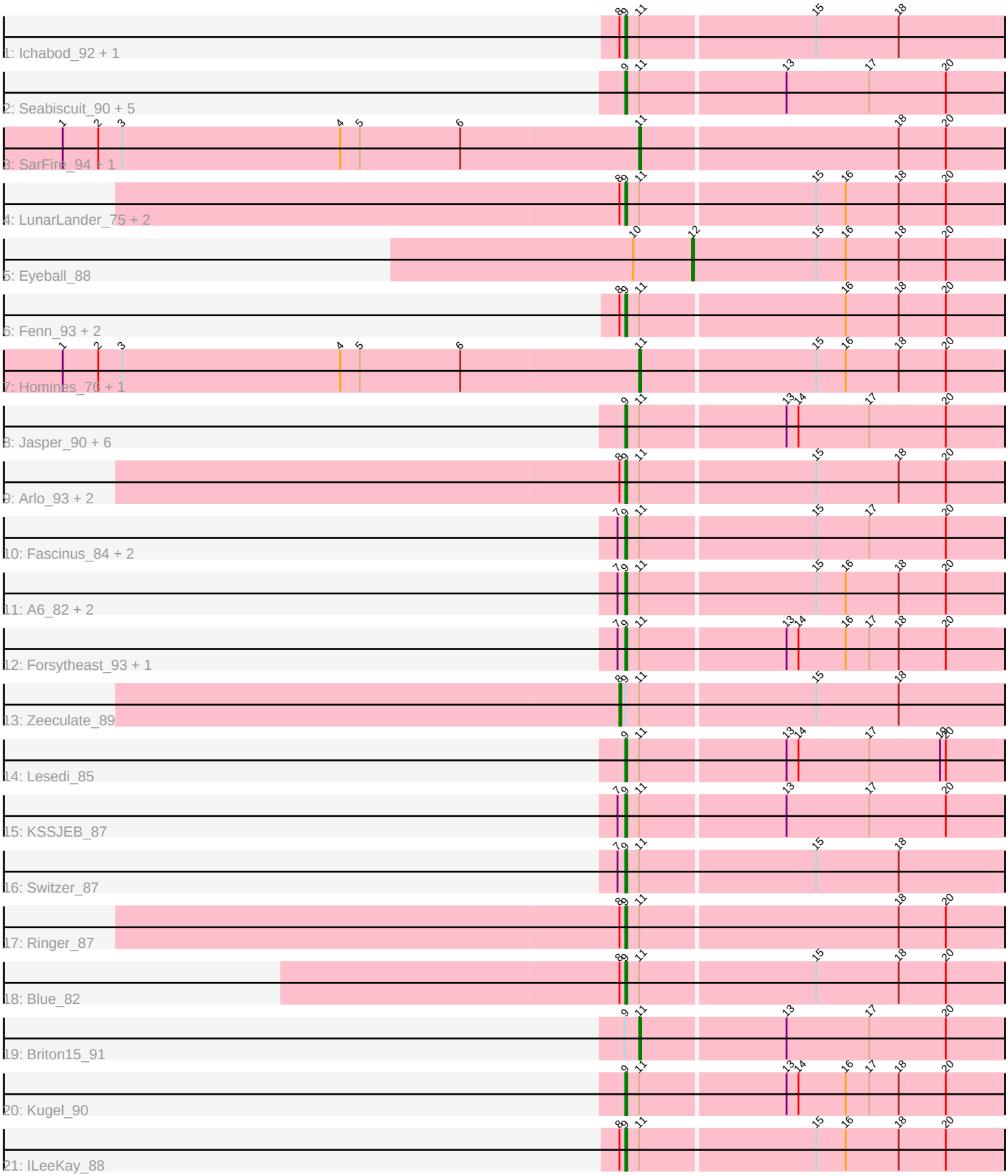
Pham 347756


1: Ichabod_92 + 1
2: Seabiscuit_90 + 5
3: SarFire_94 + 1
4: LunarLander_75 + 2
5: Eyeball_88
6: Fenn_93 + 2
7: Homines_76 + 1
8: Jasper_90 + 6
9: Arlo_93 + 2
10: Fascinus_84 + 2
11: A6_82 + 2
12: Forsytheast_93 + 1
13: Zeeculate_89
14: Lesedi_85
15: KSSJEB_87
16: Switzer_87
17: Ringer_87
18: Blue_82
19: Briton15_91
20: Kugel_90
21: ILeeKay_88

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 347756 Report

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

Pham number 347756 has 46 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Ichabod_92, Zephyr_89
• Track 2 : Seabiscuit_90, PowerRanger_82, Manatee_88, U2_81, McGuire_88, BeesKnees_91
• Track 3 : SarFire_94, Thor_94
• Track 4 : LunarLander_75, Puppet_86, Paphu_82
• Track 5 : Eyeball_88
• Track 6 : Fenn_93, Naira_92, Squee_87
• Track 7 : Homines_76, Espresso_84
• Track 8 : Jasper_90, Dreamboat_90, Wilkins_86, Seanderson_87, Topgun_85, Teodoridan_85, Snazzy_90
• Track 9 : Arlo_93, Mkhuseli_85, Carlyle_87
• Track 10 : Fascinus_84, Maroc7_89, CactusRose_93
• Track 11 : A6_82, BK1_82, Marcell_80
• Track 12 : Forsytheast_93, Moose_92
• Track 13 : Zeeculate_89
• Track 14 : Lesedi_85
• Track 15 : KSSJEB_87
• Track 16 : Switzer_87
• Track 17 : Ringer_87
• Track 18 : Blue_82
• Track 19 : Briton15_91
• Track 20 : Kugel_90
• Track 21 : ILeeKay_88

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

The start number called the most often in the published annotations is 9, it was called in 37 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• A6_82, Arlo_93, BK1_82, BeesKnees_91, Blue_82, CactusRose_93, Carlyle_87, Dreamboat_90, Fascinus_84, Fenn_93, Forsytheast_93, ILeeKay_88, Ichabod_92, Jasper_90, KSSJEB_87, Kugel_90, Lesedi_85, LunarLander_75, Manatee_88, Marcell_80, Maroc7_89, McGuire_88, Mkhuseli_85, Moose_92, Naira_92, Paphu_82,

PowerRanger_82, Puppet_86, Ringer_87, Seabiscuit_90, Seanderson_87, Snazzy_90, Squee_87, Switzer_87, Teodoridan_85, Topgun_85, U2_81, Wilkins_86, Zephyr_89,

Genes that have the "Most Annotated" start but do not call it:
• Briton15_91, Zeeculate_89,

Genes that do not have the "Most Annotated" start:
• Espresso_84, Eyeball_88, Homines_76, SarFire_94, Thor_94,

Summary by start number:

Start 8:
• Found in 15 of 46 (32.6%) of genes in pham
• Manual Annotations of this start: 1 of 44
• Called 6.7% of time when present
• Phage (with cluster) where this start called: Zeeculate_89 (A1),

Start 9:
• Found in 41 of 46 (89.1%) of genes in pham
• Manual Annotations of this start: 37 of 44
• Called 95.1% of time when present
• Phage (with cluster) where this start called: A6_82 (A1), Arlo_93 (A1), BK1_82 (A1), BeesKnees_91 (A1), Blue_82 (A1), CactusRose_93 (A1), Carlyle_87 (A1), Dreamboat_90 (A1), Fascinus_84 (A1), Fenn_93 (A1), Forsytheast_93 (A1), ILeeKay_88 (A1), Ichabod_92 (A1), Jasper_90 (A1), KSSJEB_87 (A1), Kugel_90 (A1), Lesedi_85 (A1), LunarLander_75 (A1), Manatee_88 (A1), Marcell_80 (A1), Maroc7_89 (A1), McGuire_88 (A1), Mkhuseli_85 (A1), Moose_92 (A1), Naira_92 (A1), Paphu_82 (A1), PowerRanger_82 (A1), Puppet_86 (A1), Ringer_87 (A1), Seabiscuit_90 (A1), Seanderson_87 (A1), Snazzy_90 (A1), Squee_87 (A1), Switzer_87 (A1), Teodoridan_85 (A1), Topgun_85 (A1), U2_81 (A1), Wilkins_86 (A1), Zephyr_89 (A1),

Start 11:
• Found in 45 of 46 (97.8%) of genes in pham
• Manual Annotations of this start: 5 of 44
• Called 11.1% of time when present
• Phage (with cluster) where this start called: Briton15_91 (A1), Espresso_84 (A1), Homines_76 (A1), SarFire_94 (A1), Thor_94 (A1),

Start 12:
• Found in 1 of 46 (2.2%) of genes in pham
• Manual Annotations of this start: 1 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Eyeball_88 (A1),

Summary by clusters:

There is one cluster represented in this pham: A1

Info for manual annotations of cluster A1:
•Start number 8 was manually annotated 1 time for cluster A1.
•Start number 9 was manually annotated 37 times for cluster A1.

•Start number 11 was manually annotated 5 times for cluster A1.
•Start number 12 was manually annotated 1 time for cluster A1.

Gene Information:

Gene: A6_82 Start: 48189, Stop: 48001, Start Num: 9
Candidate Starts for A6_82:
(7, 48192), (Start: 9 @48189 has 37 MA's), (Start: 11 @48183 has 5 MA's), (15, 48096), (16, 48081), (18, 48054), (20, 48030),

Gene: Arlo_93 Start: 51829, Stop: 51641, Start Num: 9
Candidate Starts for Arlo_93:
(Start: 8 @51832 has 1 MA's), (Start: 9 @51829 has 37 MA's), (Start: 11 @51823 has 5 MA's), (15, 51736), (18, 51694), (20, 51670),

Gene: BK1_82 Start: 48189, Stop: 48001, Start Num: 9
Candidate Starts for BK1_82:
(7, 48192), (Start: 9 @48189 has 37 MA's), (Start: 11 @48183 has 5 MA's), (15, 48096), (16, 48081), (18, 48054), (20, 48030),

Gene: BeesKnees_91 Start: 49945, Stop: 49745, Start Num: 9
Candidate Starts for BeesKnees_91:
(Start: 9 @49945 has 37 MA's), (Start: 11 @49939 has 5 MA's), (13, 49867), (17, 49825), (20, 49786),

Gene: Blue_82 Start: 49700, Stop: 49512, Start Num: 9
Candidate Starts for Blue_82:
(Start: 8 @49703 has 1 MA's), (Start: 9 @49700 has 37 MA's), (Start: 11 @49694 has 5 MA's), (15, 49607), (18, 49565), (20, 49541),

Gene: Briton15_91 Start: 51502, Stop: 51308, Start Num: 11
Candidate Starts for Briton15_91:
(Start: 9 @51508 has 37 MA's), (Start: 11 @51502 has 5 MA's), (13, 51430), (17, 51388), (20, 51349),

Gene: CactusRose_93 Start: 51517, Stop: 51317, Start Num: 9
Candidate Starts for CactusRose_93:
(7, 51520), (Start: 9 @51517 has 37 MA's), (Start: 11 @51511 has 5 MA's), (15, 51424), (17, 51397), (20, 51358),

Gene: Carlyle_87 Start: 49720, Stop: 49532, Start Num: 9
Candidate Starts for Carlyle_87:
(Start: 8 @49723 has 1 MA's), (Start: 9 @49720 has 37 MA's), (Start: 11 @49714 has 5 MA's), (15, 49627), (18, 49585), (20, 49561),

Gene: Dreamboat_90 Start: 49294, Stop: 49094, Start Num: 9
Candidate Starts for Dreamboat_90:
(Start: 9 @49294 has 37 MA's), (Start: 11 @49288 has 5 MA's), (13, 49216), (14, 49210), (17, 49174), (20, 49135),

Gene: Espresso_84 Start: 49761, Stop: 49579, Start Num: 11
Candidate Starts for Espresso_84:

(1, 50052), (2, 50034), (3, 50022), (4, 49911), (5, 49902), (6, 49851), (Start: 11 @49761 has 5 MA's), (15, 49674), (16, 49659), (18, 49632), (20, 49608),

Gene: Eyeball_88 Start: 49419, Stop: 49577, Start Num: 12
Candidate Starts for Eyeball_88:
(10, 49389), (Start: 12 @49419 has 1 MA's), (15, 49482), (16, 49497), (18, 49524), (20, 49548),

Gene: Fascinus_84 Start: 51014, Stop: 50814, Start Num: 9
Candidate Starts for Fascinus_84:
(7, 51017), (Start: 9 @51014 has 37 MA's), (Start: 11 @51008 has 5 MA's), (15, 50921), (17, 50894), (20, 50855),

Gene: Fenn_93 Start: 51503, Stop: 51315, Start Num: 9
Candidate Starts for Fenn_93:
(Start: 8 @51506 has 1 MA's), (Start: 9 @51503 has 37 MA's), (Start: 11 @51497 has 5 MA's), (16, 51395), (18, 51368), (20, 51344),

Gene: Forsytheast_93 Start: 51556, Stop: 51368, Start Num: 9
Candidate Starts for Forsytheast_93:
(7, 51559), (Start: 9 @51556 has 37 MA's), (Start: 11 @51550 has 5 MA's), (13, 51478), (14, 51472), (16, 51448), (17, 51436), (18, 51421), (20, 51397),

Gene: Homines_76 Start: 45144, Stop: 44962, Start Num: 11
Candidate Starts for Homines_76:
(1, 45435), (2, 45417), (3, 45405), (4, 45294), (5, 45285), (6, 45234), (Start: 11 @45144 has 5 MA's), (15, 45057), (16, 45042), (18, 45015), (20, 44991),

Gene: ILeeKay_88 Start: 49875, Stop: 49687, Start Num: 9
Candidate Starts for ILeeKay_88:
(Start: 8 @49878 has 1 MA's), (Start: 9 @49875 has 37 MA's), (Start: 11 @49869 has 5 MA's), (15, 49782), (16, 49767), (18, 49740), (20, 49716),

Gene: Ichabod_92 Start: 51778, Stop: 51590, Start Num: 9
Candidate Starts for Ichabod_92:
(Start: 8 @51781 has 1 MA's), (Start: 9 @51778 has 37 MA's), (Start: 11 @51772 has 5 MA's), (15, 51685), (18, 51643),

Gene: Jasper_90 Start: 49180, Stop: 48980, Start Num: 9
Candidate Starts for Jasper_90:
(Start: 9 @49180 has 37 MA's), (Start: 11 @49174 has 5 MA's), (13, 49102), (14, 49096), (17, 49060), (20, 49021),

Gene: KSSJEB_87 Start: 49614, Stop: 49414, Start Num: 9
Candidate Starts for KSSJEB_87:
(7, 49617), (Start: 9 @49614 has 37 MA's), (Start: 11 @49608 has 5 MA's), (13, 49536), (17, 49494), (20, 49455),

Gene: Kugel_90 Start: 50859, Stop: 50671, Start Num: 9
Candidate Starts for Kugel_90:
(Start: 9 @50859 has 37 MA's), (Start: 11 @50853 has 5 MA's), (13, 50781), (14, 50775), (16, 50751), (17, 50739), (18, 50724), (20, 50700),

Gene: Lesedi_85 Start: 49329, Stop: 49141, Start Num: 9

Candidate Starts for Lesedi_85:
(Start: 9 @49329 has 37 MA's), (Start: 11 @49323 has 5 MA's), (13, 49251), (14, 49245), (17, 49209), (19, 49173), (20, 49170),

Gene: LunarLander_75 Start: 47154, Stop: 46966, Start Num: 9
Candidate Starts for LunarLander_75:
(Start: 8 @47157 has 1 MA's), (Start: 9 @47154 has 37 MA's), (Start: 11 @47148 has 5 MA's), (15, 47061), (16, 47046), (18, 47019), (20, 46995),

Gene: Manatee_88 Start: 49510, Stop: 49310, Start Num: 9
Candidate Starts for Manatee_88:
(Start: 9 @49510 has 37 MA's), (Start: 11 @49504 has 5 MA's), (13, 49432), (17, 49390), (20, 49351),

Gene: Marcell_80 Start: 48034, Stop: 47846, Start Num: 9
Candidate Starts for Marcell_80:
(7, 48037), (Start: 9 @48034 has 37 MA's), (Start: 11 @48028 has 5 MA's), (15, 47941), (16, 47926), (18, 47899), (20, 47875),

Gene: Maroc7_89 Start: 52233, Stop: 52033, Start Num: 9
Candidate Starts for Maroc7_89:
(7, 52236), (Start: 9 @52233 has 37 MA's), (Start: 11 @52227 has 5 MA's), (15, 52140), (17, 52113), (20, 52074),

Gene: McGuire_88 Start: 49744, Stop: 49544, Start Num: 9
Candidate Starts for McGuire_88:
(Start: 9 @49744 has 37 MA's), (Start: 11 @49738 has 5 MA's), (13, 49666), (17, 49624), (20, 49585),

Gene: Mkhuseli_85 Start: 47970, Stop: 47782, Start Num: 9
Candidate Starts for Mkhuseli_85:
(Start: 8 @47973 has 1 MA's), (Start: 9 @47970 has 37 MA's), (Start: 11 @47964 has 5 MA's), (15, 47877), (18, 47835), (20, 47811),

Gene: Moose_92 Start: 51556, Stop: 51368, Start Num: 9
Candidate Starts for Moose_92:
(7, 51559), (Start: 9 @51556 has 37 MA's), (Start: 11 @51550 has 5 MA's), (13, 51478), (14, 51472), (16, 51448), (17, 51436), (18, 51421), (20, 51397),

Gene: Naira_92 Start: 51635, Stop: 51447, Start Num: 9
Candidate Starts for Naira_92:
(Start: 8 @51638 has 1 MA's), (Start: 9 @51635 has 37 MA's), (Start: 11 @51629 has 5 MA's), (16, 51527), (18, 51500), (20, 51476),

Gene: Paphu_82 Start: 48282, Stop: 48094, Start Num: 9
Candidate Starts for Paphu_82:
(Start: 8 @48285 has 1 MA's), (Start: 9 @48282 has 37 MA's), (Start: 11 @48276 has 5 MA's), (15, 48189), (16, 48174), (18, 48147), (20, 48123),

Gene: PowerRanger_82 Start: 50174, Stop: 49974, Start Num: 9
Candidate Starts for PowerRanger_82:
(Start: 9 @50174 has 37 MA's), (Start: 11 @50168 has 5 MA's), (13, 50096), (17, 50054), (20, 50015),

Gene: Puppet_86 Start: 50602, Stop: 50414, Start Num: 9
Candidate Starts for Puppet_86:

(Start: 8 @50605 has 1 MA's), (Start: 9 @50602 has 37 MA's), (Start: 11 @50596 has 5 MA's), (15, 50509), (16, 50494), (18, 50467), (20, 50443),

Gene: Ringer_87 Start: 50657, Stop: 50469, Start Num: 9
Candidate Starts for Ringer_87:
(Start: 8 @50660 has 1 MA's), (Start: 9 @50657 has 37 MA's), (Start: 11 @50651 has 5 MA's), (18, 50522), (20, 50498),

Gene: SarFire_94 Start: 52388, Stop: 52194, Start Num: 11
Candidate Starts for SarFire_94:
(1, 52679), (2, 52661), (3, 52649), (4, 52538), (5, 52529), (6, 52478), (Start: 11 @52388 has 5 MA's), (18, 52259), (20, 52235),

Gene: Seabiscuit_90 Start: 49976, Stop: 49776, Start Num: 9
Candidate Starts for Seabiscuit_90:
(Start: 9 @49976 has 37 MA's), (Start: 11 @49970 has 5 MA's), (13, 49898), (17, 49856), (20, 49817),

Gene: Seanderson_87 Start: 51872, Stop: 51684, Start Num: 9
Candidate Starts for Seanderson_87:
(Start: 9 @51872 has 37 MA's), (Start: 11 @51866 has 5 MA's), (13, 51794), (14, 51788), (17, 51752), (20, 51713),

Gene: Snazzy_90 Start: 51084, Stop: 50884, Start Num: 9
Candidate Starts for Snazzy_90:
(Start: 9 @51084 has 37 MA's), (Start: 11 @51078 has 5 MA's), (13, 51006), (14, 51000), (17, 50964), (20, 50925),

Gene: Squee_87 Start: 50007, Stop: 49819, Start Num: 9
Candidate Starts for Squee_87:
(Start: 8 @50010 has 1 MA's), (Start: 9 @50007 has 37 MA's), (Start: 11 @50001 has 5 MA's), (16, 49899), (18, 49872), (20, 49848),

Gene: Switzer_87 Start: 50760, Stop: 50560, Start Num: 9
Candidate Starts for Switzer_87:
(7, 50763), (Start: 9 @50760 has 37 MA's), (Start: 11 @50754 has 5 MA's), (15, 50667), (18, 50625),

Gene: Teodoridan_85 Start: 48171, Stop: 47971, Start Num: 9
Candidate Starts for Teodoridan_85:
(Start: 9 @48171 has 37 MA's), (Start: 11 @48165 has 5 MA's), (13, 48093), (14, 48087), (17, 48051), (20, 48012),

Gene: Thor_94 Start: 51746, Stop: 51552, Start Num: 11
Candidate Starts for Thor_94:
(1, 52037), (2, 52019), (3, 52007), (4, 51896), (5, 51887), (6, 51836), (Start: 11 @51746 has 5 MA's), (18, 51617), (20, 51593),

Gene: Topgun_85 Start: 48489, Stop: 48289, Start Num: 9
Candidate Starts for Topgun_85:
(Start: 9 @48489 has 37 MA's), (Start: 11 @48483 has 5 MA's), (13, 48411), (14, 48405), (17, 48369), (20, 48330),

Gene: U2_81 Start: 50965, Stop: 50765, Start Num: 9
Candidate Starts for U2_81:

(Start: 9 @50965 has 37 MA's), (Start: 11 @50959 has 5 MA's), (13, 50887), (17, 50845), (20, 50806),

Gene: Wilkins_86 Start: 48419, Stop: 48219, Start Num: 9
Candidate Starts for Wilkins_86:
(Start: 9 @48419 has 37 MA's), (Start: 11 @48413 has 5 MA's), (13, 48341), (14, 48335), (17, 48299), (20, 48260),

Gene: Zeeculate_89 Start: 52732, Stop: 52541, Start Num: 8
Candidate Starts for Zeeculate_89:
(Start: 8 @52732 has 1 MA's), (Start: 9 @52729 has 37 MA's), (Start: 11 @52723 has 5 MA's), (15, 52636), (18, 52594),

Gene: Zephyr_89 Start: 51170, Stop: 50982, Start Num: 9
Candidate Starts for Zephyr_89:
(Start: 8 @51173 has 1 MA's), (Start: 9 @51170 has 37 MA's), (Start: 11 @51164 has 5 MA's), (15, 51077), (18, 51035),