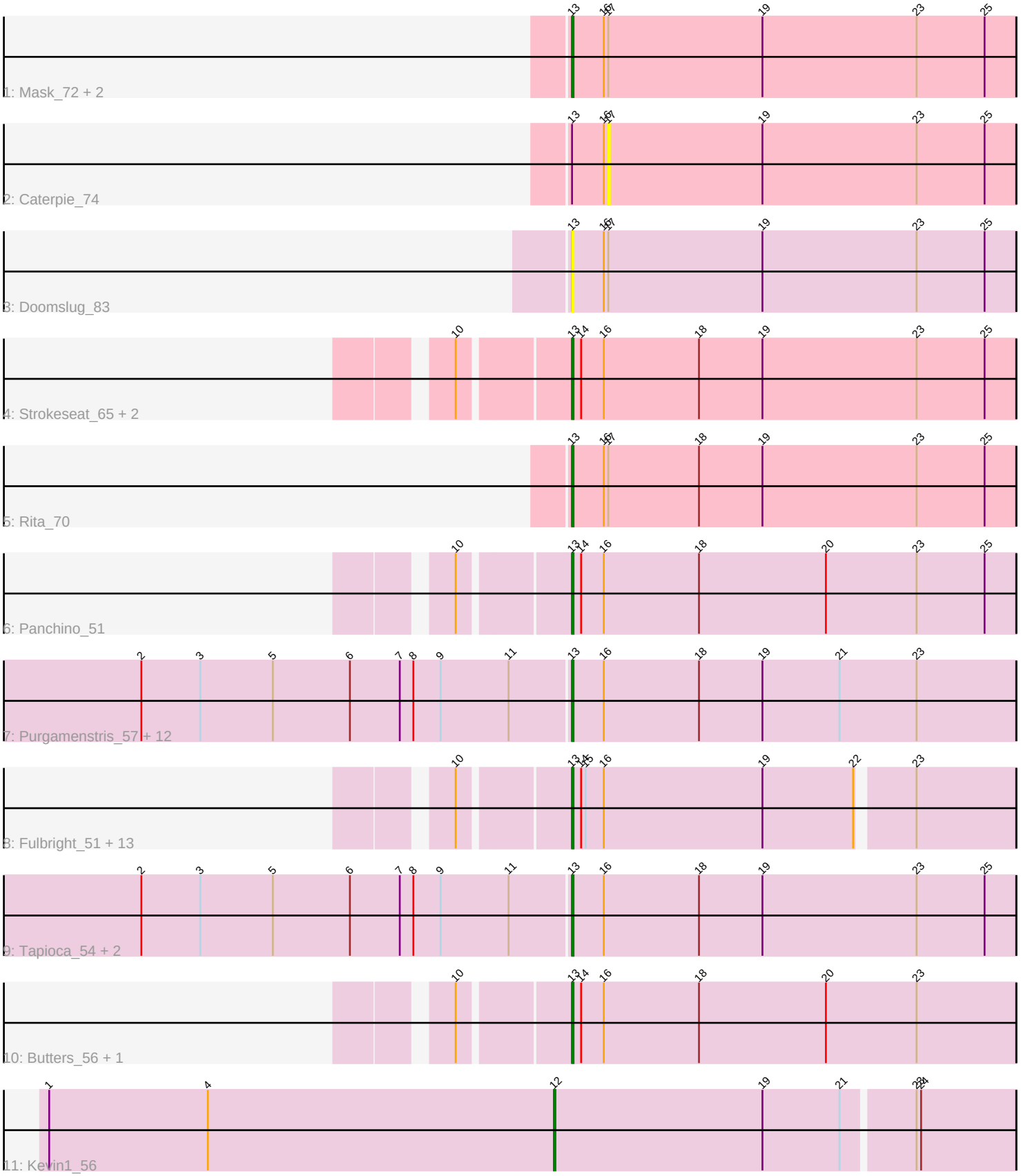
Pham 294865


1: Mask_72 + 2
2: Caterpie_74
3: Doomslug_83
4: Strokeseat_65 + 2
5: Rita_70
6: Panchino_51
7: Purgamenstris_57 + 12
8: Fulbright_51 + 13
9: Tapioca_54 + 2
10: Butters_56 + 1
11: Kevin1_56

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 294865 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294865 has 43 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Mask_72, JohnLord_73, Sejanus_71
• Track 2 : Caterpie_74
• Track 3 : Doomslug_83
• Track 4 : Strokeseat_65, Hlubikazi_65, Mandlovu_65
• Track 5 : Rita_70
• Track 6 : Panchino_51
• Track 7 : Purgamenstris_57, Hanako_57, Jamie19_51, PhancyPhin_57, Rebel_50, Spinach_57, Nenae_57, BabeRuth_58, Raymond7_51, ShrimpFriedEgg_57, Redi_57, Snekmaggedon_51, SpongeBob_51
• Track 8 : Fulbright_51, Silvafighter_53, Phloss_50, Tortoise12_51, Chewbacca_54, Melville_55, Carcharodon_52, Gex_52, Xerxes_52, Magsby_52, Tessdabest_53, Schnauzer_53, Parmesanjohn_52, Smurph_52
• Track 9 : Tapioca_54, Phrann_54, Andies_50
• Track 10 : Butters_56, Rubeelu_56
• Track 11 : Kevin1_56

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

The start number called the most often in the published annotations is 13, it was called in 38 of the 39 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Andies_50, BabeRuth_58, Butters_56, Carcharodon_52, Chewbacca_54, Doomslug_83, Fulbright_51, Gex_52, Hanako_57, Hlubikazi_65, Jamie19_51, JohnLord_73, Magsby_52, Mandlovu_65, Mask_72, Melville_55, Nenae_57, Panchino_51, Parmesanjohn_52, PhancyPhin_57, Phloss_50, Phrann_54, Purgamenstris_57, Raymond7_51, Rebel_50, Redi_57, Rita_70, Rubeelu_56, Schnauzer_53, Sejanus_71, ShrimpFriedEgg_57, Silvafighter_53, Smurph_52, Snekmaggedon_51, Spinach_57, SpongeBob_51, Strokeseat_65, Tapioca_54, Tessdabest_53, Tortoise12_51, Xerxes_52,

Genes that have the "Most Annotated" start but do not call it:
• Caterpie_74,

Genes that do not have the "Most Annotated" start:
• Kevin1_56,

Summary by start number:

Start 12:
• Found in 1 of 43 (2.3%) of genes in pham
• Manual Annotations of this start: 1 of 39
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kevin1_56 (N),

Start 13:
• Found in 42 of 43 (97.7%) of genes in pham
• Manual Annotations of this start: 38 of 39
• Called 97.6% of time when present
• Phage (with cluster) where this start called: Andies_50 (N), BabeRuth_58 (N), Butters_56 (N), Carcharodon_52 (N), Chewbacca_54 (N), Doomslug_83 (F), Fulbright_51 (N), Gex_52 (N), Hanako_57 (N), Hlubikazi_65 (F1), Jamie19_51 (N), JohnLord_73 (AD), Magsby_52 (N), Mandlovu_65 (F1), Mask_72 (AD), Melville_55 (N), Nenae_57 (N), Panchino_51 (N), Parmesanjohn_52 (N), PhancyPhin_57 (N), Phloss_50 (N), Phrann_54 (N), Purgamenstris_57 (N), Raymond7_51 (N), Rebel_50 (N), Redi_57 (N), Rita_70 (F1), Rubeelu_56 (N), Schnauzer_53 (N), Sejanus_71 (AD), ShrimpFriedEgg_57 (N), Silvafighter_53 (N), Smurph_52 (N), Snekmaggedon_51 (N), Spinach_57 (N), SpongeBob_51 (N), Strokeseat_65 (F1), Tapioca_54 (N), Tessdabest_53 (N), Tortoise12_51 (N), Xerxes_52 (N),

Start 17:
• Found in 6 of 43 (14.0%) of genes in pham
• No Manual Annotations of this start.
• Called 16.7% of time when present
• Phage (with cluster) where this start called: Caterpie_74 (AD),

Summary by clusters:

There are 4 clusters represented in this pham: F1, F, AD, N,

Info for manual annotations of cluster AD:
•Start number 13 was manually annotated 2 times for cluster AD.

Info for manual annotations of cluster F1:
•Start number 13 was manually annotated 4 times for cluster F1.

Info for manual annotations of cluster N:
•Start number 12 was manually annotated 1 time for cluster N.
•Start number 13 was manually annotated 32 times for cluster N.

Gene Information:

Gene: Andies_50 Start: 35095, Stop: 35388, Start Num: 13
Candidate Starts for Andies_50:

(2, 34813), (3, 34852), (5, 34900), (6, 34951), (7, 34984), (8, 34993), (9, 35011), (11, 35056), (Start: 13 @35095 has 38 MA's), (16, 35116), (18, 35179), (19, 35221), (23, 35323), (25, 35368),

Gene: BabeRuth_58 Start: 36816, Stop: 37109, Start Num: 13
Candidate Starts for BabeRuth_58:
(2, 36534), (3, 36573), (5, 36621), (6, 36672), (7, 36705), (8, 36714), (9, 36732), (11, 36777), (Start: 13 @36816 has 38 MA's), (16, 36837), (18, 36900), (19, 36942), (21, 36993), (23, 37044),

Gene: Butters_56 Start: 36239, Stop: 36532, Start Num: 13
Candidate Starts for Butters_56:
(10, 36173), (Start: 13 @36239 has 38 MA's), (14, 36245), (16, 36260), (18, 36323), (20, 36407), (23, 36467),

Gene: Carcharodon_52 Start: 35422, Stop: 35706, Start Num: 13
Candidate Starts for Carcharodon_52:
(10, 35356), (Start: 13 @35422 has 38 MA's), (14, 35428), (15, 35431), (16, 35443), (19, 35548), (22, 35608), (23, 35641),

Gene: Caterpie_74 Start: 52327, Stop: 52596, Start Num: 17
Candidate Starts for Caterpie_74:
(Start: 13 @52303 has 38 MA's), (16, 52324), (17, 52327), (19, 52429), (23, 52531), (25, 52576),

Gene: Chewbacca_54 Start: 35422, Stop: 35706, Start Num: 13
Candidate Starts for Chewbacca_54:
(10, 35356), (Start: 13 @35422 has 38 MA's), (14, 35428), (15, 35431), (16, 35443), (19, 35548), (22, 35608), (23, 35641),

Gene: Doomslug_83 Start: 45238, Stop: 45531, Start Num: 13
Candidate Starts for Doomslug_83:
(Start: 13 @45238 has 38 MA's), (16, 45259), (17, 45262), (19, 45364), (23, 45466), (25, 45511),

Gene: Fulbright_51 Start: 34511, Stop: 34795, Start Num: 13
Candidate Starts for Fulbright_51:
(10, 34445), (Start: 13 @34511 has 38 MA's), (14, 34517), (15, 34520), (16, 34532), (19, 34637), (22, 34697), (23, 34730),

Gene: Gex_52 Start: 35438, Stop: 35722, Start Num: 13
Candidate Starts for Gex_52:
(10, 35372), (Start: 13 @35438 has 38 MA's), (14, 35444), (15, 35447), (16, 35459), (19, 35564), (22, 35624), (23, 35657),

Gene: Hanako_57 Start: 36816, Stop: 37109, Start Num: 13
Candidate Starts for Hanako_57:
(2, 36534), (3, 36573), (5, 36621), (6, 36672), (7, 36705), (8, 36714), (9, 36732), (11, 36777), (Start: 13 @36816 has 38 MA's), (16, 36837), (18, 36900), (19, 36942), (21, 36993), (23, 37044),

Gene: Hlubikazi_65 Start: 40933, Stop: 41226, Start Num: 13
Candidate Starts for Hlubikazi_65:
(10, 40867), (Start: 13 @40933 has 38 MA's), (14, 40939), (16, 40954), (18, 41017), (19, 41059), (23, 41161), (25, 41206),

Gene: Jamie19_51 Start: 35107, Stop: 35400, Start Num: 13
Candidate Starts for Jamie19_51:

(2, 34825), (3, 34864), (5, 34912), (6, 34963), (7, 34996), (8, 35005), (9, 35023), (11, 35068), (Start: 13 @35107 has 38 MA's), (16, 35128), (18, 35191), (19, 35233), (21, 35284), (23, 35335),

Gene: JohnLord_73 Start: 51763, Stop: 52056, Start Num: 13
Candidate Starts for JohnLord_73:
(Start: 13 @51763 has 38 MA's), (16, 51784), (17, 51787), (19, 51889), (23, 51991), (25, 52036),

Gene: Kevin1_56 Start: 35942, Stop: 36241, Start Num: 12
Candidate Starts for Kevin1_56:
(1, 35609), (4, 35714), (Start: 12 @35942 has 1 MA's), (19, 36080), (21, 36131), (23, 36176), (24, 36179),

Gene: Magsby_52 Start: 35439, Stop: 35723, Start Num: 13
Candidate Starts for Magsby_52:
(10, 35373), (Start: 13 @35439 has 38 MA's), (14, 35445), (15, 35448), (16, 35460), (19, 35565), (22, 35625), (23, 35658),

Gene: Mandlovu_65 Start: 40875, Stop: 41168, Start Num: 13
Candidate Starts for Mandlovu_65:
(10, 40809), (Start: 13 @40875 has 38 MA's), (14, 40881), (16, 40896), (18, 40959), (19, 41001), (23, 41103), (25, 41148),

Gene: Mask_72 Start: 54770, Stop: 55063, Start Num: 13
Candidate Starts for Mask_72:
(Start: 13 @54770 has 38 MA's), (16, 54791), (17, 54794), (19, 54896), (23, 54998), (25, 55043),

Gene: Melville_55 Start: 35423, Stop: 35707, Start Num: 13
Candidate Starts for Melville_55:
(10, 35357), (Start: 13 @35423 has 38 MA's), (14, 35429), (15, 35432), (16, 35444), (19, 35549), (22, 35609), (23, 35642),

Gene: Nenae_57 Start: 36818, Stop: 37111, Start Num: 13
Candidate Starts for Nenae_57:
(2, 36536), (3, 36575), (5, 36623), (6, 36674), (7, 36707), (8, 36716), (9, 36734), (11, 36779), (Start: 13 @36818 has 38 MA's), (16, 36839), (18, 36902), (19, 36944), (21, 36995), (23, 37046),

Gene: Panchino_51 Start: 36536, Stop: 36829, Start Num: 13
Candidate Starts for Panchino_51:
(10, 36470), (Start: 13 @36536 has 38 MA's), (14, 36542), (16, 36557), (18, 36620), (20, 36704), (23, 36764), (25, 36809),

Gene: Parmesanjohn_52 Start: 35442, Stop: 35726, Start Num: 13
Candidate Starts for Parmesanjohn_52:
(10, 35376), (Start: 13 @35442 has 38 MA's), (14, 35448), (15, 35451), (16, 35463), (19, 35568), (22, 35628), (23, 35661),

Gene: PhancyPhin_57 Start: 36812, Stop: 37105, Start Num: 13
Candidate Starts for PhancyPhin_57:
(2, 36530), (3, 36569), (5, 36617), (6, 36668), (7, 36701), (8, 36710), (9, 36728), (11, 36773), (Start: 13 @36812 has 38 MA's), (16, 36833), (18, 36896), (19, 36938), (21, 36989), (23, 37040),

Gene: Phloss_50 Start: 34849, Stop: 35133, Start Num: 13
Candidate Starts for Phloss_50:

(10, 34783), (Start: 13 @34849 has 38 MA's), (14, 34855), (15, 34858), (16, 34870), (19, 34975), (22, 35035), (23, 35068),

Gene: Phrann_54 Start: 37095, Stop: 37388, Start Num: 13
Candidate Starts for Phrann_54:
(2, 36813), (3, 36852), (5, 36900), (6, 36951), (7, 36984), (8, 36993), (9, 37011), (11, 37056), (Start: 13 @37095 has 38 MA's), (16, 37116), (18, 37179), (19, 37221), (23, 37323), (25, 37368),

Gene: Purgamenstris_57 Start: 36816, Stop: 37109, Start Num: 13
Candidate Starts for Purgamenstris_57:
(2, 36534), (3, 36573), (5, 36621), (6, 36672), (7, 36705), (8, 36714), (9, 36732), (11, 36777), (Start: 13 @36816 has 38 MA's), (16, 36837), (18, 36900), (19, 36942), (21, 36993), (23, 37044),

Gene: Raymond7_51 Start: 36604, Stop: 36897, Start Num: 13
Candidate Starts for Raymond7_51:
(2, 36322), (3, 36361), (5, 36409), (6, 36460), (7, 36493), (8, 36502), (9, 36520), (11, 36565), (Start: 13 @36604 has 38 MA's), (16, 36625), (18, 36688), (19, 36730), (21, 36781), (23, 36832),

Gene: Rebel_50 Start: 34001, Stop: 34294, Start Num: 13
Candidate Starts for Rebel_50:
(2, 33719), (3, 33758), (5, 33806), (6, 33857), (7, 33890), (8, 33899), (9, 33917), (11, 33962), (Start: 13 @34001 has 38 MA's), (16, 34022), (18, 34085), (19, 34127), (21, 34178), (23, 34229),

Gene: Redi_57 Start: 36815, Stop: 37108, Start Num: 13
Candidate Starts for Redi_57:
(2, 36533), (3, 36572), (5, 36620), (6, 36671), (7, 36704), (8, 36713), (9, 36731), (11, 36776), (Start: 13 @36815 has 38 MA's), (16, 36836), (18, 36899), (19, 36941), (21, 36992), (23, 37043),

Gene: Rita_70 Start: 41718, Stop: 42011, Start Num: 13
Candidate Starts for Rita_70:
(Start: 13 @41718 has 38 MA's), (16, 41739), (17, 41742), (18, 41802), (19, 41844), (23, 41946), (25, 41991),

Gene: Rubeelu_56 Start: 36239, Stop: 36532, Start Num: 13
Candidate Starts for Rubeelu_56:
(10, 36173), (Start: 13 @36239 has 38 MA's), (14, 36245), (16, 36260), (18, 36323), (20, 36407), (23, 36467),

Gene: Schnauzer_53 Start: 35442, Stop: 35726, Start Num: 13
Candidate Starts for Schnauzer_53:
(10, 35376), (Start: 13 @35442 has 38 MA's), (14, 35448), (15, 35451), (16, 35463), (19, 35568), (22, 35628), (23, 35661),

Gene: Sejanus_71 Start: 53231, Stop: 53524, Start Num: 13
Candidate Starts for Sejanus_71:
(Start: 13 @53231 has 38 MA's), (16, 53252), (17, 53255), (19, 53357), (23, 53459), (25, 53504),

Gene: ShrimpFriedEgg_57 Start: 36815, Stop: 37108, Start Num: 13
Candidate Starts for ShrimpFriedEgg_57:
(2, 36533), (3, 36572), (5, 36620), (6, 36671), (7, 36704), (8, 36713), (9, 36731), (11, 36776), (Start: 13 @36815 has 38 MA's), (16, 36836), (18, 36899), (19, 36941), (21, 36992), (23, 37043),

Gene: Silvafighter_53 Start: 35415, Stop: 35699, Start Num: 13

Candidate Starts for Silvafighter_53:
(10, 35349), (Start: 13 @35415 has 38 MA's), (14, 35421), (15, 35424), (16, 35436), (19, 35541), (22, 35601), (23, 35634),

Gene: Smurph_52 Start: 35442, Stop: 35726, Start Num: 13
Candidate Starts for Smurph_52:
(10, 35376), (Start: 13 @35442 has 38 MA's), (14, 35448), (15, 35451), (16, 35463), (19, 35568), (22, 35628), (23, 35661),

Gene: Snekmaggedon_51 Start: 35107, Stop: 35400, Start Num: 13
Candidate Starts for Snekmaggedon_51:
(2, 34825), (3, 34864), (5, 34912), (6, 34963), (7, 34996), (8, 35005), (9, 35023), (11, 35068), (Start: 13 @35107 has 38 MA's), (16, 35128), (18, 35191), (19, 35233), (21, 35284), (23, 35335),

Gene: Spinach_57 Start: 36815, Stop: 37108, Start Num: 13
Candidate Starts for Spinach_57:
(2, 36533), (3, 36572), (5, 36620), (6, 36671), (7, 36704), (8, 36713), (9, 36731), (11, 36776), (Start: 13 @36815 has 38 MA's), (16, 36836), (18, 36899), (19, 36941), (21, 36992), (23, 37043),

Gene: SpongeBob_51 Start: 35107, Stop: 35400, Start Num: 13
Candidate Starts for SpongeBob_51:
(2, 34825), (3, 34864), (5, 34912), (6, 34963), (7, 34996), (8, 35005), (9, 35023), (11, 35068), (Start: 13 @35107 has 38 MA's), (16, 35128), (18, 35191), (19, 35233), (21, 35284), (23, 35335),

Gene: Strokeseat_65 Start: 40932, Stop: 41225, Start Num: 13
Candidate Starts for Strokeseat_65:
(10, 40866), (Start: 13 @40932 has 38 MA's), (14, 40938), (16, 40953), (18, 41016), (19, 41058), (23, 41160), (25, 41205),

Gene: Tapioca_54 Start: 35534, Stop: 35827, Start Num: 13
Candidate Starts for Tapioca_54:
(2, 35252), (3, 35291), (5, 35339), (6, 35390), (7, 35423), (8, 35432), (9, 35450), (11, 35495), (Start: 13 @35534 has 38 MA's), (16, 35555), (18, 35618), (19, 35660), (23, 35762), (25, 35807),

Gene: Tessdabest_53 Start: 35439, Stop: 35723, Start Num: 13
Candidate Starts for Tessdabest_53:
(10, 35373), (Start: 13 @35439 has 38 MA's), (14, 35445), (15, 35448), (16, 35460), (19, 35565), (22, 35625), (23, 35658),

Gene: Tortoise12_51 Start: 34125, Stop: 34409, Start Num: 13
Candidate Starts for Tortoise12_51:
(10, 34059), (Start: 13 @34125 has 38 MA's), (14, 34131), (15, 34134), (16, 34146), (19, 34251), (22, 34311), (23, 34344),

Gene: Xerxes_52 Start: 35439, Stop: 35723, Start Num: 13
Candidate Starts for Xerxes_52:
(10, 35373), (Start: 13 @35439 has 38 MA's), (14, 35445), (15, 35448), (16, 35460), (19, 35565), (22, 35625), (23, 35658),