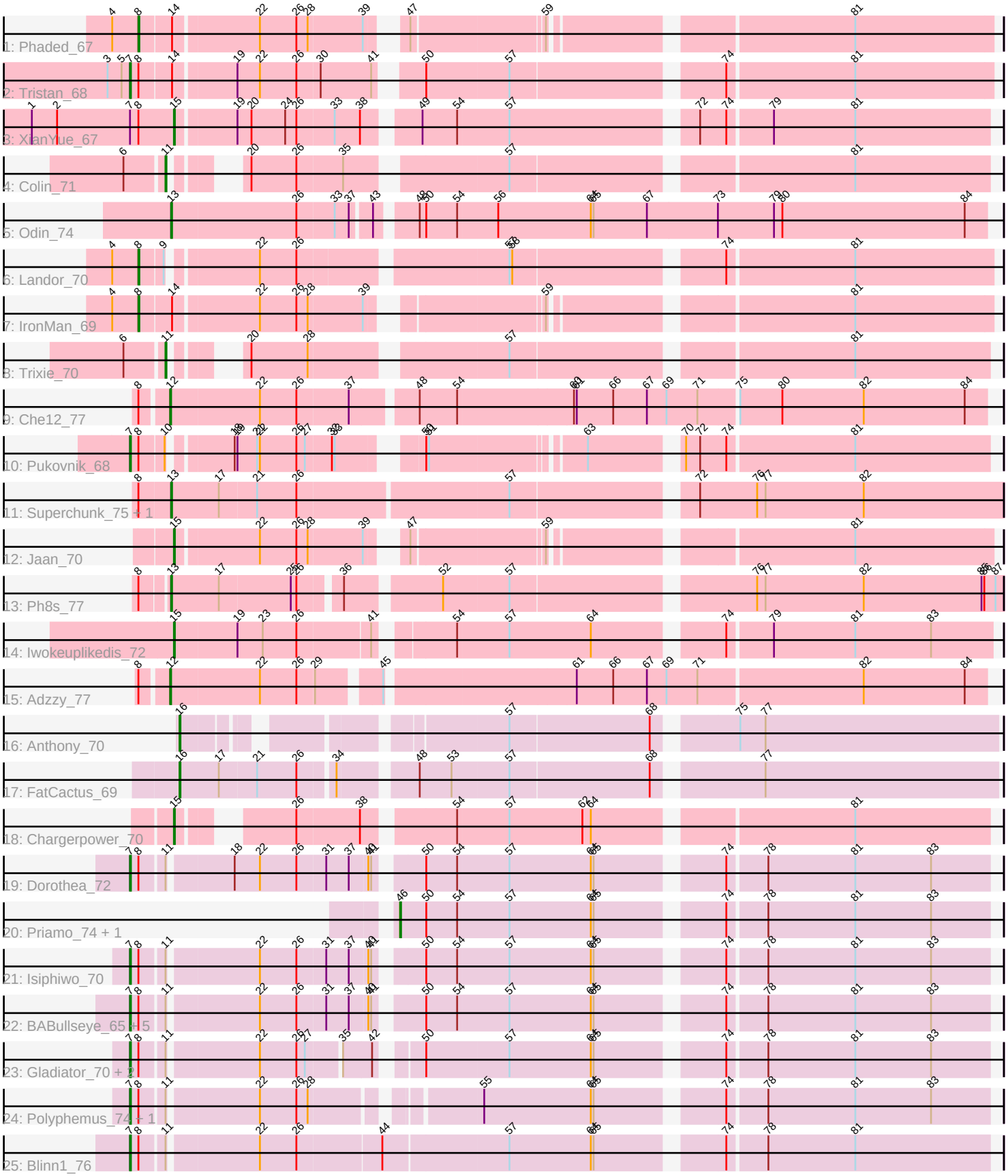
# Pham 347853


1: Phaded_67
2: Tristan_68
3: XianYue_67
4: Colin_71
5: Odin_74
6: Landor_70
7: IronMan_69
8: Trixie_70
9: Che12_77
10: Pukovnik_68
11: Superchunk_75 + 1
12: Jaan_70
13: Ph8s_77
14: Iwokeuplikedis_72
15: Adzzy_77
16: Anthony_70
17: FatCactus_69
18: Chargerpower_70
19: Dorothea_72
20: Priamo_74 + 1
21: Isiphiwo_70
22: BABullseye_65 + 5
23: Gladiator_70 + 2
24: Polyphemus_74 + 1
25: Blinn1_76

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 347853 Report

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

Pham number 347853 has 35 members, 0 are drafts.

Phages represented in each track:
• Track 1 : Phaded_67
• Track 2 : Tristan_68
• Track 3 : XianYue_67
• Track 4 : Colin_71
• Track 5 : Odin_74
• Track 6 : Landor_70
• Track 7 : IronMan_69
• Track 8 : Trixie_70
• Track 9 : Che12_77
• Track 10 : Pukovnik_68
• Track 11 : Superchunk_75, Caraxes_75
• Track 12 : Jaan_70
• Track 13 : Ph8s_77
• Track 14 : Iwokeuplikedis_72
• Track 15 : Adzzy_77
• Track 16 : Anthony_70
• Track 17 : FatCactus_69
• Track 18 : Chargerpower_70
• Track 19 : Dorothea_72
• Track 20 : Priamo_74, Jordennis_71
• Track 21 : Isiphiwo_70
• Track 22 : BABullseye_65, Pmask_71, SuperAwesome_72, Neeharika16_71, SuperCallie99_69, Cookiedough_72
• Track 23 : Gladiator_70, Newrala_72, Imbriano_74
• Track 24 : Polyphemus_74, JewelBug_72
• Track 25 : Blinn1_76

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

The start number called the most often in the published annotations is 7, it was called in 16 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• BABullseye_65, Blinn1_76, Cookiedough_72, Dorothea_72, Gladiator_70, Imbriano_74, Isiphiwo_70, JewelBug_72, Neeharika16_71, Newrala_72, Pmask_71, Polyphemus_74, Pukovnik_68, SuperAwesome_72, SuperCallie99_69, Tristan_68,

Genes that have the "Most Annotated" start but do not call it:
• XianYue_67,

Genes that do not have the "Most Annotated" start:
• Adzzy_77, Anthony_70, Caraxes_75, Chargerpower_70, Che12_77, Colin_71, FatCactus_69, IronMan_69, Iwokeuplikedis_72, Jaan_70, Jordennis_71, Landor_70, Odin_74, Ph8s_77, Phaded_67, Priamo_74, Superchunk_75, Trixie_70,

**Summary by start number:**

Start 7:
• Found in 17 of 35 ( 48.6% ) of genes in pham
• Manual Annotations of this start: 16 of 35
• Called 94.1% of time when present
• Phage (with cluster) where this start called: BABullseye_65 (A6), Blinn1_76 (A6), Cookiedough_72 (A6), Dorothea_72 (A6), Gladiator_70 (A6), Imbriano_74 (A6), Isiphiwo_70 (A6), JewelBug_72 (A6), Neeharika16_71 (A6), Newrala_72 (A6), Pmask_71 (A6), Polyphemus_74 (A6), Pukovnik_68 (A2), SuperAwesome_72 (A6), SuperCallie99_69 (A6), Tristan_68 (A2),

Start 8:
• Found in 25 of 35 ( 71.4% ) of genes in pham
• Manual Annotations of this start: 3 of 35
• Called 12.0% of time when present
• Phage (with cluster) where this start called: IronMan_69 (A2), Landor_70 (A2), Phaded_67 (A2),

Start 11:
• Found in 16 of 35 ( 45.7% ) of genes in pham
• Manual Annotations of this start: 2 of 35
• Called 12.5% of time when present
• Phage (with cluster) where this start called: Colin_71 (A2), Trixie_70 (A2),

Start 12:
• Found in 2 of 35 ( 5.7% ) of genes in pham
• Manual Annotations of this start: 2 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Adzzy_77 (A2), Che12_77 (A2),

Start 13:
• Found in 4 of 35 ( 11.4% ) of genes in pham
• Manual Annotations of this start: 4 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Caraxes_75 (A2), Odin_74 (A2), Ph8s_77 (A2), Superchunk_75 (A2),

Start 15:
• Found in 4 of 35 ( 11.4% ) of genes in pham
• Manual Annotations of this start: 4 of 35

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chargerpower_70 (A22), Iwokeuplikedis_72 (A2), Jaan_70 (A2), XianYue_67 (A2),

Start 16:
• Found in 2 of 35 ( 5.7% ) of genes in pham
• Manual Annotations of this start: 2 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Anthony_70 (A20), FatCactus_69 (A20),

Start 46:
• Found in 2 of 35 ( 5.7% ) of genes in pham
• Manual Annotations of this start: 2 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jordennis_71 (A6), Priamo_74 (A6),

**Summary by clusters:**

There are 4 clusters represented in this pham: A20, A22, A2, A6,

Info for manual annotations of cluster A2:
•Start number 7 was manually annotated 2 times for cluster A2.
•Start number 8 was manually annotated 3 times for cluster A2.
•Start number 11 was manually annotated 2 times for cluster A2.
•Start number 12 was manually annotated 2 times for cluster A2.
•Start number 13 was manually annotated 4 times for cluster A2.
•Start number 15 was manually annotated 3 times for cluster A2.

Info for manual annotations of cluster A20:
•Start number 16 was manually annotated 2 times for cluster A20.

Info for manual annotations of cluster A22:
•Start number 15 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A6:
•Start number 7 was manually annotated 14 times for cluster A6.
•Start number 46 was manually annotated 2 times for cluster A6.

***Gene Information:***

Gene: Adzzy_77 Start: 43239, Stop: 42412, Start Num: 12
Candidate Starts for Adzzy_77:
(Start: 8 @43266 has 3 MA's), (Start: 12 @43239 has 2 MA's), (22, 43146), (26, 43107), (29, 43089), (45, 43032), (61, 42843), (66, 42804), (67, 42768), (69, 42747), (71, 42714), (82, 42543), (84, 42435),

Gene: Anthony_70 Start: 42960, Stop: 42178, Start Num: 16
Candidate Starts for Anthony_70:
(Start: 16 @42960 has 2 MA's), (57, 42675), (68, 42528), (75, 42453), (77, 42426),

Gene: BABullseye_65 Start: 39826, Stop: 38978, Start Num: 7
Candidate Starts for BABullseye_65:

(Start: 7 @39826 has 16 MA's), (Start: 8 @39817 has 3 MA's), (Start: 11 @39793 has 2 MA's), (22, 39703), (26, 39664), (31, 39634), (37, 39610), (40, 39592), (41, 39589), (50, 39550), (54, 39517), (57, 39463), (64, 39376), (65, 39373), (74, 39253), (78, 39214), (81, 39121), (83, 39040),

Gene: Blinn1_76 Start: 42445, Stop: 41582, Start Num: 7
Candidate Starts for Blinn1_76:
(Start: 7 @42445 has 16 MA's), (Start: 8 @42436 has 3 MA's), (Start: 11 @42412 has 2 MA's), (22, 42322), (26, 42283), (44, 42196), (57, 42067), (64, 41980), (65, 41977), (74, 41857), (78, 41818), (81, 41725),

Gene: Caraxes_75 Start: 43021, Stop: 42170, Start Num: 13
Candidate Starts for Caraxes_75:
(Start: 8 @43054 has 3 MA's), (Start: 13 @43021 has 4 MA's), (17, 42970), (21, 42931), (26, 42889), (57, 42673), (72, 42493), (76, 42433), (77, 42424), (82, 42319),

Gene: Chargerpower_70 Start: 41985, Stop: 41206, Start Num: 15
Candidate Starts for Chargerpower_70:
(Start: 15 @41985 has 4 MA's), (26, 41895), (38, 41829), (54, 41745), (57, 41691), (62, 41613), (64, 41604), (81, 41349),

Gene: Che12_77 Start: 43138, Stop: 42296, Start Num: 12
Candidate Starts for Che12_77:
(Start: 8 @43165 has 3 MA's), (Start: 12 @43138 has 2 MA's), (22, 43045), (26, 43006), (37, 42952), (48, 42889), (54, 42850), (60, 42730), (61, 42727), (66, 42688), (67, 42652), (69, 42631), (71, 42598), (75, 42559), (80, 42514), (82, 42427), (84, 42319),

Gene: Colin_71 Start: 43999, Stop: 43229, Start Num: 11
Candidate Starts for Colin_71:
(6, 44038), (Start: 11 @43999 has 2 MA's), (20, 43957), (26, 43909), (35, 43861), (57, 43711), (81, 43372),

Gene: Cookiedough_72 Start: 42134, Stop: 41286, Start Num: 7
Candidate Starts for Cookiedough_72:
(Start: 7 @42134 has 16 MA's), (Start: 8 @42125 has 3 MA's), (Start: 11 @42101 has 2 MA's), (22, 42011), (26, 41972), (31, 41942), (37, 41918), (40, 41900), (41, 41897), (50, 41858), (54, 41825), (57, 41771), (64, 41684), (65, 41681), (74, 41561), (78, 41522), (81, 41429), (83, 41348),

Gene: Dorothea_72 Start: 42132, Stop: 41284, Start Num: 7
Candidate Starts for Dorothea_72:
(Start: 7 @42132 has 16 MA's), (Start: 8 @42123 has 3 MA's), (Start: 11 @42099 has 2 MA's), (18, 42036), (22, 42009), (26, 41970), (31, 41940), (37, 41916), (40, 41898), (41, 41895), (50, 41856), (54, 41823), (57, 41769), (64, 41682), (65, 41679), (74, 41559), (78, 41520), (81, 41427), (83, 41346),

Gene: FatCactus_69 Start: 42406, Stop: 41588, Start Num: 16
Candidate Starts for FatCactus_69:
(Start: 16 @42406 has 2 MA's), (17, 42364), (21, 42325), (26, 42283), (34, 42250), (48, 42178), (53, 42145), (57, 42085), (68, 41938), (77, 41836),

Gene: Gladiator_70 Start: 41751, Stop: 40912, Start Num: 7
Candidate Starts for Gladiator_70:
(Start: 7 @41751 has 16 MA's), (Start: 8 @41742 has 3 MA's), (Start: 11 @41718 has 2 MA's), (22, 41628), (26, 41589), (27, 41580), (35, 41547), (42, 41517), (50, 41484), (57, 41397), (64, 41310), (65, 41307), (74, 41187), (78, 41148), (81, 41055), (83, 40974),

Gene: Imbriano_74 Start: 42515, Stop: 41676, Start Num: 7
Candidate Starts for Imbriano_74:
(Start: 7 @42515 has 16 MA's), (Start: 8 @42506 has 3 MA's), (Start: 11 @42482 has 2 MA's), (22, 42392), (26, 42353), (27, 42344), (35, 42311), (42, 42281), (50, 42248), (57, 42161), (64, 42074), (65, 42071), (74, 41951), (78, 41912), (81, 41819), (83, 41738),

Gene: IronMan_69 Start: 44419, Stop: 43604, Start Num: 8
Candidate Starts for IronMan_69:
(4, 44446), (Start: 8 @44419 has 3 MA's), (14, 44386), (22, 44302), (26, 44263), (28, 44251), (39, 44194), (59, 44041), (81, 43750),

Gene: Isiphiwo_70 Start: 41692, Stop: 40844, Start Num: 7
Candidate Starts for Isiphiwo_70:
(Start: 7 @41692 has 16 MA's), (Start: 8 @41683 has 3 MA's), (Start: 11 @41659 has 2 MA's), (22, 41569), (26, 41530), (31, 41500), (37, 41476), (40, 41458), (41, 41455), (50, 41416), (54, 41383), (57, 41329), (64, 41242), (65, 41239), (74, 41119), (78, 41080), (81, 40987), (83, 40906),

Gene: Iwokeuplikedis_72 Start: 43407, Stop: 42592, Start Num: 15
Candidate Starts for Iwokeuplikedis_72:
(Start: 15 @43407 has 4 MA's), (19, 43341), (23, 43314), (26, 43278), (41, 43203), (54, 43134), (57, 43080), (64, 42993), (74, 42870), (79, 42825), (81, 42738), (83, 42657),

Gene: Jaan_70 Start: 44554, Stop: 43772, Start Num: 15
Candidate Starts for Jaan_70:
(Start: 15 @44554 has 4 MA's), (22, 44470), (26, 44431), (28, 44419), (39, 44362), (47, 44341), (59, 44209), (81, 43918),

Gene: JewelBug_72 Start: 42414, Stop: 41578, Start Num: 7
Candidate Starts for JewelBug_72:
(Start: 7 @42414 has 16 MA's), (Start: 8 @42405 has 3 MA's), (Start: 11 @42381 has 2 MA's), (22, 42291), (26, 42252), (28, 42240), (55, 42090), (64, 41976), (65, 41973), (74, 41853), (78, 41814), (81, 41721), (83, 41640),

Gene: Jordennis_71 Start: 41658, Stop: 41059, Start Num: 46
Candidate Starts for Jordennis_71:
(Start: 46 @41658 has 2 MA's), (50, 41631), (54, 41598), (57, 41544), (64, 41457), (65, 41454), (74, 41334), (78, 41295), (81, 41202), (83, 41121),

Gene: Landor_70 Start: 44512, Stop: 43679, Start Num: 8
Candidate Starts for Landor_70:
(4, 44539), (Start: 8 @44512 has 3 MA's), (9, 44488), (22, 44404), (26, 44365), (57, 44164), (58, 44161), (74, 43957), (81, 43825),

Gene: Neeharika16_71 Start: 41586, Stop: 40738, Start Num: 7
Candidate Starts for Neeharika16_71:
(Start: 7 @41586 has 16 MA's), (Start: 8 @41577 has 3 MA's), (Start: 11 @41553 has 2 MA's), (22, 41463), (26, 41424), (31, 41394), (37, 41370), (40, 41352), (41, 41349), (50, 41310), (54, 41277), (57, 41223), (64, 41136), (65, 41133), (74, 41013), (78, 40974), (81, 40881), (83, 40800),

Gene: Newrala_72 Start: 42117, Stop: 41278, Start Num: 7
Candidate Starts for Newrala_72:

(Start: 7 @42117 has 16 MA's), (Start: 8 @42108 has 3 MA's), (Start: 11 @42084 has 2 MA's), (22, 41994), (26, 41955), (27, 41946), (35, 41913), (42, 41883), (50, 41850), (57, 41763), (64, 41676), (65, 41673), (74, 41553), (78, 41514), (81, 41421), (83, 41340),

Gene: Odin_74 Start: 43407, Stop: 42565, Start Num: 13
Candidate Starts for Odin_74:
(Start: 13 @43407 has 4 MA's), (26, 43275), (33, 43236), (37, 43221), (43, 43203), (48, 43167), (50, 43161), (54, 43128), (56, 43086), (64, 42987), (65, 42984), (67, 42927), (73, 42852), (79, 42792), (80, 42783), (84, 42588),

Gene: Ph8s_77 Start: 43456, Stop: 42623, Start Num: 13
Candidate Starts for Ph8s_77:
(Start: 8 @43483 has 3 MA's), (Start: 13 @43456 has 4 MA's), (17, 43405), (25, 43330), (26, 43324), (36, 43285), (52, 43195), (57, 43126), (76, 42886), (77, 42877), (82, 42772), (85, 42646), (86, 42643), (87, 42631),

Gene: Phaded_67 Start: 44471, Stop: 43656, Start Num: 8
Candidate Starts for Phaded_67:
(4, 44498), (Start: 8 @44471 has 3 MA's), (14, 44438), (22, 44354), (26, 44315), (28, 44303), (39, 44246), (47, 44225), (59, 44093), (81, 43802),

Gene: Pmask_71 Start: 42122, Stop: 41274, Start Num: 7
Candidate Starts for Pmask_71:
(Start: 7 @42122 has 16 MA's), (Start: 8 @42113 has 3 MA's), (Start: 11 @42089 has 2 MA's), (22, 41999), (26, 41960), (31, 41930), (37, 41906), (40, 41888), (41, 41885), (50, 41846), (54, 41813), (57, 41759), (64, 41672), (65, 41669), (74, 41549), (78, 41510), (81, 41417), (83, 41336),

Gene: Polyphemus_74 Start: 42500, Stop: 41664, Start Num: 7
Candidate Starts for Polyphemus_74:
(Start: 7 @42500 has 16 MA's), (Start: 8 @42491 has 3 MA's), (Start: 11 @42467 has 2 MA's), (22, 42377), (26, 42338), (28, 42326), (55, 42176), (64, 42062), (65, 42059), (74, 41939), (78, 41900), (81, 41807), (83, 41726),

Gene: Priamo_74 Start: 41728, Stop: 41129, Start Num: 46
Candidate Starts for Priamo_74:
(Start: 46 @41728 has 2 MA's), (50, 41701), (54, 41668), (57, 41614), (64, 41527), (65, 41524), (74, 41404), (78, 41365), (81, 41272), (83, 41191),

Gene: Pukovnik_68 Start: 44139, Stop: 43324, Start Num: 7
Candidate Starts for Pukovnik_68:
(Start: 7 @44139 has 16 MA's), (Start: 8 @44130 has 3 MA's), (10, 44106), (18, 44049), (19, 44046), (21, 44025), (22, 44022), (26, 43983), (27, 43974), (32, 43947), (33, 43944), (50, 43878), (51, 43875), (63, 43725), (70, 43641), (72, 43626), (74, 43599), (81, 43467),

Gene: SuperAwesome_72 Start: 42164, Stop: 41316, Start Num: 7
Candidate Starts for SuperAwesome_72:
(Start: 7 @42164 has 16 MA's), (Start: 8 @42155 has 3 MA's), (Start: 11 @42131 has 2 MA's), (22, 42041), (26, 42002), (31, 41972), (37, 41948), (40, 41930), (41, 41927), (50, 41888), (54, 41855), (57, 41801), (64, 41714), (65, 41711), (74, 41591), (78, 41552), (81, 41459), (83, 41378),

Gene: SuperCallie99_69 Start: 42006, Stop: 41158, Start Num: 7
Candidate Starts for SuperCallie99_69:

(Start: 7 @42006 has 16 MA's), (Start: 8 @41997 has 3 MA's), (Start: 11 @41973 has 2 MA's), (22, 41883), (26, 41844), (31, 41814), (37, 41790), (40, 41772), (41, 41769), (50, 41730), (54, 41697), (57, 41643), (64, 41556), (65, 41553), (74, 41433), (78, 41394), (81, 41301), (83, 41220),

Gene: Superchunk_75 Start: 43021, Stop: 42170, Start Num: 13
Candidate Starts for Superchunk_75:
(Start: 8 @43054 has 3 MA's), (Start: 13 @43021 has 4 MA's), (17, 42970), (21, 42931), (26, 42889), (57, 42673), (72, 42493), (76, 42433), (77, 42424), (82, 42319),

Gene: Tristan_68 Start: 44342, Stop: 43494, Start Num: 7
Candidate Starts for Tristan_68:
(3, 44366), (5, 44351), (Start: 7 @44342 has 16 MA's), (Start: 8 @44333 has 3 MA's), (14, 44300), (19, 44240), (22, 44216), (26, 44177), (30, 44153), (41, 44099), (50, 44066), (57, 43979), (74, 43772), (81, 43640),

Gene: Trixie_70 Start: 43815, Stop: 43045, Start Num: 11
Candidate Starts for Trixie_70:
(6, 43854), (Start: 11 @43815 has 2 MA's), (20, 43773), (28, 43713), (57, 43527), (81, 43188),

Gene: XianYue_67 Start: 43032, Stop: 42220, Start Num: 15
Candidate Starts for XianYue_67:
(1, 43182), (2, 43155), (Start: 7 @43077 has 16 MA's), (Start: 8 @43068 has 3 MA's), (Start: 15 @43032 has 4 MA's), (19, 42972), (20, 42957), (24, 42921), (26, 42909), (33, 42870), (38, 42843), (49, 42795), (54, 42759), (57, 42705), (72, 42522), (74, 42495), (79, 42450), (81, 42363),