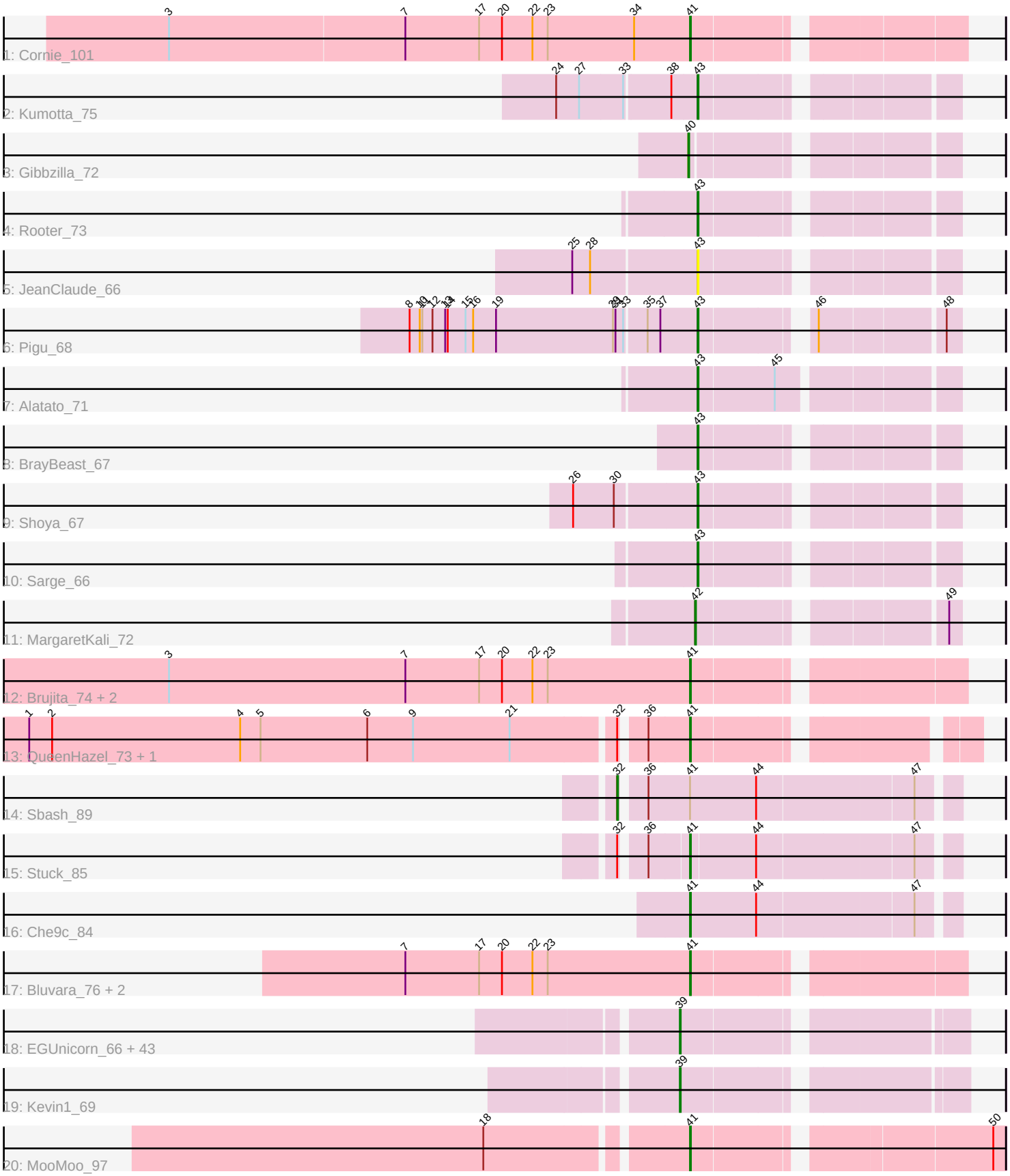
# Pham 347588


1: Cornie_101
2: Kumotta_75
3: Gibbzilla_72
4: Rooter_73
5: JeanClaude_66
6: Pigu_68
7: Alatato_71
8: BrayBeast_67
9: Shoya_67
10: Sarge_66
11: MargaretKali_72
12: Brujita_74 + 2
13: QueenHazel_73 + 1
14: Sbash_89
15: Stuck_85
16: Che9c_84
17: Bluvara_76 + 2
18: EGUnicorn_66 + 43
19: Kevin1_69
20: MooMoo_97

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 347588 Report

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

Pham number 347588 has 68 members, 5 are drafts.

Phages represented in each track:
- Track 1 : Cornie_101
- Track 2 : Kumotta_75
- Track 3 : Gibbzilla_72
- Track 4 : Rooter_73
- Track 5 : JeanClaude_66
- Track 6 : Pigu_68
- Track 7 : Alatato_71
- Track 8 : BrayBeast_67
- Track 9 : Shoya_67
- Track 10 : Sarge_66
- Track 11 : MargaretKali_72
- Track 12 : Brujita_74, Babsiella_78, Island3_76
- Track 13 : QueenHazel_73, Xula_74
- Track 14 : Sbash_89
- Track 15 : Stuck_85
- Track 16 : Che9c_84
- Track 17 : Bluvara_76, PaintedDog_77, HC_78
- Track 18 : EGUnicorn_66, Rebel_66, Fulbright_70, Bosection6_66, Tapioca_70, Duplicity_70, Cubone_74, Spinach_69, Xeno_69, Chewbacca_74, ShrimpFriedEgg_70, Andies_65, Scitech_67, Hanako_69, Rubeelu_66, Gex_71, Raymond7_63, Pipsqueaks_73, Carcharodon_71, Purgamenstris_70, Panchino_66, Charlie_69, Redi_70, Nenae_70, Xerxes_72, Magsby_71, BabeRuth_70, Jamie19_65, Phrann_67, Phloss_70, Tortoise12_72, SpongeBob_65, Shweta_66, Schnauzer_74, Tessdabest_72, Philonius_72, Aggie_67, PhancyPhin_69, Silvy_68, Parmesanjohn_72, Butters_66, MichelleMyBell_70, Smurph_72, Silvafighter_74
- Track 19 : Kevin1_69
- Track 20 : MooMoo_97

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

The start number called the most often in the published annotations is 39, it was called in 43 of the 63 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Aggie_67, Andies_65, BabeRuth_70, Bosection6_66, Butters_66, Carcharodon_71, Charlie_69, Chewbacca_74, Cubone_74, Duplicity_70, EGUnicorn_66, Fulbright_70, Gex_71, Hanako_69, Jamie19_65, Kevin1_69, Magsby_71, MichelleMyBell_70, Nenae_70, Panchino_66, Parmesanjohn_72, PhancyPhin_69, Philonius_72, Phloss_70, Phrann_67, Pipsqueaks_73, Purgamenstris_70, Raymond7_63, Rebel_66, Redi_70, Rubeelu_66, Schnauzer_74, Scitech_67, ShrimpFriedEgg_70, Shweta_66, Silvafighter_74, Silvy_68, Smurph_72, Spinach_69, SpongeBob_65, Tapioca_70, Tessdabest_72, Tortoise12_72, Xeno_69, Xerxes_72,

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

Genes that do not have the "Most Annotated" start:
• Alatato_71, Babsiella_78, Bluvara_76, BrayBeast_67, Brujita_74, Che9c_84, Cornie_101, Gibbzilla_72, HC_78, Island3_76, JeanClaude_66, Kumotta_75, MargaretKali_72, MooMoo_97, PaintedDog_77, Pigu_68, QueenHazel_73, Rooter_73, Sarge_66, Sbash_89, Shoya_67, Stuck_85, Xula_74,

**Summary by start number:**

Start 32:
• Found in 4 of 68 ( 5.9% ) of genes in pham
• Manual Annotations of this start: 1 of 63
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Sbash_89 (I2),

Start 39:
• Found in 45 of 68 ( 66.2% ) of genes in pham
• Manual Annotations of this start: 43 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aggie_67 (N), Andies_65 (N), BabeRuth_70 (N), Bosection6_66 (N), Butters_66 (N), Carcharodon_71 (N), Charlie_69 (N), Chewbacca_74 (N), Cubone_74 (N), Duplicity_70 (N), EGUnicorn_66 (N), Fulbright_70 (N), Gex_71 (N), Hanako_69 (N), Jamie19_65 (N), Kevin1_69 (N), Magsby_71 (N), MichelleMyBell_70 (N), Nenae_70 (N), Panchino_66 (N), Parmesanjohn_72 (N), PhancyPhin_69 (N), Philonius_72 (N), Phloss_70 (N), Phrann_67 (N), Pipsqueaks_73 (N), Purgamenstris_70 (N), Raymond7_63 (N), Rebel_66 (N), Redi_70 (N), Rubeelu_66 (N), Schnauzer_74 (N), Scitech_67 (N), ShrimpFriedEgg_70 (N), Shweta_66 (N), Silvafighter_74 (N), Silvy_68 (N), Smurph_72 (N), Spinach_69 (N), SpongeBob_65 (N), Tapioca_70 (N), Tessdabest_72 (N), Tortoise12_72 (N), Xeno_69 (N), Xerxes_72 (N),

Start 40:
• Found in 1 of 68 ( 1.5% ) of genes in pham
• Manual Annotations of this start: 1 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gibbzilla_72 (FB),

Start 41:
• Found in 13 of 68 ( 19.1% ) of genes in pham
• Manual Annotations of this start: 10 of 63
• Called 92.3% of time when present

• Phage (with cluster) where this start called: Babsiella_78 (I1), Bluvara_76 (I3), Brujita_74 (I1), Che9c_84 (I2), Cornie_101 (F5), HC_78 (I1), Island3_76 (I1), MooMoo_97 (singleton), PaintedDog_77 (I1), QueenHazel_73 (I1), Stuck_85 (I2), Xula_74 (I1),

Start 42:
• Found in 1 of 68 ( 1.5% ) of genes in pham
• Manual Annotations of this start: 1 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MargaretKali_72 (FB),

Start 43:
• Found in 8 of 68 ( 11.8% ) of genes in pham
• Manual Annotations of this start: 7 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alatato_71 (FB), BrayBeast_67 (FB), JeanClaude_66 (FB), Kumotta_75 (FB), Pigu_68 (FB), Rooter_73 (FB), Sarge_66 (FB), Shoya_67 (FB),

**Summary by clusters:**

There are 7 clusters represented in this pham: singleton, F5, I1, I3, I2, N, FB,

Info for manual annotations of cluster F5:
•Start number 41 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster FB:
•Start number 40 was manually annotated 1 time for cluster FB.
•Start number 42 was manually annotated 1 time for cluster FB.
•Start number 43 was manually annotated 7 times for cluster FB.

Info for manual annotations of cluster I1:
•Start number 41 was manually annotated 6 times for cluster I1.

Info for manual annotations of cluster I2:
•Start number 32 was manually annotated 1 time for cluster I2.
•Start number 41 was manually annotated 2 times for cluster I2.

Info for manual annotations of cluster N:
•Start number 39 was manually annotated 43 times for cluster N.

***Gene Information:***

Gene: Aggie_67 Start: 43847, Stop: 44146, Start Num: 39
Candidate Starts for Aggie_67:
(Start: 39 @43847 has 43 MA's),

Gene: Alatato_71 Start: 39249, Stop: 39527, Start Num: 43
Candidate Starts for Alatato_71:
(Start: 43 @39249 has 7 MA's), (45, 39336),

Gene: Andies_65 Start: 43293, Stop: 43592, Start Num: 39
Candidate Starts for Andies_65:
(Start: 39 @43293 has 43 MA's),

Gene: BabeRuth_70 Start: 42101, Stop: 42409, Start Num: 39
Candidate Starts for BabeRuth_70:
(Start: 39 @42101 has 43 MA's),

Gene: Babsiella_78 Start: 47992, Stop: 48282, Start Num: 41
Candidate Starts for Babsiella_78:
(3, 47377), (7, 47656), (17, 47743), (20, 47770), (22, 47806), (23, 47824), (Start: 41 @47992 has 10 MA's),

Gene: Bluvara_76 Start: 49031, Stop: 49321, Start Num: 41
Candidate Starts for Bluvara_76:
(7, 48695), (17, 48782), (20, 48809), (22, 48845), (23, 48863), (Start: 41 @49031 has 10 MA's),

Gene: Bosection6_66 Start: 42917, Stop: 43225, Start Num: 39
Candidate Starts for Bosection6_66:
(Start: 39 @42917 has 43 MA's),

Gene: BrayBeast_67 Start: 37446, Stop: 37709, Start Num: 43
Candidate Starts for BrayBeast_67:
(Start: 43 @37446 has 7 MA's),

Gene: Brujita_74 Start: 46629, Stop: 46919, Start Num: 41
Candidate Starts for Brujita_74:
(3, 46014), (7, 46293), (17, 46380), (20, 46407), (22, 46443), (23, 46461), (Start: 41 @46629 has 10 MA's),

Gene: Butters_66 Start: 41009, Stop: 41308, Start Num: 39
Candidate Starts for Butters_66:
(Start: 39 @41009 has 43 MA's),

Gene: Carcharodon_71 Start: 43194, Stop: 43493, Start Num: 39
Candidate Starts for Carcharodon_71:
(Start: 39 @43194 has 43 MA's),

Gene: Charlie_69 Start: 42541, Stop: 42849, Start Num: 39
Candidate Starts for Charlie_69:
(Start: 39 @42541 has 43 MA's),

Gene: Che9c_84 Start: 56646, Stop: 56942, Start Num: 41
Candidate Starts for Che9c_84:
(Start: 41 @56646 has 10 MA's), (44, 56724), (47, 56901),

Gene: Chewbacca_74 Start: 43089, Stop: 43388, Start Num: 39
Candidate Starts for Chewbacca_74:
(Start: 39 @43089 has 43 MA's),

Gene: Cornie_101 Start: 56005, Stop: 56292, Start Num: 41
Candidate Starts for Cornie_101:

(3, 55393), (7, 55669), (17, 55756), (20, 55783), (22, 55819), (23, 55837), (34, 55939), (Start: 41 @56005 has 10 MA's),

Gene: Cubone_74 Start: 43816, Stop: 44124, Start Num: 39
Candidate Starts for Cubone_74:
(Start: 39 @43816 has 43 MA's),

Gene: Duplicity_70 Start: 42451, Stop: 42750, Start Num: 39
Candidate Starts for Duplicity_70:
(Start: 39 @42451 has 43 MA's),

Gene: EGUnicorn_66 Start: 41517, Stop: 41816, Start Num: 39
Candidate Starts for EGUnicorn_66:
(Start: 39 @41517 has 43 MA's),

Gene: Fulbright_70 Start: 41910, Stop: 42209, Start Num: 39
Candidate Starts for Fulbright_70:
(Start: 39 @41910 has 43 MA's),

Gene: Gex_71 Start: 43210, Stop: 43509, Start Num: 39
Candidate Starts for Gex_71:
(Start: 39 @43210 has 43 MA's),

Gene: Gibbzilla_72 Start: 38657, Stop: 38926, Start Num: 40
Candidate Starts for Gibbzilla_72:
(Start: 40 @38657 has 1 MA's),

Gene: HC_78 Start: 45878, Stop: 46168, Start Num: 41
Candidate Starts for HC_78:
(7, 45542), (17, 45629), (20, 45656), (22, 45692), (23, 45710), (Start: 41 @45878 has 10 MA's),

Gene: Hanako_69 Start: 42101, Stop: 42409, Start Num: 39
Candidate Starts for Hanako_69:
(Start: 39 @42101 has 43 MA's),

Gene: Island3_76 Start: 46859, Stop: 47149, Start Num: 41
Candidate Starts for Island3_76:
(3, 46244), (7, 46523), (17, 46610), (20, 46637), (22, 46673), (23, 46691), (Start: 41 @46859 has 10 MA's),

Gene: Jamie19_65 Start: 40783, Stop: 41091, Start Num: 39
Candidate Starts for Jamie19_65:
(Start: 39 @40783 has 43 MA's),

Gene: JeanClaude_66 Start: 36463, Stop: 36726, Start Num: 43
Candidate Starts for JeanClaude_66:
(25, 36322), (28, 36343), (Start: 43 @36463 has 7 MA's),

Gene: Kevin1_69 Start: 41506, Stop: 41805, Start Num: 39
Candidate Starts for Kevin1_69:
(Start: 39 @41506 has 43 MA's),

Gene: Kumotta_75 Start: 39866, Stop: 40129, Start Num: 43

Candidate Starts for Kumotta_75:
(24, 39707), (27, 39734), (33, 39785), (38, 39836), (Start: 43 @39866 has 7 MA's),

Gene: Magsby_71 Start: 43156, Stop: 43455, Start Num: 39
Candidate Starts for Magsby_71:
(Start: 39 @43156 has 43 MA's),

Gene: MargaretKali_72 Start: 38623, Stop: 38889, Start Num: 42
Candidate Starts for MargaretKali_72:
(Start: 42 @38623 has 1 MA's), (49, 38875),

Gene: MichelleMyBell_70 Start: 41746, Stop: 42054, Start Num: 39
Candidate Starts for MichelleMyBell_70:
(Start: 39 @41746 has 43 MA's),

Gene: MooMoo_97 Start: 54747, Stop: 55079, Start Num: 41
Candidate Starts for MooMoo_97:
(18, 54531), (Start: 41 @54747 has 10 MA's), (50, 55065),

Gene: Nenae_70 Start: 42103, Stop: 42411, Start Num: 39
Candidate Starts for Nenae_70:
(Start: 39 @42103 has 43 MA's),

Gene: PaintedDog_77 Start: 48513, Stop: 48803, Start Num: 41
Candidate Starts for PaintedDog_77:
(7, 48177), (17, 48264), (20, 48291), (22, 48327), (23, 48345), (Start: 41 @48513 has 10 MA's),

Gene: Panchino_66 Start: 43021, Stop: 43329, Start Num: 39
Candidate Starts for Panchino_66:
(Start: 39 @43021 has 43 MA's),

Gene: Parmesanjohn_72 Start: 43214, Stop: 43513, Start Num: 39
Candidate Starts for Parmesanjohn_72:
(Start: 39 @43214 has 43 MA's),

Gene: PhancyPhin_69 Start: 41960, Stop: 42268, Start Num: 39
Candidate Starts for PhancyPhin_69:
(Start: 39 @41960 has 43 MA's),

Gene: Philonius_72 Start: 43400, Stop: 43699, Start Num: 39
Candidate Starts for Philonius_72:
(Start: 39 @43400 has 43 MA's),

Gene: Phloss_70 Start: 42621, Stop: 42920, Start Num: 39
Candidate Starts for Phloss_70:
(Start: 39 @42621 has 43 MA's),

Gene: Phrann_67 Start: 44377, Stop: 44685, Start Num: 39
Candidate Starts for Phrann_67:
(Start: 39 @44377 has 43 MA's),

Gene: Pigu_68 Start: 36861, Stop: 37124, Start Num: 43
Candidate Starts for Pigu_68:

(8, 36528), (10, 36540), (11, 36543), (12, 36555), (13, 36570), (14, 36573), (15, 36594), (16, 36603), (19, 36630), (29, 36768), (31, 36771), (33, 36780), (35, 36804), (37, 36819), (Start: 43 @36861 has 7 MA's), (46, 36972), (48, 37107),

Gene: Pipsqueaks_73 Start: 43192, Stop: 43491, Start Num: 39
Candidate Starts for Pipsqueaks_73:
(Start: 39 @43192 has 43 MA's),

Gene: Purgamenstris_70 Start: 42101, Stop: 42409, Start Num: 39
Candidate Starts for Purgamenstris_70:
(Start: 39 @42101 has 43 MA's),

Gene: QueenHazel_73 Start: 47625, Stop: 47915, Start Num: 41
Candidate Starts for QueenHazel_73:
(1, 46872), (2, 46899), (4, 47121), (5, 47145), (6, 47271), (9, 47325), (21, 47439), (Start: 32 @47553 has 1 MA's), (36, 47577), (Start: 41 @47625 has 10 MA's),

Gene: Raymond7_63 Start: 41889, Stop: 42197, Start Num: 39
Candidate Starts for Raymond7_63:
(Start: 39 @41889 has 43 MA's),

Gene: Rebel_66 Start: 40085, Stop: 40393, Start Num: 39
Candidate Starts for Rebel_66:
(Start: 39 @40085 has 43 MA's),

Gene: Redi_70 Start: 42100, Stop: 42408, Start Num: 39
Candidate Starts for Redi_70:
(Start: 39 @42100 has 43 MA's),

Gene: Rooter_73 Start: 38816, Stop: 39079, Start Num: 43
Candidate Starts for Rooter_73:
(Start: 43 @38816 has 7 MA's),

Gene: Rubeelu_66 Start: 41009, Stop: 41308, Start Num: 39
Candidate Starts for Rubeelu_66:
(Start: 39 @41009 has 43 MA's),

Gene: Sarge_66 Start: 35891, Stop: 36154, Start Num: 43
Candidate Starts for Sarge_66:
(Start: 43 @35891 has 7 MA's),

Gene: Sbash_89 Start: 55345, Stop: 55713, Start Num: 32
Candidate Starts for Sbash_89:
(Start: 32 @55345 has 1 MA's), (36, 55369), (Start: 41 @55417 has 10 MA's), (44, 55495), (47, 55672),

Gene: Schnauzer_74 Start: 43214, Stop: 43513, Start Num: 39
Candidate Starts for Schnauzer_74:
(Start: 39 @43214 has 43 MA's),

Gene: Scitech_67 Start: 42617, Stop: 42916, Start Num: 39
Candidate Starts for Scitech_67:
(Start: 39 @42617 has 43 MA's),

Gene: Shoya_67 Start: 37457, Stop: 37720, Start Num: 43
Candidate Starts for Shoya_67:
(26, 37322), (30, 37370), (Start: 43 @37457 has 7 MA's),

Gene: ShrimpFriedEgg_70 Start: 42100, Stop: 42408, Start Num: 39
Candidate Starts for ShrimpFriedEgg_70:
(Start: 39 @42100 has 43 MA's),

Gene: Shweta_66 Start: 42196, Stop: 42504, Start Num: 39
Candidate Starts for Shweta_66:
(Start: 39 @42196 has 43 MA's),

Gene: Silvafighter_74 Start: 42757, Stop: 43056, Start Num: 39
Candidate Starts for Silvafighter_74:
(Start: 39 @42757 has 43 MA's),

Gene: Silvy_68 Start: 43847, Stop: 44146, Start Num: 39
Candidate Starts for Silvy_68:
(Start: 39 @43847 has 43 MA's),

Gene: Smurph_72 Start: 43214, Stop: 43513, Start Num: 39
Candidate Starts for Smurph_72:
(Start: 39 @43214 has 43 MA's),

Gene: Spinach_69 Start: 42100, Stop: 42408, Start Num: 39
Candidate Starts for Spinach_69:
(Start: 39 @42100 has 43 MA's),

Gene: SpongeBob_65 Start: 40783, Stop: 41091, Start Num: 39
Candidate Starts for SpongeBob_65:
(Start: 39 @40783 has 43 MA's),

Gene: Stuck_85 Start: 54724, Stop: 55017, Start Num: 41
Candidate Starts for Stuck_85:
(Start: 32 @54655 has 1 MA's), (36, 54679), (Start: 41 @54724 has 10 MA's), (44, 54799), (47, 54976),

Gene: Tapioca_70 Start: 43719, Stop: 44018, Start Num: 39
Candidate Starts for Tapioca_70:
(Start: 39 @43719 has 43 MA's),

Gene: Tessdabest_72 Start: 43348, Stop: 43647, Start Num: 39
Candidate Starts for Tessdabest_72:
(Start: 39 @43348 has 43 MA's),

Gene: Tortoise12_72 Start: 42203, Stop: 42502, Start Num: 39
Candidate Starts for Tortoise12_72:
(Start: 39 @42203 has 43 MA's),

Gene: Xeno_69 Start: 41900, Stop: 42208, Start Num: 39
Candidate Starts for Xeno_69:
(Start: 39 @41900 has 43 MA's),

Gene: Xerxes_72 Start: 43211, Stop: 43510, Start Num: 39

Candidate Starts for Xerxes_72:
(Start: 39 @43211 has 43 MA's),

Gene: Xula_74 Start: 48112, Stop: 48402, Start Num: 41
Candidate Starts for Xula_74:
(1, 47359), (2, 47386), (4, 47608), (5, 47632), (6, 47758), (9, 47812), (21, 47926), (Start: 32 @48040 has 1 MA's), (36, 48064), (Start: 41 @48112 has 10 MA's),