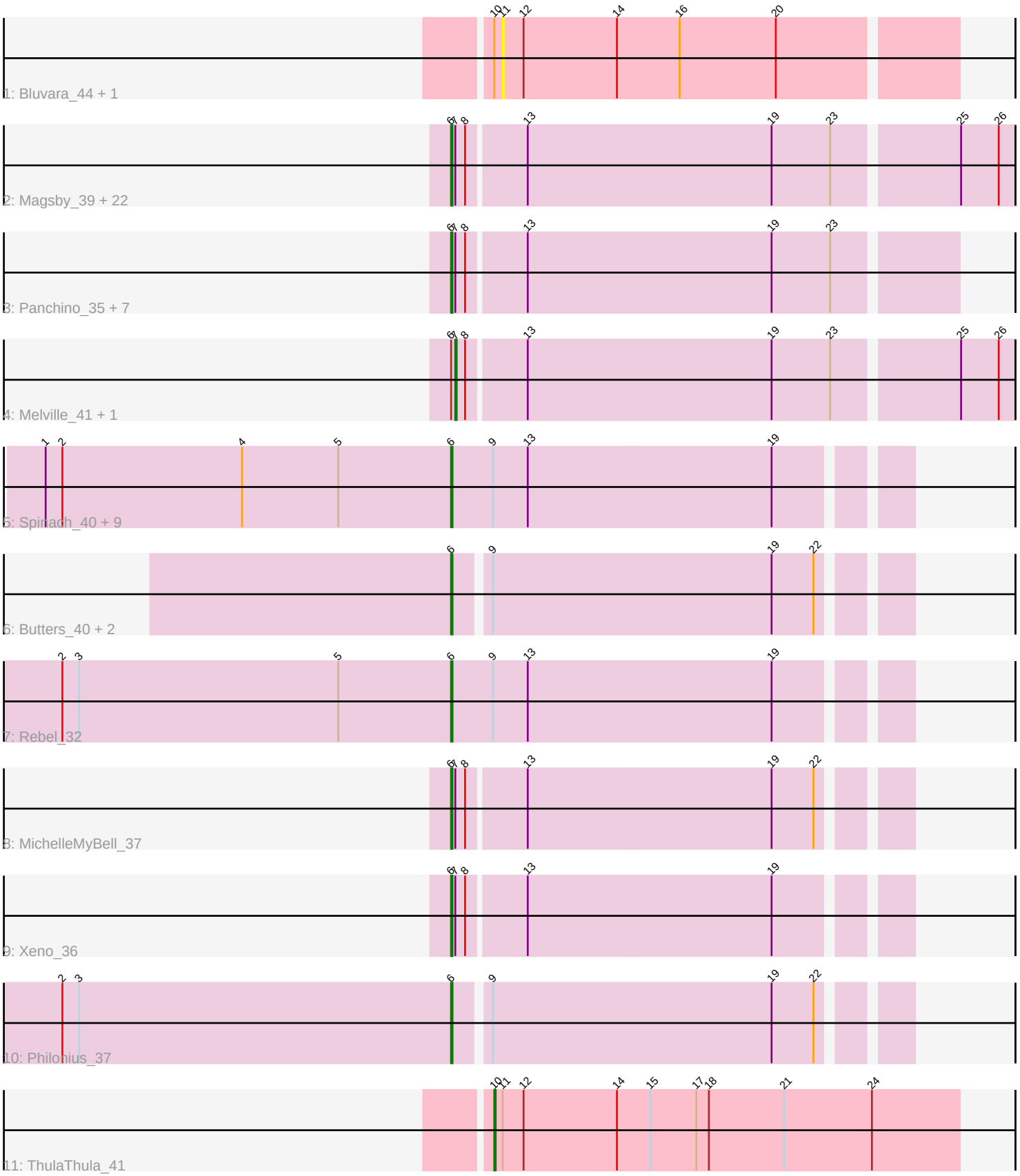
Pham 294797


1: Bluvara_44 + 1
2: Magsby_39 + 22
3: Panchino_35 + 7
4: Melville_41 + 1
5: Spinach_40 + 9
6: Butters_40 + 2
7: Rebel_32
8: MichelleMyBell_37
9: Xeno_36
10: Philonius_37
11: ThulaThula_41

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 294797 Report

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

Pham number 294797 has 53 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Bluvara_44, Stuck_53
• Track 2 : Magsby_39, Duplicity_39, SkinnyPete_34, Cubone_39, Phloss_37, Carcharodon_39, Bosection6_37, Gex_39, Fulbright_38, Journey_37, Aggie_37, Pipsqueaks_39, Silvy_37, Xerxes_39, Silvafighter_40, Charlie_37, Chewbacca_40, Scitech_36, Parmesanjohn_39, Smurph_39, Tortoise12_37, Schnauzer_39, Tessdabest_40
• Track 3 : Panchino_35, Jamie19_36, Phrann_40, Shweta_36, EGUnicorn_37, Andies_36, Snekmaggedon_36, SpongeBob_36
• Track 4 : Melville_41, Tapioca_40
• Track 5 : Spinach_40, BabeRuth_41, Redi_40, Purgamenstris_40, Impisi_42, Hanako_40, ShrimpFriedEgg_40, Raymond7_34, Nenae_40, PhancyPhin_40
• Track 6 : Butters_40, Kevin1_38, Rubeelu_40
• Track 7 : Rebel_32
• Track 8 : MichelleMyBell_37
• Track 9 : Xeno_36
• Track 10 : Philonius_37
• Track 11 : ThulaThula_41

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 44 of the 47 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aggie_37, Andies_36, BabeRuth_41, Bosection6_37, Butters_40, Carcharodon_39, Charlie_37, Chewbacca_40, Cubone_39, Duplicity_39, EGUnicorn_37, Fulbright_38, Gex_39, Hanako_40, Impisi_42, Jamie19_36, Journey_37, Kevin1_38, Magsby_39, MichelleMyBell_37, Nenae_40, Panchino_35, Parmesanjohn_39, PhancyPhin_40, Philonius_37, Phloss_37, Phrann_40, Pipsqueaks_39, Purgamenstris_40, Raymond7_34, Rebel_32, Redi_40, Rubeelu_40, Schnauzer_39, Scitech_36, ShrimpFriedEgg_40, Shweta_36, Silvafighter_40, Silvy_37, SkinnyPete_34, Smurph_39, Snekmaggedon_36, Spinach_40, SpongeBob_36, Tessdabest_40, Tortoise12_37, Xeno_36, Xerxes_39,

Genes that have the "Most Annotated" start but do not call it:
• Melville_41, Tapioca_40,

Genes that do not have the "Most Annotated" start:
• Bluvara_44, Stuck_53, ThulaThula_41,

Summary by start number:

Start 6:
• Found in 50 of 53 (94.3%) of genes in pham
• Manual Annotations of this start: 44 of 47
• Called 96.0% of time when present
• Phage (with cluster) where this start called: Aggie_37 (N), Andies_36 (N), BabeRuth_41 (N), Bosection6_37 (N), Butters_40 (N), Carcharodon_39 (N), Charlie_37 (N), Chewbacca_40 (N), Cubone_39 (N), Duplicity_39 (N), EGUnicorn_37 (N), Fulbright_38 (N), Gex_39 (N), Hanako_40 (N), Impisi_42 (N), Jamie19_36 (N), Journey_37 (N), Kevin1_38 (N), Magsby_39 (N), MichelleMyBell_37 (N), Nenae_40 (N), Panchino_35 (N), Parmesanjohn_39 (N), PhancyPhin_40 (N), Philonius_37 (N), Phloss_37 (N), Phrann_40 (N), Pipsqueaks_39 (N), Purgamenstris_40 (N), Raymond7_34 (N), Rebel_32 (N), Redi_40 (N), Rubeelu_40 (N), Schnauzer_39 (N), Scitech_36 (N), ShrimpFriedEgg_40 (N), Shweta_36 (N), Silvafighter_40 (N), Silvy_37 (N), SkinnyPete_34 (N), Smurph_39 (N), Snekmaggedon_36 (N), Spinach_40 (N), SpongeBob_36 (N), Tessdabest_40 (N), Tortoise12_37 (N), Xeno_36 (N), Xerxes_39 (N),

Start 7:
• Found in 35 of 53 (66.0%) of genes in pham
• Manual Annotations of this start: 2 of 47
• Called 5.7% of time when present
• Phage (with cluster) where this start called: Melville_41 (N), Tapioca_40 (N),

Start 10:
• Found in 3 of 53 (5.7%) of genes in pham
• Manual Annotations of this start: 1 of 47
• Called 33.3% of time when present
• Phage (with cluster) where this start called: ThulaThula_41 (P5),

Start 11:
• Found in 3 of 53 (5.7%) of genes in pham
• No Manual Annotations of this start.
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Bluvara_44 (I3), Stuck_53 (I2),

Summary by clusters:

There are 4 clusters represented in this pham: I3, I2, P5, N,

Info for manual annotations of cluster N:
•Start number 6 was manually annotated 44 times for cluster N.
•Start number 7 was manually annotated 2 times for cluster N.

Info for manual annotations of cluster P5:
•Start number 10 was manually annotated 1 time for cluster P5.

Gene Information:

Gene: Aggie_37 Start: 28130, Stop: 28516, Start Num: 6
Candidate Starts for Aggie_37:
(Start: 6 @28130 has 44 MA's), (Start: 7 @28133 has 2 MA's), (8, 28139), (13, 28178), (19, 28352), (23, 28394), (25, 28478), (26, 28505),

Gene: Andies_36 Start: 28648, Stop: 28995, Start Num: 6
Candidate Starts for Andies_36:
(Start: 6 @28648 has 44 MA's), (Start: 7 @28651 has 2 MA's), (8, 28657), (13, 28696), (19, 28870), (23, 28912),

Gene: BabeRuth_41 Start: 29773, Stop: 30084, Start Num: 6
Candidate Starts for BabeRuth_41:
(1, 29482), (2, 29494), (4, 29623), (5, 29692), (Start: 6 @29773 has 44 MA's), (9, 29803), (13, 29827), (19, 30001),

Gene: Bluvara_44 Start: 34751, Stop: 35068, Start Num: 11
Candidate Starts for Bluvara_44:
(Start: 10 @34745 has 1 MA's), (11, 34751), (12, 34766), (14, 34832), (16, 34877), (20, 34946),

Gene: Bosection6_37 Start: 28151, Stop: 28537, Start Num: 6
Candidate Starts for Bosection6_37:
(Start: 6 @28151 has 44 MA's), (Start: 7 @28154 has 2 MA's), (8, 28160), (13, 28199), (19, 28373), (23, 28415), (25, 28499), (26, 28526),

Gene: Butters_40 Start: 30199, Stop: 30501, Start Num: 6
Candidate Starts for Butters_40:
(Start: 6 @30199 has 44 MA's), (9, 30220), (19, 30418), (22, 30448),

Gene: Carcharodon_39 Start: 29459, Stop: 29845, Start Num: 6
Candidate Starts for Carcharodon_39:
(Start: 6 @29459 has 44 MA's), (Start: 7 @29462 has 2 MA's), (8, 29468), (13, 29507), (19, 29681), (23, 29723), (25, 29807), (26, 29834),

Gene: Charlie_37 Start: 28150, Stop: 28536, Start Num: 6
Candidate Starts for Charlie_37:
(Start: 6 @28150 has 44 MA's), (Start: 7 @28153 has 2 MA's), (8, 28159), (13, 28198), (19, 28372), (23, 28414), (25, 28498), (26, 28525),

Gene: Chewbacca_40 Start: 29459, Stop: 29845, Start Num: 6
Candidate Starts for Chewbacca_40:
(Start: 6 @29459 has 44 MA's), (Start: 7 @29462 has 2 MA's), (8, 29468), (13, 29507), (19, 29681), (23, 29723), (25, 29807), (26, 29834),

Gene: Cubone_39 Start: 28172, Stop: 28558, Start Num: 6
Candidate Starts for Cubone_39:

(Start: 6 @28172 has 44 MA's), (Start: 7 @28175 has 2 MA's), (8, 28181), (13, 28220), (19, 28394), (23, 28436), (25, 28520), (26, 28547),

Gene: Duplicity_39 Start: 29468, Stop: 29854, Start Num: 6
Candidate Starts for Duplicity_39:
(Start: 6 @29468 has 44 MA's), (Start: 7 @29471 has 2 MA's), (8, 29477), (13, 29516), (19, 29690), (23, 29732), (25, 29816), (26, 29843),

Gene: EGUnicorn_37 Start: 28151, Stop: 28498, Start Num: 6
Candidate Starts for EGUnicorn_37:
(Start: 6 @28151 has 44 MA's), (Start: 7 @28154 has 2 MA's), (8, 28160), (13, 28199), (19, 28373), (23, 28415),

Gene: Fulbright_38 Start: 28548, Stop: 28934, Start Num: 6
Candidate Starts for Fulbright_38:
(Start: 6 @28548 has 44 MA's), (Start: 7 @28551 has 2 MA's), (8, 28557), (13, 28596), (19, 28770), (23, 28812), (25, 28896), (26, 28923),

Gene: Gex_39 Start: 29475, Stop: 29861, Start Num: 6
Candidate Starts for Gex_39:
(Start: 6 @29475 has 44 MA's), (Start: 7 @29478 has 2 MA's), (8, 29484), (13, 29523), (19, 29697), (23, 29739), (25, 29823), (26, 29850),

Gene: Hanako_40 Start: 29772, Stop: 30083, Start Num: 6
Candidate Starts for Hanako_40:
(1, 29481), (2, 29493), (4, 29622), (5, 29691), (Start: 6 @29772 has 44 MA's), (9, 29802), (13, 29826), (19, 30000),

Gene: Impisi_42 Start: 30328, Stop: 30639, Start Num: 6
Candidate Starts for Impisi_42:
(1, 30037), (2, 30049), (4, 30178), (5, 30247), (Start: 6 @30328 has 44 MA's), (9, 30358), (13, 30382), (19, 30556),

Gene: Jamie19_36 Start: 28529, Stop: 28876, Start Num: 6
Candidate Starts for Jamie19_36:
(Start: 6 @28529 has 44 MA's), (Start: 7 @28532 has 2 MA's), (8, 28538), (13, 28577), (19, 28751), (23, 28793),

Gene: Journey_37 Start: 28150, Stop: 28536, Start Num: 6
Candidate Starts for Journey_37:
(Start: 6 @28150 has 44 MA's), (Start: 7 @28153 has 2 MA's), (8, 28159), (13, 28198), (19, 28372), (23, 28414), (25, 28498), (26, 28525),

Gene: Kevin1_38 Start: 29378, Stop: 29680, Start Num: 6
Candidate Starts for Kevin1_38:
(Start: 6 @29378 has 44 MA's), (9, 29399), (19, 29597), (22, 29627),

Gene: Magsby_39 Start: 29476, Stop: 29862, Start Num: 6
Candidate Starts for Magsby_39:
(Start: 6 @29476 has 44 MA's), (Start: 7 @29479 has 2 MA's), (8, 29485), (13, 29524), (19, 29698), (23, 29740), (25, 29824), (26, 29851),

Gene: Melville_41 Start: 29463, Stop: 29846, Start Num: 7

Candidate Starts for Melville_41:
(Start: 6 @29460 has 44 MA's), (Start: 7 @29463 has 2 MA's), (8, 29469), (13, 29508), (19, 29682), (23, 29724), (25, 29808), (26, 29835),

Gene: MichelleMyBell_37 Start: 28467, Stop: 28772, Start Num: 6
Candidate Starts for MichelleMyBell_37:
(Start: 6 @28467 has 44 MA's), (Start: 7 @28470 has 2 MA's), (8, 28476), (13, 28515), (19, 28689), (22, 28719),

Gene: Nenae_40 Start: 29775, Stop: 30086, Start Num: 6
Candidate Starts for Nenae_40:
(1, 29484), (2, 29496), (4, 29625), (5, 29694), (Start: 6 @29775 has 44 MA's), (9, 29805), (13, 29829), (19, 30003),

Gene: Panchino_35 Start: 29875, Stop: 30222, Start Num: 6
Candidate Starts for Panchino_35:
(Start: 6 @29875 has 44 MA's), (Start: 7 @29878 has 2 MA's), (8, 29884), (13, 29923), (19, 30097), (23, 30139),

Gene: Parmesanjohn_39 Start: 29479, Stop: 29865, Start Num: 6
Candidate Starts for Parmesanjohn_39:
(Start: 6 @29479 has 44 MA's), (Start: 7 @29482 has 2 MA's), (8, 29488), (13, 29527), (19, 29701), (23, 29743), (25, 29827), (26, 29854),

Gene: PhancyPhin_40 Start: 29769, Stop: 30080, Start Num: 6
Candidate Starts for PhancyPhin_40:
(1, 29478), (2, 29490), (4, 29619), (5, 29688), (Start: 6 @29769 has 44 MA's), (9, 29799), (13, 29823), (19, 29997),

Gene: Philonius_37 Start: 28138, Stop: 28440, Start Num: 6
Candidate Starts for Philonius_37:
(2, 27859), (3, 27871), (Start: 6 @28138 has 44 MA's), (9, 28159), (19, 28357), (22, 28387),

Gene: Phloss_37 Start: 28886, Stop: 29272, Start Num: 6
Candidate Starts for Phloss_37:
(Start: 6 @28886 has 44 MA's), (Start: 7 @28889 has 2 MA's), (8, 28895), (13, 28934), (19, 29108), (23, 29150), (25, 29234), (26, 29261),

Gene: Phrann_40 Start: 30555, Stop: 30902, Start Num: 6
Candidate Starts for Phrann_40:
(Start: 6 @30555 has 44 MA's), (Start: 7 @30558 has 2 MA's), (8, 30564), (13, 30603), (19, 30777), (23, 30819),

Gene: Pipsqueaks_39 Start: 29456, Stop: 29842, Start Num: 6
Candidate Starts for Pipsqueaks_39:
(Start: 6 @29456 has 44 MA's), (Start: 7 @29459 has 2 MA's), (8, 29465), (13, 29504), (19, 29678), (23, 29720), (25, 29804), (26, 29831),

Gene: Purgamenstris_40 Start: 29773, Stop: 30084, Start Num: 6
Candidate Starts for Purgamenstris_40:
(1, 29482), (2, 29494), (4, 29623), (5, 29692), (Start: 6 @29773 has 44 MA's), (9, 29803), (13, 29827), (19, 30001),

Gene: Raymond7_34 Start: 29585, Stop: 29896, Start Num: 6
Candidate Starts for Raymond7_34:
(1, 29294), (2, 29306), (4, 29435), (5, 29504), (Start: 6 @29585 has 44 MA's), (9, 29615), (13, 29639), (19, 29813),

Gene: Rebel_32 Start: 25903, Stop: 26214, Start Num: 6
Candidate Starts for Rebel_32:
(2, 25624), (3, 25636), (5, 25822), (Start: 6 @25903 has 44 MA's), (9, 25933), (13, 25957), (19, 26131),

Gene: Redi_40 Start: 29772, Stop: 30083, Start Num: 6
Candidate Starts for Redi_40:
(1, 29481), (2, 29493), (4, 29622), (5, 29691), (Start: 6 @29772 has 44 MA's), (9, 29802), (13, 29826), (19, 30000),

Gene: Rubeelu_40 Start: 30199, Stop: 30501, Start Num: 6
Candidate Starts for Rubeelu_40:
(Start: 6 @30199 has 44 MA's), (9, 30220), (19, 30418), (22, 30448),

Gene: Schnauzer_39 Start: 29479, Stop: 29865, Start Num: 6
Candidate Starts for Schnauzer_39:
(Start: 6 @29479 has 44 MA's), (Start: 7 @29482 has 2 MA's), (8, 29488), (13, 29527), (19, 29701), (23, 29743), (25, 29827), (26, 29854),

Gene: Scitech_36 Start: 27327, Stop: 27713, Start Num: 6
Candidate Starts for Scitech_36:
(Start: 6 @27327 has 44 MA's), (Start: 7 @27330 has 2 MA's), (8, 27336), (13, 27375), (19, 27549), (23, 27591), (25, 27675), (26, 27702),

Gene: ShrimpFriedEgg_40 Start: 29772, Stop: 30083, Start Num: 6
Candidate Starts for ShrimpFriedEgg_40:
(1, 29481), (2, 29493), (4, 29622), (5, 29691), (Start: 6 @29772 has 44 MA's), (9, 29802), (13, 29826), (19, 30000),

Gene: Shweta_36 Start: 28659, Stop: 29006, Start Num: 6
Candidate Starts for Shweta_36:
(Start: 6 @28659 has 44 MA's), (Start: 7 @28662 has 2 MA's), (8, 28668), (13, 28707), (19, 28881), (23, 28923),

Gene: Silvafighter_40 Start: 29452, Stop: 29838, Start Num: 6
Candidate Starts for Silvafighter_40:
(Start: 6 @29452 has 44 MA's), (Start: 7 @29455 has 2 MA's), (8, 29461), (13, 29500), (19, 29674), (23, 29716), (25, 29800), (26, 29827),

Gene: Silvy_37 Start: 28130, Stop: 28516, Start Num: 6
Candidate Starts for Silvy_37:
(Start: 6 @28130 has 44 MA's), (Start: 7 @28133 has 2 MA's), (8, 28139), (13, 28178), (19, 28352), (23, 28394), (25, 28478), (26, 28505),

Gene: SkinnyPete_34 Start: 27190, Stop: 27576, Start Num: 6
Candidate Starts for SkinnyPete_34:
(Start: 6 @27190 has 44 MA's), (Start: 7 @27193 has 2 MA's), (8, 27199), (13, 27238), (19, 27412), (23, 27454), (25, 27538), (26, 27565),

Gene: Smurph_39 Start: 29479, Stop: 29865, Start Num: 6
Candidate Starts for Smurph_39:
(Start: 6 @29479 has 44 MA's), (Start: 7 @29482 has 2 MA's), (8, 29488), (13, 29527), (19, 29701), (23, 29743), (25, 29827), (26, 29854),

Gene: Snekmaggedon_36 Start: 28529, Stop: 28876, Start Num: 6
Candidate Starts for Snekmaggedon_36:
(Start: 6 @28529 has 44 MA's), (Start: 7 @28532 has 2 MA's), (8, 28538), (13, 28577), (19, 28751), (23, 28793),

Gene: Spinach_40 Start: 29772, Stop: 30083, Start Num: 6
Candidate Starts for Spinach_40:
(1, 29481), (2, 29493), (4, 29622), (5, 29691), (Start: 6 @29772 has 44 MA's), (9, 29802), (13, 29826), (19, 30000),

Gene: SpongeBob_36 Start: 28529, Stop: 28876, Start Num: 6
Candidate Starts for SpongeBob_36:
(Start: 6 @28529 has 44 MA's), (Start: 7 @28532 has 2 MA's), (8, 28538), (13, 28577), (19, 28751), (23, 28793),

Gene: Stuck_53 Start: 39604, Stop: 39921, Start Num: 11
Candidate Starts for Stuck_53:
(Start: 10 @39598 has 1 MA's), (11, 39604), (12, 39619), (14, 39685), (16, 39730), (20, 39799),

Gene: Tapioca_40 Start: 29448, Stop: 29831, Start Num: 7
Candidate Starts for Tapioca_40:
(Start: 6 @29445 has 44 MA's), (Start: 7 @29448 has 2 MA's), (8, 29454), (13, 29493), (19, 29667), (23, 29709), (25, 29793), (26, 29820),

Gene: Tessdabest_40 Start: 29476, Stop: 29862, Start Num: 6
Candidate Starts for Tessdabest_40:
(Start: 6 @29476 has 44 MA's), (Start: 7 @29479 has 2 MA's), (8, 29485), (13, 29524), (19, 29698), (23, 29740), (25, 29824), (26, 29851),

Gene: ThulaThula_41 Start: 32851, Stop: 33183, Start Num: 10
Candidate Starts for ThulaThula_41:
(Start: 10 @32851 has 1 MA's), (11, 32857), (12, 32872), (14, 32938), (15, 32962), (17, 32995), (18, 33004), (21, 33058), (24, 33121),

Gene: Tortoise12_37 Start: 28162, Stop: 28548, Start Num: 6
Candidate Starts for Tortoise12_37:
(Start: 6 @28162 has 44 MA's), (Start: 7 @28165 has 2 MA's), (8, 28171), (13, 28210), (19, 28384), (23, 28426), (25, 28510), (26, 28537),

Gene: Xeno_36 Start: 27916, Stop: 28221, Start Num: 6
Candidate Starts for Xeno_36:
(Start: 6 @27916 has 44 MA's), (Start: 7 @27919 has 2 MA's), (8, 27925), (13, 27964), (19, 28138),

Gene: Xerxes_39 Start: 29476, Stop: 29862, Start Num: 6
Candidate Starts for Xerxes_39:
(Start: 6 @29476 has 44 MA's), (Start: 7 @29479 has 2 MA's), (8, 29485), (13, 29524), (19, 29698), (23, 29740), (25, 29824), (26, 29851),