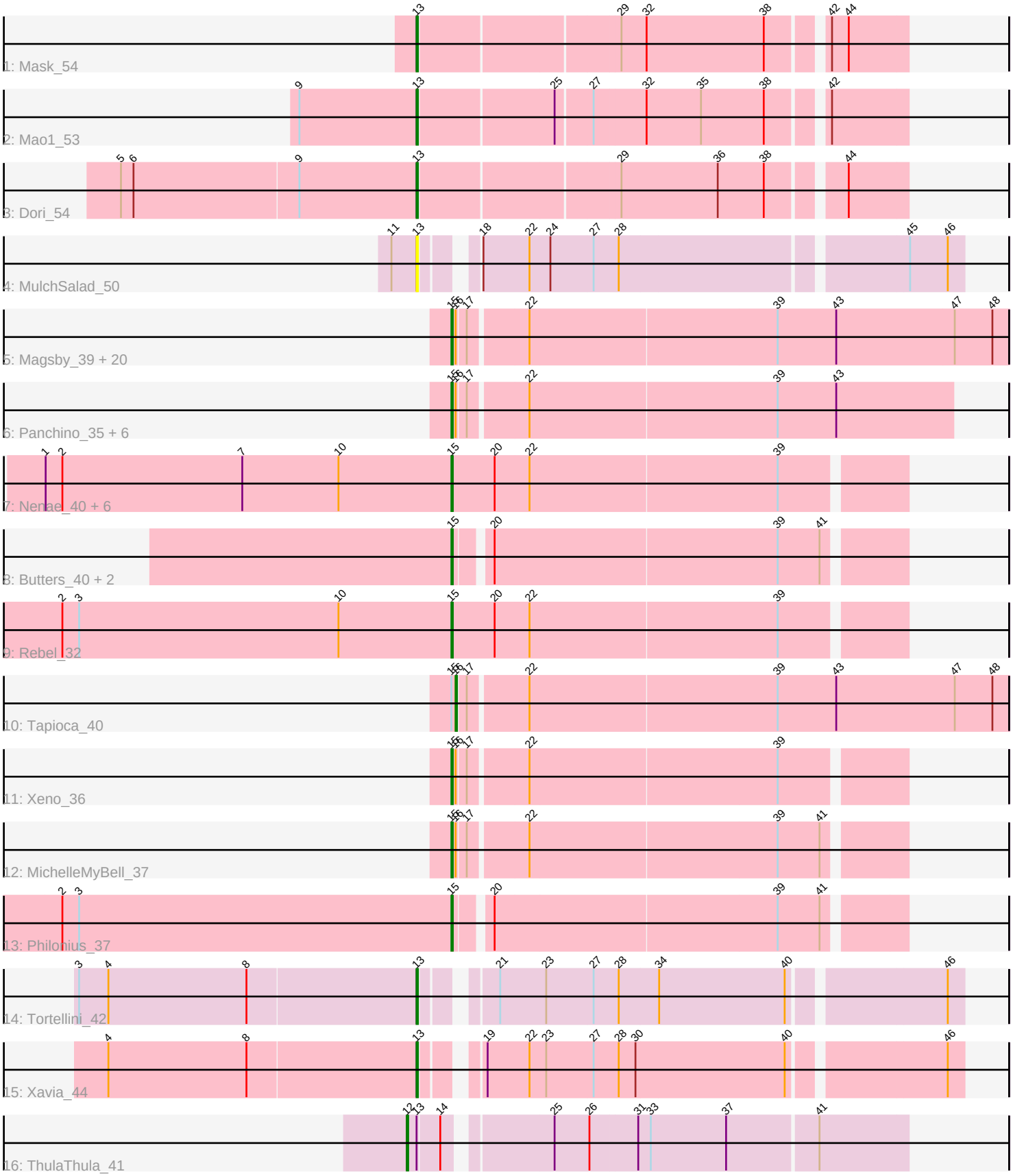
Pham 171527


1: Mask_54
2: Mao1_53
3: Dori_54
4: MulchSalad_50
5: Magsby_39 + 20
6: Panchino_35 + 6
7: Nemae_40 + 6
8: Butters_40 + 2
9: Rebel_32
10: Tapioca_40
11: Xeno_36
12: MichelleMyBell_37
13: Philonius_37
14: Tortellini_42
15: Xavia_44
16: 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 171527 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171527 has 50 members, 5 are drafts.

Phages represented in each track:
• Track 1 : Mask_54
• Track 2 : Mao1_53
• Track 3 : Dori_54
• Track 4 : MulchSalad_50
• Track 5 : Magsby_39, Duplicity_39, Melville_43, SkinnyPete_34, Carcharodon_39, Gex_39, Phloss_37, Bosection6_39, Journey_40, Aggie_37, Pipsqueaks_39, Silvy_37, Fulbright_38, Xerxes_39, Silvafighter_40, Charlie_37, Chewbacca_40, Scitech_36, Parmesanjohn_39, Smurph_39, Schnauzer_39
• Track 6 : Panchino_35, Jamie19_36, Shweta_36, Phrann_40, Andies_36, Snekmaggedon_36, SpongeBob_36
• Track 7 : Nenae_40, Purgamenstris_40, Raymond7_34, ShrimpFriedEgg_40, BabeRuth_41, PhancyPhin_40, Redi_40
• Track 8 : Butters_40, Kevin1_38, Rubeelu_40
• Track 9 : Rebel_32
• Track 10 : Tapioca_40
• Track 11 : Xeno_36
• Track 12 : MichelleMyBell_37
• Track 13 : Philonius_37
• Track 14 : Tortellini_42
• Track 15 : Xavia_44
• Track 16 : 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 15, it was called in 38 of the 45 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aggie_37, Andies_36, BabeRuth_41, Bosection6_39, Butters_40, Carcharodon_39, Charlie_37, Chewbacca_40, Duplicity_39, Fulbright_38, Gex_39, Jamie19_36, Journey_40, Kevin1_38, Magsby_39, Melville_43, 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, SpongeBob_36, Xeno_36, Xerxes_39,

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

Genes that do not have the "Most Annotated" start:
• Dori_54, Mao1_53, Mask_54, MulchSalad_50, ThulaThula_41, Tortellini_42, Xavia_44,

Summary by start number:

Start 12:
• Found in 1 of 50 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ThulaThula_41 (P5),

Start 13:
• Found in 7 of 50 (14.0%) of genes in pham
• Manual Annotations of this start: 5 of 45
• Called 85.7% of time when present
• Phage (with cluster) where this start called: Dori_54 (AD), Mao1_53 (AD), Mask_54 (AD), MulchSalad_50 (F), Tortellini_42 (P2), Xavia_44 (P3),

Start 15:
• Found in 43 of 50 (86.0%) of genes in pham
• Manual Annotations of this start: 38 of 45
• Called 97.7% of time when present
• Phage (with cluster) where this start called: Aggie_37 (N), Andies_36 (N), BabeRuth_41 (N), Bosection6_39 (N), Butters_40 (N), Carcharodon_39 (N), Charlie_37 (N), Chewbacca_40 (N), Duplicity_39 (N), Fulbright_38 (N), Gex_39 (N), Jamie19_36 (N), Journey_40 (N), Kevin1_38 (N), Magsby_39 (N), Melville_43 (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), SpongeBob_36 (N), Xeno_36 (N), Xerxes_39 (N),

Start 16:
• Found in 31 of 50 (62.0%) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 3.2% of time when present
• Phage (with cluster) where this start called: Tapioca_40 (N),

Summary by clusters:

There are 6 clusters represented in this pham: P2, P3, AD, F, P5, N,

Info for manual annotations of cluster AD:
•Start number 13 was manually annotated 3 times for cluster AD.

Info for manual annotations of cluster N:
•Start number 15 was manually annotated 38 times for cluster N.
•Start number 16 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster P2:
•Start number 13 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P3:
•Start number 13 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster P5:
•Start number 12 was manually annotated 1 time for cluster P5.

Gene Information:

Gene: Aggie_37 Start: 28130, Stop: 28516, Start Num: 15
Candidate Starts for Aggie_37:
(Start: 15 @28130 has 38 MA's), (Start: 16 @28133 has 1 MA's), (17, 28139), (22, 28178), (39, 28352), (43, 28394), (47, 28478), (48, 28505),

Gene: Andies_36 Start: 28648, Stop: 28995, Start Num: 15
Candidate Starts for Andies_36:
(Start: 15 @28648 has 38 MA's), (Start: 16 @28651 has 1 MA's), (17, 28657), (22, 28696), (39, 28870), (43, 28912),

Gene: BabeRuth_41 Start: 29773, Stop: 30084, Start Num: 15
Candidate Starts for BabeRuth_41:
(1, 29482), (2, 29494), (7, 29623), (10, 29692), (Start: 15 @29773 has 38 MA's), (20, 29803), (22, 29827), (39, 30001),

Gene: Bosection6_39 Start: 28151, Stop: 28537, Start Num: 15
Candidate Starts for Bosection6_39:
(Start: 15 @28151 has 38 MA's), (Start: 16 @28154 has 1 MA's), (17, 28160), (22, 28199), (39, 28373), (43, 28415), (47, 28499), (48, 28526),

Gene: Butters_40 Start: 30199, Stop: 30501, Start Num: 15
Candidate Starts for Butters_40:
(Start: 15 @30199 has 38 MA's), (20, 30220), (39, 30418), (41, 30448),

Gene: Carcharodon_39 Start: 29459, Stop: 29845, Start Num: 15
Candidate Starts for Carcharodon_39:
(Start: 15 @29459 has 38 MA's), (Start: 16 @29462 has 1 MA's), (17, 29468), (22, 29507), (39, 29681), (43, 29723), (47, 29807), (48, 29834),

Gene: Charlie_37 Start: 28150, Stop: 28536, Start Num: 15
Candidate Starts for Charlie_37:
(Start: 15 @28150 has 38 MA's), (Start: 16 @28153 has 1 MA's), (17, 28159), (22, 28198), (39, 28372), (43, 28414), (47, 28498), (48, 28525),

Gene: Chewbacca_40 Start: 29459, Stop: 29845, Start Num: 15
Candidate Starts for Chewbacca_40:
(Start: 15 @29459 has 38 MA's), (Start: 16 @29462 has 1 MA's), (17, 29468), (22, 29507), (39, 29681), (43, 29723), (47, 29807), (48, 29834),

Gene: Dori_54 Start: 46186, Stop: 46512, Start Num: 13
Candidate Starts for Dori_54:
(5, 45976), (6, 45985), (9, 46102), (Start: 13 @46186 has 5 MA's), (29, 46321), (36, 46390), (38, 46423), (44, 46471),

Gene: Duplicity_39 Start: 29468, Stop: 29854, Start Num: 15
Candidate Starts for Duplicity_39:
(Start: 15 @29468 has 38 MA's), (Start: 16 @29471 has 1 MA's), (17, 29477), (22, 29516), (39, 29690), (43, 29732), (47, 29816), (48, 29843),

Gene: Fulbright_38 Start: 28548, Stop: 28934, Start Num: 15
Candidate Starts for Fulbright_38:
(Start: 15 @28548 has 38 MA's), (Start: 16 @28551 has 1 MA's), (17, 28557), (22, 28596), (39, 28770), (43, 28812), (47, 28896), (48, 28923),

Gene: Gex_39 Start: 29475, Stop: 29861, Start Num: 15
Candidate Starts for Gex_39:
(Start: 15 @29475 has 38 MA's), (Start: 16 @29478 has 1 MA's), (17, 29484), (22, 29523), (39, 29697), (43, 29739), (47, 29823), (48, 29850),

Gene: Jamie19_36 Start: 28529, Stop: 28876, Start Num: 15
Candidate Starts for Jamie19_36:
(Start: 15 @28529 has 38 MA's), (Start: 16 @28532 has 1 MA's), (17, 28538), (22, 28577), (39, 28751), (43, 28793),

Gene: Journey_40 Start: 28150, Stop: 28536, Start Num: 15
Candidate Starts for Journey_40:
(Start: 15 @28150 has 38 MA's), (Start: 16 @28153 has 1 MA's), (17, 28159), (22, 28198), (39, 28372), (43, 28414), (47, 28498), (48, 28525),

Gene: Kevin1_38 Start: 29378, Stop: 29680, Start Num: 15
Candidate Starts for Kevin1_38:
(Start: 15 @29378 has 38 MA's), (20, 29399), (39, 29597), (41, 29627),

Gene: Magsby_39 Start: 29476, Stop: 29862, Start Num: 15
Candidate Starts for Magsby_39:
(Start: 15 @29476 has 38 MA's), (Start: 16 @29479 has 1 MA's), (17, 29485), (22, 29524), (39, 29698), (43, 29740), (47, 29824), (48, 29851),

Gene: Mao1_53 Start: 44475, Stop: 44801, Start Num: 13
Candidate Starts for Mao1_53:
(9, 44391), (Start: 13 @44475 has 5 MA's), (25, 44568), (27, 44592), (32, 44628), (35, 44667), (38, 44712), (42, 44748),

Gene: Mask_54 Start: 47033, Stop: 47359, Start Num: 13
Candidate Starts for Mask_54:
(Start: 13 @47033 has 5 MA's), (29, 47168), (32, 47186), (38, 47270), (42, 47306), (44, 47318),

Gene: Melville_43 Start: 29460, Stop: 29846, Start Num: 15
Candidate Starts for Melville_43:
(Start: 15 @29460 has 38 MA's), (Start: 16 @29463 has 1 MA's), (17, 29469), (22, 29508), (39, 29682), (43, 29724), (47, 29808), (48, 29835),

Gene: MichelleMyBell_37 Start: 28467, Stop: 28772, Start Num: 15
Candidate Starts for MichelleMyBell_37:
(Start: 15 @28467 has 38 MA's), (Start: 16 @28470 has 1 MA's), (17, 28476), (22, 28515), (39, 28689), (41, 28719),

Gene: MulchSalad_50 Start: 34298, Stop: 34651, Start Num: 13
Candidate Starts for MulchSalad_50:
(11, 34280), (Start: 13 @34298 has 5 MA's), (18, 34325), (22, 34358), (24, 34373), (27, 34403), (28, 34421), (45, 34613), (46, 34640),

Gene: Nenae_40 Start: 29775, Stop: 30086, Start Num: 15
Candidate Starts for Nenae_40:
(1, 29484), (2, 29496), (7, 29625), (10, 29694), (Start: 15 @29775 has 38 MA's), (20, 29805), (22, 29829), (39, 30003),

Gene: Panchino_35 Start: 29875, Stop: 30222, Start Num: 15
Candidate Starts for Panchino_35:
(Start: 15 @29875 has 38 MA's), (Start: 16 @29878 has 1 MA's), (17, 29884), (22, 29923), (39, 30097), (43, 30139),

Gene: Parmesanjohn_39 Start: 29479, Stop: 29865, Start Num: 15
Candidate Starts for Parmesanjohn_39:
(Start: 15 @29479 has 38 MA's), (Start: 16 @29482 has 1 MA's), (17, 29488), (22, 29527), (39, 29701), (43, 29743), (47, 29827), (48, 29854),

Gene: PhancyPhin_40 Start: 29769, Stop: 30080, Start Num: 15
Candidate Starts for PhancyPhin_40:
(1, 29478), (2, 29490), (7, 29619), (10, 29688), (Start: 15 @29769 has 38 MA's), (20, 29799), (22, 29823), (39, 29997),

Gene: Philonius_37 Start: 28138, Stop: 28440, Start Num: 15
Candidate Starts for Philonius_37:
(2, 27859), (3, 27871), (Start: 15 @28138 has 38 MA's), (20, 28159), (39, 28357), (41, 28387),

Gene: Phloss_37 Start: 28886, Stop: 29272, Start Num: 15
Candidate Starts for Phloss_37:
(Start: 15 @28886 has 38 MA's), (Start: 16 @28889 has 1 MA's), (17, 28895), (22, 28934), (39, 29108), (43, 29150), (47, 29234), (48, 29261),

Gene: Phrann_40 Start: 30555, Stop: 30902, Start Num: 15
Candidate Starts for Phrann_40:
(Start: 15 @30555 has 38 MA's), (Start: 16 @30558 has 1 MA's), (17, 30564), (22, 30603), (39, 30777), (43, 30819),

Gene: Pipsqueaks_39 Start: 29456, Stop: 29842, Start Num: 15
Candidate Starts for Pipsqueaks_39:
(Start: 15 @29456 has 38 MA's), (Start: 16 @29459 has 1 MA's), (17, 29465), (22, 29504), (39, 29678), (43, 29720), (47, 29804), (48, 29831),

Gene: Purgamenstris_40 Start: 29773, Stop: 30084, Start Num: 15
Candidate Starts for Purgamenstris_40:
(1, 29482), (2, 29494), (7, 29623), (10, 29692), (Start: 15 @29773 has 38 MA's), (20, 29803), (22, 29827), (39, 30001),

Gene: Raymond7_34 Start: 29585, Stop: 29896, Start Num: 15
Candidate Starts for Raymond7_34:
(1, 29294), (2, 29306), (7, 29435), (10, 29504), (Start: 15 @29585 has 38 MA's), (20, 29615), (22, 29639), (39, 29813),

Gene: Rebel_32 Start: 25903, Stop: 26214, Start Num: 15
Candidate Starts for Rebel_32:
(2, 25624), (3, 25636), (10, 25822), (Start: 15 @25903 has 38 MA's), (20, 25933), (22, 25957), (39, 26131),

Gene: Redi_40 Start: 29772, Stop: 30083, Start Num: 15
Candidate Starts for Redi_40:
(1, 29481), (2, 29493), (7, 29622), (10, 29691), (Start: 15 @29772 has 38 MA's), (20, 29802), (22, 29826), (39, 30000),

Gene: Rubeelu_40 Start: 30199, Stop: 30501, Start Num: 15
Candidate Starts for Rubeelu_40:
(Start: 15 @30199 has 38 MA's), (20, 30220), (39, 30418), (41, 30448),

Gene: Schnauzer_39 Start: 29479, Stop: 29865, Start Num: 15
Candidate Starts for Schnauzer_39:
(Start: 15 @29479 has 38 MA's), (Start: 16 @29482 has 1 MA's), (17, 29488), (22, 29527), (39, 29701), (43, 29743), (47, 29827), (48, 29854),

Gene: Scitech_36 Start: 27327, Stop: 27713, Start Num: 15
Candidate Starts for Scitech_36:
(Start: 15 @27327 has 38 MA's), (Start: 16 @27330 has 1 MA's), (17, 27336), (22, 27375), (39, 27549), (43, 27591), (47, 27675), (48, 27702),

Gene: ShrimpFriedEgg_40 Start: 29772, Stop: 30083, Start Num: 15
Candidate Starts for ShrimpFriedEgg_40:
(1, 29481), (2, 29493), (7, 29622), (10, 29691), (Start: 15 @29772 has 38 MA's), (20, 29802), (22, 29826), (39, 30000),

Gene: Shweta_36 Start: 28659, Stop: 29006, Start Num: 15
Candidate Starts for Shweta_36:
(Start: 15 @28659 has 38 MA's), (Start: 16 @28662 has 1 MA's), (17, 28668), (22, 28707), (39, 28881), (43, 28923),

Gene: Silvafighter_40 Start: 29452, Stop: 29838, Start Num: 15
Candidate Starts for Silvafighter_40:
(Start: 15 @29452 has 38 MA's), (Start: 16 @29455 has 1 MA's), (17, 29461), (22, 29500), (39, 29674), (43, 29716), (47, 29800), (48, 29827),

Gene: Silvy_37 Start: 28130, Stop: 28516, Start Num: 15
Candidate Starts for Silvy_37:

(Start: 15 @28130 has 38 MA's), (Start: 16 @28133 has 1 MA's), (17, 28139), (22, 28178), (39, 28352), (43, 28394), (47, 28478), (48, 28505),

Gene: SkinnyPete_34 Start: 27190, Stop: 27576, Start Num: 15
Candidate Starts for SkinnyPete_34:
(Start: 15 @27190 has 38 MA's), (Start: 16 @27193 has 1 MA's), (17, 27199), (22, 27238), (39, 27412), (43, 27454), (47, 27538), (48, 27565),

Gene: Smurph_39 Start: 29479, Stop: 29865, Start Num: 15
Candidate Starts for Smurph_39:
(Start: 15 @29479 has 38 MA's), (Start: 16 @29482 has 1 MA's), (17, 29488), (22, 29527), (39, 29701), (43, 29743), (47, 29827), (48, 29854),

Gene: Snekmaggedon_36 Start: 28529, Stop: 28876, Start Num: 15
Candidate Starts for Snekmaggedon_36:
(Start: 15 @28529 has 38 MA's), (Start: 16 @28532 has 1 MA's), (17, 28538), (22, 28577), (39, 28751), (43, 28793),

Gene: SpongeBob_36 Start: 28529, Stop: 28876, Start Num: 15
Candidate Starts for SpongeBob_36:
(Start: 15 @28529 has 38 MA's), (Start: 16 @28532 has 1 MA's), (17, 28538), (22, 28577), (39, 28751), (43, 28793),

Gene: Tapioca_40 Start: 29448, Stop: 29831, Start Num: 16
Candidate Starts for Tapioca_40:
(Start: 15 @29445 has 38 MA's), (Start: 16 @29448 has 1 MA's), (17, 29454), (22, 29493), (39, 29667), (43, 29709), (47, 29793), (48, 29820),

Gene: ThulaThula_41 Start: 32851, Stop: 33183, Start Num: 12
Candidate Starts for ThulaThula_41:
(Start: 12 @32851 has 1 MA's), (Start: 13 @32857 has 5 MA's), (14, 32872), (25, 32938), (26, 32962), (31, 32995), (33, 33004), (37, 33058), (41, 33121),

Gene: Tortellini_42 Start: 35456, Stop: 35809, Start Num: 13
Candidate Starts for Tortellini_42:
(3, 35216), (4, 35237), (8, 35336), (Start: 13 @35456 has 5 MA's), (21, 35495), (23, 35528), (27, 35561), (28, 35579), (34, 35606), (40, 35696), (46, 35798),

Gene: Xavia_44 Start: 36039, Stop: 36392, Start Num: 13
Candidate Starts for Xavia_44:
(4, 35820), (8, 35919), (Start: 13 @36039 has 5 MA's), (19, 36069), (22, 36099), (23, 36111), (27, 36144), (28, 36162), (30, 36174), (40, 36279), (46, 36381),

Gene: Xeno_36 Start: 27916, Stop: 28221, Start Num: 15
Candidate Starts for Xeno_36:
(Start: 15 @27916 has 38 MA's), (Start: 16 @27919 has 1 MA's), (17, 27925), (22, 27964), (39, 28138),

Gene: Xerxes_39 Start: 29476, Stop: 29862, Start Num: 15
Candidate Starts for Xerxes_39:
(Start: 15 @29476 has 38 MA's), (Start: 16 @29479 has 1 MA's), (17, 29485), (22, 29524), (39, 29698), (43, 29740), (47, 29824), (48, 29851),