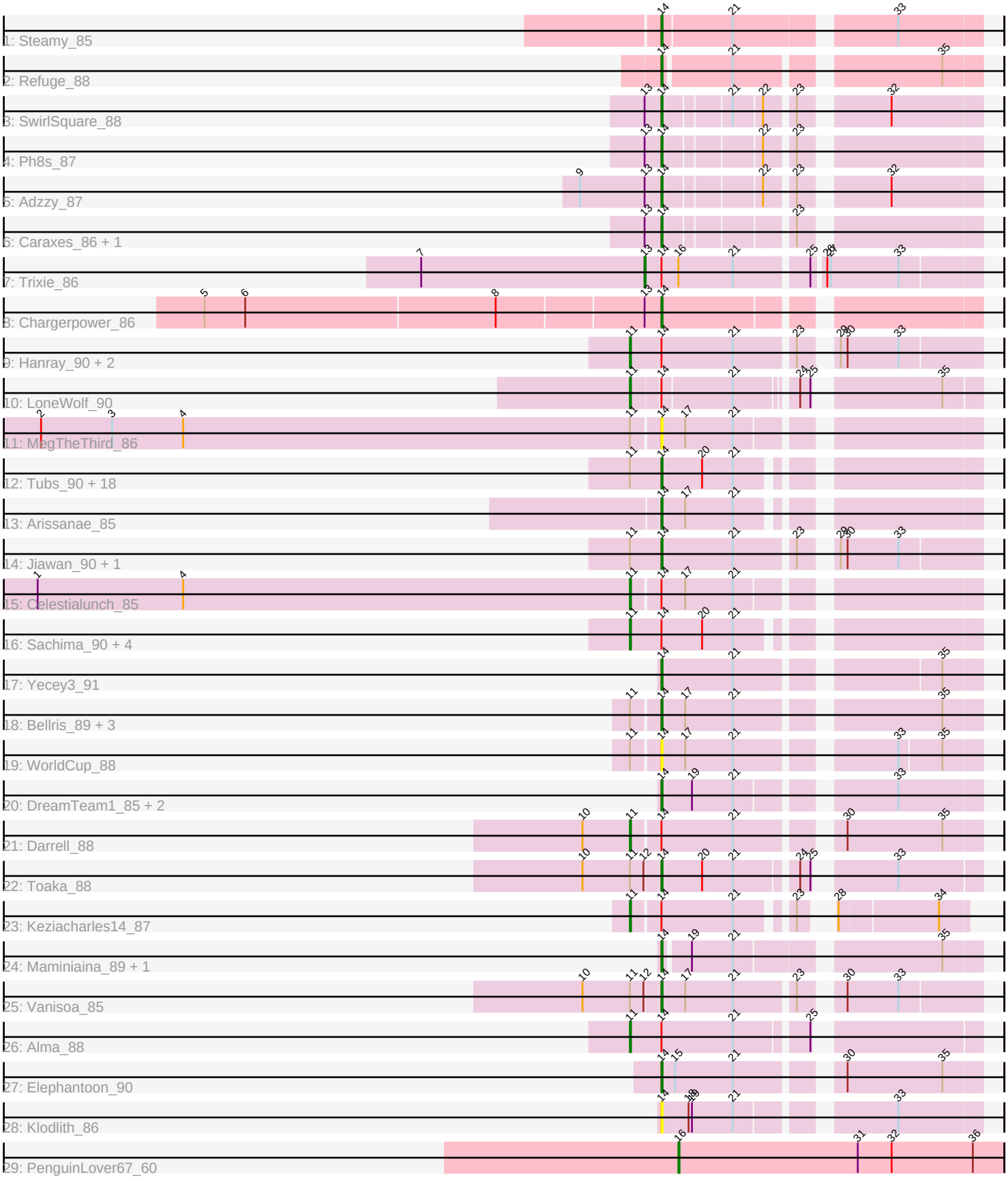
Pham 347640


1: Steamy_85
2: Refuge_88
3: SwirlSquare_88
4: Ph8s_87
5: Adzzy_87
6: Caraxes_86 + 1
7: Trixie_86
8: Chargerpower_86
9: Hanray_90 + 2
10: LoneWolf_90
11: MegTheThird_86
12: Tubs_90 + 18
13: Arissanae_85
14: Jiawan_90 + 1
15: Celestialunch_85
16: Sachima_90 + 4
17: Yecey3_91
18: Bellris_89 + 3
19: WorldCup_88
20: DreamTeam1_85 + 2
21: Darrell_88
22: Toaka_88
23: Keziacharles14_87
24: Maminiaina_89 + 1
25: Vanisoa_85
26: Alma_88
27: Elephantoon_90
28: Klodlith_86
29: PenguinLover67_60

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 347640 Report

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

Pham number 347640 has 61 members, 5 are drafts.

Phages represented in each track:
• Track 1 : Steamy_85
• Track 2 : Refuge_88
• Track 3 : SwirlSquare_88
• Track 4 : Ph8s_87
• Track 5 : Adzzy_87
• Track 6 : Caraxes_86, Superchunk_86
• Track 7 : Trixie_86
• Track 8 : Chargerpower_86
• Track 9 : Hanray_90, RyeScarlet_90, Onglai_89
• Track 10 : LoneWolf_90
• Track 11 : MegTheThird_86
• Track 12 : Tubs_90, Ugenie5_77, Eidsmoe_88, Beemo_90, Conquerage_88, Phaeder_90, Catalina_92, HortumSL17_91, Phonnegut_90, Qobbit_88, Myxus_90, PackMan_85, ExplosioNervosa_88, Priya_88, Pioneer_90, Aliter_83, Scherzo_88, Fayely_88, Spouty_88
• Track 13 : Arissanae_85
• Track 14 : Jiawan_90, Holex_90
• Track 15 : Celestialunch_85
• Track 16 : Sachima_90, EdogawaKiddo_90, Lilleskat_90, EmyBug_87, Ayanochan_87
• Track 17 : Yecey3_91
• Track 18 : Bellris_89, Minispark_87, Rahalelujah_89, CogOmlette_87
• Track 19 : WorldCup_88
• Track 20 : DreamTeam1_85, SheaKeira_85, Charm_85
• Track 21 : Darrell_88
• Track 22 : Toaka_88
• Track 23 : Keziacharles14_87
• Track 24 : Maminiaina_89, BogosyJay_89
• Track 25 : Vanisoa_85
• Track 26 : Alma_88
• Track 27 : Elephantoon_90
• Track 28 : Klodlith_86
• Track 29 : PenguinLover67_60

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

The start number called the most often in the published annotations is 14, it was called in 41 of the 56 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adzzy_87, Aliter_83, Arissanae_85, Beemo_90, Bellris_89, BogosyJay_89, Caraxes_86, Catalina_92, Chargerpower_86, Charm_85, CogOmlette_87, Conquerage_88, DreamTeam1_85, Eidsmoe_88, Elephantoon_90, ExplosioNervosa_88, Fayely_88, Holex_90, HortumSL17_91, Jiawan_90, Klodlith_86, Maminiaina_89, MegTheThird_86, Minispark_87, Myxus_90, PackMan_85, Ph8s_87, Phaeder_90, Phonnegut_90, Pioneer_90, Priya_88, Qobbit_88, Rahalelujah_89, Refuge_88, Scherzo_88, SheaKeira_85, Spouty_88, Steamy_85, Superchunk_86, SwirlSquare_88, Toaka_88, Tubs_90, Ugenie5_77, Vanisoa_85, WorldCup_88, Yecey3_91,

Genes that have the "Most Annotated" start but do not call it:
• Alma_88, Ayanochan_87, Celestialunch_85, Darrell_88, EdogawaKiddo_90, EmyBug_87, Hanray_90, Keziacharles14_87, Lilleskat_90, LoneWolf_90, Onglai_89, RyeScarlet_90, Sachima_90, Trixie_86,

Genes that do not have the "Most Annotated" start:
• PenguinLover67_60,

Summary by start number:

Start 11:
• Found in 42 of 61 (68.9%) of genes in pham
• Manual Annotations of this start: 13 of 56
• Called 31.0% of time when present
• Phage (with cluster) where this start called: Alma_88 (A9), Ayanochan_87 (A9), Celestialunch_85 (A9), Darrell_88 (A9), EdogawaKiddo_90 (A9), EmyBug_87 (A9), Hanray_90 (A9), Keziacharles14_87 (A9), Lilleskat_90 (A9), LoneWolf_90 (A9), Onglai_89 (A9), RyeScarlet_90 (A9), Sachima_90 (A9),

Start 13:
• Found in 7 of 61 (11.5%) of genes in pham
• Manual Annotations of this start: 1 of 56
• Called 14.3% of time when present
• Phage (with cluster) where this start called: Trixie_86 (A2),

Start 14:
• Found in 60 of 61 (98.4%) of genes in pham
• Manual Annotations of this start: 41 of 56
• Called 76.7% of time when present
• Phage (with cluster) where this start called: Adzzy_87 (A2), Aliter_83 (A9), Arissanae_85 (A9), Beemo_90 (A9), Bellris_89 (A9), BogosyJay_89 (A9), Caraxes_86 (A2), Catalina_92 (A9), Chargerpower_86 (A22), Charm_85 (A9), CogOmlette_87 (A9), Conquerage_88 (A9), DreamTeam1_85 (A9), Eidsmoe_88 (A9), Elephantoon_90 (A9), ExplosioNervosa_88 (A9), Fayely_88 (A9), Holex_90 (A9), HortumSL17_91 (A9), Jiawan_90 (A9), Klodlith_86 (A9), Maminiaina_89 (A9), MegTheThird_86 (A9), Minispark_87 (A9), Myxus_90 (A9), PackMan_85 (A9), Ph8s_87 (A2), Phaeder_90 (A9), Phonnegut_90 (A9), Pioneer_90 (A9), Priya_88 (A9), Qobbit_88 (A9), Rahalelujah_89 (A9), Refuge_88 (A12), Scherzo_88 (A9),

SheaKeira_85 (A9), Spouty_88 (A9), Steamy_85 (A12), Superchunk_86 (A2), SwirlSquare_88 (A2), Toaka_88 (A9), Tubs_90 (A9), Ugenie5_77 (A9), Vanisoa_85 (A9), WorldCup_88 (A9), Yecey3_91 (A9),

Start 16:
• Found in 2 of 61 (3.3%) of genes in pham
• Manual Annotations of this start: 1 of 56
• Called 50.0% of time when present
• Phage (with cluster) where this start called: PenguinLover67_60 (B9),

Summary by clusters:

There are 5 clusters represented in this pham: A9, A22, A2, B9, A12,

Info for manual annotations of cluster A12:
•Start number 14 was manually annotated 2 times for cluster A12.

Info for manual annotations of cluster A2:
•Start number 13 was manually annotated 1 time for cluster A2.
•Start number 14 was manually annotated 5 times for cluster A2.

Info for manual annotations of cluster A22:
•Start number 14 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A9:
•Start number 11 was manually annotated 13 times for cluster A9.
•Start number 14 was manually annotated 33 times for cluster A9.

Info for manual annotations of cluster B9:
•Start number 16 was manually annotated 1 time for cluster B9.

Gene Information:

Gene: Adzzy_87 Start: 47625, Stop: 47383, Start Num: 14
Candidate Starts for Adzzy_87:
(9, 47697), (Start: 13 @47640 has 1 MA's), (Start: 14 @47625 has 41 MA's), (22, 47547), (23, 47526), (32, 47460),

Gene: Aliter_83 Start: 46251, Stop: 46006, Start Num: 14
Candidate Starts for Aliter_83:
(Start: 11 @46278 has 13 MA's), (Start: 14 @46251 has 41 MA's), (20, 46215), (21, 46188),

Gene: Alma_88 Start: 49120, Stop: 48845, Start Num: 11
Candidate Starts for Alma_88:
(Start: 11 @49120 has 13 MA's), (Start: 14 @49093 has 41 MA's), (21, 49030), (25, 48973),

Gene: Arissanae_85 Start: 48962, Stop: 48717, Start Num: 14
Candidate Starts for Arissanae_85:
(Start: 14 @48962 has 41 MA's), (17, 48941), (21, 48899),

Gene: Ayanochan_87 Start: 48901, Stop: 48629, Start Num: 11

Candidate Starts for Ayanochan_87:
(Start: 11 @48901 has 13 MA's), (Start: 14 @48874 has 41 MA's), (20, 48838), (21, 48811),

Gene: Beemo_90 Start: 49084, Stop: 48839, Start Num: 14
Candidate Starts for Beemo_90:
(Start: 11 @49111 has 13 MA's), (Start: 14 @49084 has 41 MA's), (20, 49048), (21, 49021),

Gene: Bellris_89 Start: 48609, Stop: 48355, Start Num: 14
Candidate Starts for Bellris_89:
(Start: 11 @48633 has 13 MA's), (Start: 14 @48609 has 41 MA's), (17, 48588), (21, 48546), (35, 48387),

Gene: BogosyJay_89 Start: 49135, Stop: 48884, Start Num: 14
Candidate Starts for BogosyJay_89:
(Start: 14 @49135 has 41 MA's), (19, 49114), (21, 49078), (35, 48916),

Gene: Caraxes_86 Start: 47583, Stop: 47341, Start Num: 14
Candidate Starts for Caraxes_86:
(Start: 13 @47598 has 1 MA's), (Start: 14 @47583 has 41 MA's), (23, 47484),

Gene: Catalina_92 Start: 49198, Stop: 48953, Start Num: 14
Candidate Starts for Catalina_92:
(Start: 11 @49225 has 13 MA's), (Start: 14 @49198 has 41 MA's), (20, 49162), (21, 49135),

Gene: Celestialunch_85 Start: 48365, Stop: 48090, Start Num: 11
Candidate Starts for Celestialunch_85:
(1, 48890), (4, 48761), (Start: 11 @48365 has 13 MA's), (Start: 14 @48341 has 41 MA's), (17, 48320), (21, 48278),

Gene: Chargerpower_86 Start: 47145, Stop: 46894, Start Num: 14
Candidate Starts for Chargerpower_86:
(5, 47541), (6, 47505), (8, 47286), (Start: 13 @47160 has 1 MA's), (Start: 14 @47145 has 41 MA's),

Gene: Charm_85 Start: 48488, Stop: 48237, Start Num: 14
Candidate Starts for Charm_85:
(Start: 14 @48488 has 41 MA's), (19, 48461), (21, 48425), (33, 48308),

Gene: CogOmlette_87 Start: 48606, Stop: 48352, Start Num: 14
Candidate Starts for CogOmlette_87:
(Start: 11 @48630 has 13 MA's), (Start: 14 @48606 has 41 MA's), (17, 48585), (21, 48543), (35, 48384),

Gene: Conquerage_88 Start: 48859, Stop: 48614, Start Num: 14
Candidate Starts for Conquerage_88:
(Start: 11 @48886 has 13 MA's), (Start: 14 @48859 has 41 MA's), (20, 48823), (21, 48796),

Gene: Darrell_88 Start: 48317, Stop: 48039, Start Num: 11
Candidate Starts for Darrell_88:
(10, 48359), (Start: 11 @48317 has 13 MA's), (Start: 14 @48293 has 41 MA's), (21, 48230), (30, 48155), (35, 48071),

Gene: DreamTeam1_85 Start: 48336, Stop: 48085, Start Num: 14
Candidate Starts for DreamTeam1_85:

(Start: 14 @48336 has 41 MA's), (19, 48309), (21, 48273), (33, 48156),

Gene: EdogawaKiddo_90 Start: 49188, Stop: 48916, Start Num: 11
Candidate Starts for EdogawaKiddo_90:
(Start: 11 @49188 has 13 MA's), (Start: 14 @49161 has 41 MA's), (20, 49125), (21, 49098),

Gene: Eidsmoe_88 Start: 48852, Stop: 48607, Start Num: 14
Candidate Starts for Eidsmoe_88:
(Start: 11 @48879 has 13 MA's), (Start: 14 @48852 has 41 MA's), (20, 48816), (21, 48789),

Gene: Elephantoon_90 Start: 49016, Stop: 48762, Start Num: 14
Candidate Starts for Elephantoon_90:
(Start: 14 @49016 has 41 MA's), (15, 49004), (21, 48953), (30, 48878), (35, 48794),

Gene: EmyBug_87 Start: 48881, Stop: 48609, Start Num: 11
Candidate Starts for EmyBug_87:
(Start: 11 @48881 has 13 MA's), (Start: 14 @48854 has 41 MA's), (20, 48818), (21, 48791),

Gene: ExplosioNervosa_88 Start: 48920, Stop: 48675, Start Num: 14
Candidate Starts for ExplosioNervosa_88:
(Start: 11 @48947 has 13 MA's), (Start: 14 @48920 has 41 MA's), (20, 48884), (21, 48857),

Gene: Fayely_88 Start: 48828, Stop: 48583, Start Num: 14
Candidate Starts for Fayely_88:
(Start: 11 @48855 has 13 MA's), (Start: 14 @48828 has 41 MA's), (20, 48792), (21, 48765),

Gene: Hanray_90 Start: 49176, Stop: 48895, Start Num: 11
Candidate Starts for Hanray_90:
(Start: 11 @49176 has 13 MA's), (Start: 14 @49149 has 41 MA's), (21, 49086), (23, 49038), (29, 49017), (30, 49011), (33, 48966),

Gene: Holex_90 Start: 49162, Stop: 48908, Start Num: 14
Candidate Starts for Holex_90:
(Start: 11 @49189 has 13 MA's), (Start: 14 @49162 has 41 MA's), (21, 49099), (23, 49051), (29, 49030), (30, 49024), (33, 48979),

Gene: HortumSL17_91 Start: 49196, Stop: 48951, Start Num: 14
Candidate Starts for HortumSL17_91:
(Start: 11 @49223 has 13 MA's), (Start: 14 @49196 has 41 MA's), (20, 49160), (21, 49133),

Gene: Jiawan_90 Start: 49179, Stop: 48925, Start Num: 14
Candidate Starts for Jiawan_90:
(Start: 11 @49206 has 13 MA's), (Start: 14 @49179 has 41 MA's), (21, 49116), (23, 49068), (29, 49047), (30, 49041), (33, 48996),

Gene: Keziacharles14_87 Start: 49677, Stop: 49432, Start Num: 11
Candidate Starts for Keziacharles14_87:
(Start: 11 @49677 has 13 MA's), (Start: 14 @49653 has 41 MA's), (21, 49590), (23, 49551), (28, 49539), (34, 49455),

Gene: Klodlith_86 Start: 48558, Stop: 48307, Start Num: 14
Candidate Starts for Klodlith_86:
(Start: 14 @48558 has 41 MA's), (18, 48534), (19, 48531), (21, 48495), (33, 48378),

Gene: Lilleskat_90 Start: 49177, Stop: 48905, Start Num: 11
Candidate Starts for Lilleskat_90:
(Start: 11 @49177 has 13 MA's), (Start: 14 @49150 has 41 MA's), (20, 49114), (21, 49087),

Gene: LoneWolf_90 Start: 49212, Stop: 48946, Start Num: 11
Candidate Starts for LoneWolf_90:
(Start: 11 @49212 has 13 MA's), (Start: 14 @49188 has 41 MA's), (21, 49128), (24, 49083), (25, 49074), (35, 48978),

Gene: Maminiaina_89 Start: 49117, Stop: 48866, Start Num: 14
Candidate Starts for Maminiaina_89:
(Start: 14 @49117 has 41 MA's), (19, 49096), (21, 49060), (35, 48898),

Gene: MegTheThird_86 Start: 48559, Stop: 48308, Start Num: 14
Candidate Starts for MegTheThird_86:
(2, 49105), (3, 49042), (4, 48979), (Start: 11 @48583 has 13 MA's), (Start: 14 @48559 has 41 MA's), (17, 48538), (21, 48496),

Gene: Minispark_87 Start: 48603, Stop: 48349, Start Num: 14
Candidate Starts for Minispark_87:
(Start: 11 @48627 has 13 MA's), (Start: 14 @48603 has 41 MA's), (17, 48582), (21, 48540), (35, 48381),

Gene: Myxus_90 Start: 49196, Stop: 48951, Start Num: 14
Candidate Starts for Myxus_90:
(Start: 11 @49223 has 13 MA's), (Start: 14 @49196 has 41 MA's), (20, 49160), (21, 49133),

Gene: Onglai_89 Start: 47378, Stop: 47097, Start Num: 11
Candidate Starts for Onglai_89:
(Start: 11 @47378 has 13 MA's), (Start: 14 @47351 has 41 MA's), (21, 47288), (23, 47240), (29, 47219), (30, 47213), (33, 47168),

Gene: PackMan_85 Start: 47110, Stop: 46865, Start Num: 14
Candidate Starts for PackMan_85:
(Start: 11 @47137 has 13 MA's), (Start: 14 @47110 has 41 MA's), (20, 47074), (21, 47047),

Gene: PenguinLover67_60 Start: 56278, Stop: 55991, Start Num: 16
Candidate Starts for PenguinLover67_60:
(Start: 16 @56278 has 1 MA's), (31, 56119), (32, 56089), (36, 56017),

Gene: Ph8s_87 Start: 47838, Stop: 47596, Start Num: 14
Candidate Starts for Ph8s_87:
(Start: 13 @47853 has 1 MA's), (Start: 14 @47838 has 41 MA's), (22, 47760), (23, 47739),

Gene: Phaeder_90 Start: 49071, Stop: 48826, Start Num: 14
Candidate Starts for Phaeder_90:
(Start: 11 @49098 has 13 MA's), (Start: 14 @49071 has 41 MA's), (20, 49035), (21, 49008),

Gene: Phonnegut_90 Start: 49083, Stop: 48838, Start Num: 14
Candidate Starts for Phonnegut_90:
(Start: 11 @49110 has 13 MA's), (Start: 14 @49083 has 41 MA's), (20, 49047), (21, 49020),

Gene: Pioneer_90 Start: 49083, Stop: 48838, Start Num: 14
Candidate Starts for Pioneer_90:
(Start: 11 @49110 has 13 MA's), (Start: 14 @49083 has 41 MA's), (20, 49047), (21, 49020),

Gene: Priya_88 Start: 48855, Stop: 48610, Start Num: 14
Candidate Starts for Priya_88:
(Start: 11 @48882 has 13 MA's), (Start: 14 @48855 has 41 MA's), (20, 48819), (21, 48792),

Gene: Qobbit_88 Start: 48817, Stop: 48572, Start Num: 14
Candidate Starts for Qobbit_88:
(Start: 11 @48844 has 13 MA's), (Start: 14 @48817 has 41 MA's), (20, 48781), (21, 48754),

Gene: Rahalelujah_89 Start: 48618, Stop: 48364, Start Num: 14
Candidate Starts for Rahalelujah_89:
(Start: 11 @48642 has 13 MA's), (Start: 14 @48618 has 41 MA's), (17, 48597), (21, 48555), (35, 48396),

Gene: Refuge_88 Start: 50832, Stop: 50584, Start Num: 14
Candidate Starts for Refuge_88:
(Start: 14 @50832 has 41 MA's), (21, 50775), (35, 50616),

Gene: RyeScarlet_90 Start: 49096, Stop: 48815, Start Num: 11
Candidate Starts for RyeScarlet_90:
(Start: 11 @49096 has 13 MA's), (Start: 14 @49069 has 41 MA's), (21, 49006), (23, 48958), (29, 48937), (30, 48931), (33, 48886),

Gene: Sachima_90 Start: 49125, Stop: 48853, Start Num: 11
Candidate Starts for Sachima_90:
(Start: 11 @49125 has 13 MA's), (Start: 14 @49098 has 41 MA's), (20, 49062), (21, 49035),

Gene: Scherzo_88 Start: 49115, Stop: 48870, Start Num: 14
Candidate Starts for Scherzo_88:
(Start: 11 @49142 has 13 MA's), (Start: 14 @49115 has 41 MA's), (20, 49079), (21, 49052),

Gene: SheaKeira_85 Start: 48361, Stop: 48110, Start Num: 14
Candidate Starts for SheaKeira_85:
(Start: 14 @48361 has 41 MA's), (19, 48334), (21, 48298), (33, 48181),

Gene: Spouty_88 Start: 48854, Stop: 48609, Start Num: 14
Candidate Starts for Spouty_88:
(Start: 11 @48881 has 13 MA's), (Start: 14 @48854 has 41 MA's), (20, 48818), (21, 48791),

Gene: Steamy_85 Start: 49811, Stop: 49554, Start Num: 14
Candidate Starts for Steamy_85:
(Start: 14 @49811 has 41 MA's), (21, 49751), (33, 49625),

Gene: Superchunk_86 Start: 47583, Stop: 47341, Start Num: 14
Candidate Starts for Superchunk_86:
(Start: 13 @47598 has 1 MA's), (Start: 14 @47583 has 41 MA's), (23, 47484),

Gene: SwirlSquare_88 Start: 47313, Stop: 47071, Start Num: 14
Candidate Starts for SwirlSquare_88:

(Start: 13 @47328 has 1 MA's), (Start: 14 @47313 has 41 MA's), (21, 47259), (22, 47235), (23, 47214), (32, 47148),

Gene: Toaka_88 Start: 48957, Stop: 48709, Start Num: 14
Candidate Starts for Toaka_88:
(10, 49023), (Start: 11 @48981 has 13 MA's), (12, 48969), (Start: 14 @48957 has 41 MA's), (20, 48921), (21, 48894), (24, 48846), (25, 48837), (33, 48780),

Gene: Trixie_86 Start: 49391, Stop: 49113, Start Num: 13
Candidate Starts for Trixie_86:
(7, 49589), (Start: 13 @49391 has 1 MA's), (Start: 14 @49376 has 41 MA's), (Start: 16 @49361 has 1 MA's), (21, 49313), (25, 49253), (26, 49244), (27, 49241), (33, 49181),

Gene: Tubs_90 Start: 49071, Stop: 48826, Start Num: 14
Candidate Starts for Tubs_90:
(Start: 11 @49098 has 13 MA's), (Start: 14 @49071 has 41 MA's), (20, 49035), (21, 49008),

Gene: Ugenie5_77 Start: 46559, Stop: 46314, Start Num: 14
Candidate Starts for Ugenie5_77:
(Start: 11 @46586 has 13 MA's), (Start: 14 @46559 has 41 MA's), (20, 46523), (21, 46496),

Gene: Vanisoa_85 Start: 49296, Stop: 49042, Start Num: 14
Candidate Starts for Vanisoa_85:
(10, 49362), (Start: 11 @49320 has 13 MA's), (12, 49308), (Start: 14 @49296 has 41 MA's), (17, 49275), (21, 49233), (23, 49185), (30, 49158), (33, 49113),

Gene: WorldCup_88 Start: 48754, Stop: 48503, Start Num: 14
Candidate Starts for WorldCup_88:
(Start: 11 @48778 has 13 MA's), (Start: 14 @48754 has 41 MA's), (17, 48733), (21, 48691), (33, 48571), (35, 48535),

Gene: Yecey3_91 Start: 48834, Stop: 48583, Start Num: 14
Candidate Starts for Yecey3_91:
(Start: 14 @48834 has 41 MA's), (21, 48771), (35, 48615),