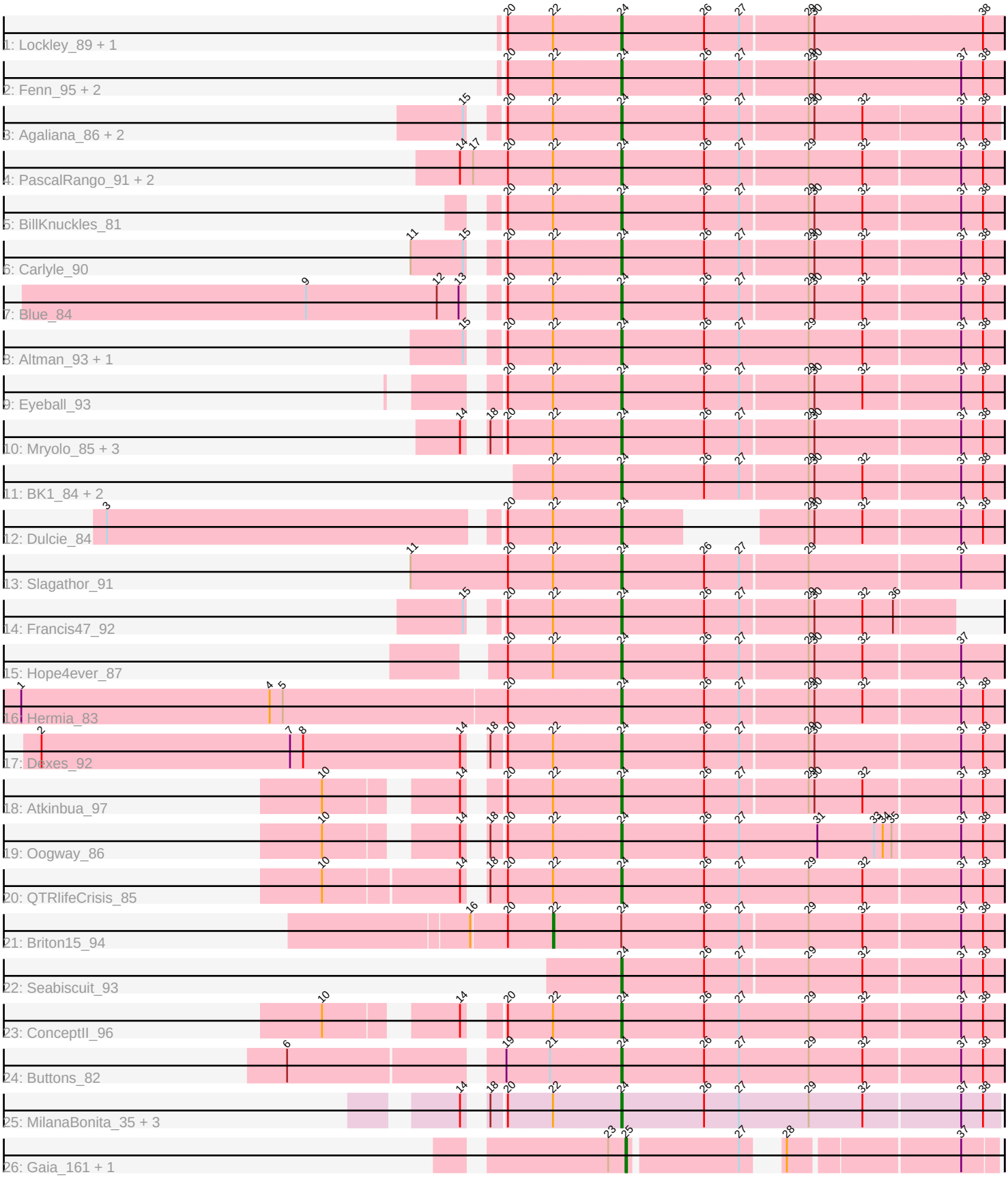
Pham 171586


1: Lockley_89 + 1
2: Fenn_95 + 2
3: Agaliana_86 + 2
4: PascalRango_91 + 2
5: BillKnuckles_81
6: Carlyle_90
7: Blue_84
8: Altman_93 + 1
9: Eyeball_93
10: Mryolo_85 + 3
11: BK1_84 + 2
12: Dulcie_84
13: Slagathor_91
14: Francis47_92
15: Hope4ever_87
16: Hermia_83
17: Dexes_92
18: Atkinbua_97
19: Oogway_86
20: QTRlifeCrisis_85
21: Briton15_94
22: Seabiscuit_93
23: ConceptII_96
24: Buttons_82
25: MilanaBonita_35 + 3
26: Gaia_161 + 1

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 171586 Report

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

Pham number 171586 has 43 members, 2 are drafts.

Phages represented in each track:
- Track 1 : Lockley_89, Pari_90
- Track 2 : Fenn_95, Naira_94, Squee_90
- Track 3 : Agaliana_86, Bircsak_89, Gompeii16_89
- Track 4 : PascalRango_91, Switzer_90, BeesKnees_94
- Track 5 : BillKnuckles_81
- Track 6 : Carlyle_90
- Track 7 : Blue_84
- Track 8 : Altman_93, Kanely_92
- Track 9 : Eyeball_93
- Track 10 : Mryolo_85, Nerujay_94, Rhynn_86, Teodoridan_94
- Track 11 : BK1_84, A6_84, Magnar_90
- Track 12 : Dulcie_84
- Track 13 : Slagathor_91
- Track 14 : Francis47_92
- Track 15 : Hope4ever_87
- Track 16 : Hermia_83
- Track 17 : Dexes_92
- Track 18 : Atkinbua_97
- Track 19 : Oogway_86
- Track 20 : QTRlifeCrisis_85
- Track 21 : Briton15_94
- Track 22 : Seabiscuit_93
- Track 23 : ConceptII_96
- Track 24 : Buttons_82
- Track 25 : MilanaBonita_35, LunaBlu_45, Batiatus_41, Akhila_35
- Track 26 : Gaia_161, Nebkiss_157

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

The start number called the most often in the published annotations is 24, it was called in 38 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• A6_84, Agaliana_86, Akhila_35, Altman_93, Atkinbua_97, BK1_84, Batiatus_41, BeesKnees_94, BillKnuckles_81, Bircsak_89, Blue_84, Buttons_82, Carlyle_90, ConceptII_96, Dexes_92, Dulcie_84, Eyeball_93, Fenn_95, Francis47_92, Gompeii16_89, Hermia_83, Hope4ever_87, Kanely_92, Lockley_89, LunaBlu_45, Magnar_90, MilanaBonita_35, Mryolo_85, Naira_94, Nerujay_94, Oogway_86, Pari_90, PascalRango_91, QTRlifeCrisis_85, Rhynn_86, Seabiscuit_93, Slagathor_91, Squee_90, Switzer_90, Teodoridan_94,

Genes that have the "Most Annotated" start but do not call it:
• Briton15_94,

Genes that do not have the "Most Annotated" start:
• Gaia_161, Nebkiss_157,

Summary by start number:

Start 22:
• Found in 38 of 43 (88.4%) of genes in pham
• Manual Annotations of this start: 1 of 41
• Called 2.6% of time when present
• Phage (with cluster) where this start called: Briton15_94 (A1),

Start 24:
• Found in 41 of 43 (95.3%) of genes in pham
• Manual Annotations of this start: 38 of 41
• Called 97.6% of time when present
• Phage (with cluster) where this start called: A6_84 (A1), Agaliana_86 (A1), Akhila_35 (F1), Altman_93 (A1), Atkinbua_97 (A1), BK1_84 (A1), Batiatus_41 (F1), BeesKnees_94 (A1), BillKnuckles_81 (A1), Bircsak_89 (A1), Blue_84 (A1), Buttons_82 (A1), Carlyle_90 (A1), ConceptII_96 (A1), Dexes_92 (A1), Dulcie_84 (A1), Eyeball_93 (A1), Fenn_95 (A1), Francis47_92 (A1), Gompeii16_89 (A1), Hermia_83 (A1), Hope4ever_87 (A1), Kanely_92 (A1), Lockley_89 (A1), LunaBlu_45 (F1), Magnar_90 (A1), MilanaBonita_35 (F1), Mryolo_85 (A1), Naira_94 (A1), Nerujay_94 (A1), Oogway_86 (A1), Pari_90 (A1), PascalRango_91 (A1), QTRlifeCrisis_85 (A1), Rhynn_86 (A1), Seabiscuit_93 (A1), Slagathor_91 (A1), Squee_90 (A1), Switzer_90 (A1), Teodoridan_94 (A1),

Start 25:
• Found in 2 of 43 (4.7%) of genes in pham
• Manual Annotations of this start: 2 of 41
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gaia_161 (X), Nebkiss_157 (X),

Summary by clusters:

There are 3 clusters represented in this pham: A1, X, F1,

Info for manual annotations of cluster A1:
•Start number 22 was manually annotated 1 time for cluster A1.
•Start number 24 was manually annotated 34 times for cluster A1.

Info for manual annotations of cluster F1:
•Start number 24 was manually annotated 4 times for cluster F1.

Info for manual annotations of cluster X:
•Start number 25 was manually annotated 2 times for cluster X.

Gene Information:

Gene: A6_84 Start: 48975, Stop: 48721, Start Num: 24
Candidate Starts for A6_84:
(Start: 22 @49020 has 1 MA's), (Start: 24 @48975 has 38 MA's), (26, 48918), (27, 48894), (29, 48849), (30, 48846), (32, 48813), (37, 48750), (38, 48735),

Gene: Agaliana_86 Start: 48958, Stop: 48707, Start Num: 24
Candidate Starts for Agaliana_86:
(15, 49045), (20, 49033), (Start: 22 @49003 has 1 MA's), (Start: 24 @48958 has 38 MA's), (26, 48901), (27, 48877), (29, 48832), (30, 48829), (32, 48796), (37, 48733), (38, 48718),

Gene: Akhila_35 Start: 27884, Stop: 27630, Start Num: 24
Candidate Starts for Akhila_35:
(14, 27974), (18, 27968), (20, 27959), (Start: 22 @27929 has 1 MA's), (Start: 24 @27884 has 38 MA's), (26, 27827), (27, 27803), (29, 27755), (32, 27719), (37, 27656), (38, 27641),

Gene: Altman_93 Start: 51784, Stop: 51527, Start Num: 24
Candidate Starts for Altman_93:
(15, 51871), (20, 51859), (Start: 22 @51829 has 1 MA's), (Start: 24 @51784 has 38 MA's), (26, 51727), (27, 51703), (29, 51655), (32, 51619), (37, 51556), (38, 51541),

Gene: Atkinbua_97 Start: 52217, Stop: 51963, Start Num: 24
Candidate Starts for Atkinbua_97:
(10, 52382), (14, 52307), (20, 52292), (Start: 22 @52262 has 1 MA's), (Start: 24 @52217 has 38 MA's), (26, 52160), (27, 52136), (29, 52091), (30, 52088), (32, 52055), (37, 51992), (38, 51977),

Gene: BK1_84 Start: 48975, Stop: 48721, Start Num: 24
Candidate Starts for BK1_84:
(Start: 22 @49020 has 1 MA's), (Start: 24 @48975 has 38 MA's), (26, 48918), (27, 48894), (29, 48849), (30, 48846), (32, 48813), (37, 48750), (38, 48735),

Gene: Batiatus_41 Start: 31862, Stop: 31608, Start Num: 24
Candidate Starts for Batiatus_41:
(14, 31952), (18, 31946), (20, 31937), (Start: 22 @31907 has 1 MA's), (Start: 24 @31862 has 38 MA's), (26, 31805), (27, 31781), (29, 31733), (32, 31697), (37, 31634), (38, 31619),

Gene: BeesKnees_94 Start: 50722, Stop: 50468, Start Num: 24
Candidate Starts for BeesKnees_94:
(14, 50830), (17, 50821), (20, 50797), (Start: 22 @50767 has 1 MA's), (Start: 24 @50722 has 38 MA's), (26, 50665), (27, 50641), (29, 50596), (32, 50560), (37, 50497), (38, 50482),

Gene: BillKnuckles_81 Start: 50042, Stop: 49788, Start Num: 24
Candidate Starts for BillKnuckles_81:
(20, 50117), (Start: 22 @50087 has 1 MA's), (Start: 24 @50042 has 38 MA's), (26, 49985), (27, 49961), (29, 49916), (30, 49913), (32, 49880), (37, 49817), (38, 49802),

Gene: Bircsak_89 Start: 52486, Stop: 52235, Start Num: 24
Candidate Starts for Bircsak_89:
(15, 52573), (20, 52561), (Start: 22 @52531 has 1 MA's), (Start: 24 @52486 has 38 MA's), (26, 52429), (27, 52405), (29, 52360), (30, 52357), (32, 52324), (37, 52261), (38, 52246),

Gene: Blue_84 Start: 50474, Stop: 50220, Start Num: 24
Candidate Starts for Blue_84:
(9, 50669), (12, 50579), (13, 50564), (20, 50549), (Start: 22 @50519 has 1 MA's), (Start: 24 @50474 has 38 MA's), (26, 50417), (27, 50393), (29, 50348), (30, 50345), (32, 50312), (37, 50249), (38, 50234),

Gene: Briton15_94 Start: 52330, Stop: 52031, Start Num: 22
Candidate Starts for Briton15_94:
(16, 52384), (20, 52360), (Start: 22 @52330 has 1 MA's), (Start: 24 @52285 has 38 MA's), (26, 52228), (27, 52204), (29, 52159), (32, 52123), (37, 52060), (38, 52045),

Gene: Buttons_82 Start: 47652, Stop: 47395, Start Num: 24
Candidate Starts for Buttons_82:
(6, 47862), (19, 47730), (21, 47700), (Start: 24 @47652 has 38 MA's), (26, 47595), (27, 47571), (29, 47523), (32, 47487), (37, 47424), (38, 47409),

Gene: Carlyle_90 Start: 50491, Stop: 50237, Start Num: 24
Candidate Starts for Carlyle_90:
(11, 50614), (15, 50578), (20, 50566), (Start: 22 @50536 has 1 MA's), (Start: 24 @50491 has 38 MA's), (26, 50434), (27, 50410), (29, 50365), (30, 50362), (32, 50329), (37, 50266), (38, 50251),

Gene: ConceptII_96 Start: 52549, Stop: 52292, Start Num: 24
Candidate Starts for ConceptII_96:
(10, 52714), (14, 52639), (20, 52624), (Start: 22 @52594 has 1 MA's), (Start: 24 @52549 has 38 MA's), (26, 52492), (27, 52468), (29, 52420), (32, 52384), (37, 52321), (38, 52306),

Gene: Dexes_92 Start: 53613, Stop: 53359, Start Num: 24
Candidate Starts for Dexes_92:
(2, 53991), (7, 53820), (8, 53811), (14, 53703), (18, 53697), (20, 53688), (Start: 22 @53658 has 1 MA's), (Start: 24 @53613 has 38 MA's), (26, 53556), (27, 53532), (29, 53487), (30, 53484), (37, 53388), (38, 53373),

Gene: Dulcie_84 Start: 50542, Stop: 50339, Start Num: 24
Candidate Starts for Dulcie_84:
(3, 50875), (20, 50617), (Start: 22 @50587 has 1 MA's), (Start: 24 @50542 has 38 MA's), (29, 50467), (30, 50464), (32, 50431), (37, 50368), (38, 50353),

Gene: Eyeball_93 Start: 51506, Stop: 51252, Start Num: 24
Candidate Starts for Eyeball_93:
(20, 51581), (Start: 22 @51551 has 1 MA's), (Start: 24 @51506 has 38 MA's), (26, 51449), (27, 51425), (29, 51380), (30, 51377), (32, 51344), (37, 51281), (38, 51266),

Gene: Fenn_95 Start: 52290, Stop: 52033, Start Num: 24
Candidate Starts for Fenn_95:
(20, 52365), (Start: 22 @52335 has 1 MA's), (Start: 24 @52290 has 38 MA's), (26, 52233), (27, 52209), (29, 52164), (30, 52161), (37, 52062), (38, 52047),

Gene: Francis47_92 Start: 53229, Stop: 53008, Start Num: 24

Candidate Starts for Francis47_92:
(15, 53316), (20, 53304), (Start: 22 @53274 has 1 MA's), (Start: 24 @53229 has 38 MA's), (26, 53172), (27, 53148), (29, 53103), (30, 53100), (32, 53067), (36, 53046),

Gene: Gaia_161 Start: 81793, Stop: 81578, Start Num: 25
Candidate Starts for Gaia_161:
(23, 81805), (Start: 25 @81793 has 2 MA's), (27, 81721), (28, 81709), (37, 81601),

Gene: Gompeii16_89 Start: 52487, Stop: 52236, Start Num: 24
Candidate Starts for Gompeii16_89:
(15, 52574), (20, 52562), (Start: 22 @52532 has 1 MA's), (Start: 24 @52487 has 38 MA's), (26, 52430), (27, 52406), (29, 52361), (30, 52358), (32, 52325), (37, 52262), (38, 52247),

Gene: Hermia_83 Start: 48916, Stop: 48662, Start Num: 24
Candidate Starts for Hermia_83:
(1, 49324), (4, 49153), (5, 49144), (20, 48991), (Start: 24 @48916 has 38 MA's), (26, 48859), (27, 48835), (29, 48790), (30, 48787), (32, 48754), (37, 48691), (38, 48676),

Gene: Hope4ever_87 Start: 49787, Stop: 49533, Start Num: 24
Candidate Starts for Hope4ever_87:
(20, 49862), (Start: 22 @49832 has 1 MA's), (Start: 24 @49787 has 38 MA's), (26, 49730), (27, 49706), (29, 49661), (30, 49658), (32, 49625), (37, 49562),

Gene: Kanely_92 Start: 51561, Stop: 51304, Start Num: 24
Candidate Starts for Kanely_92:
(15, 51648), (20, 51636), (Start: 22 @51606 has 1 MA's), (Start: 24 @51561 has 38 MA's), (26, 51504), (27, 51480), (29, 51432), (32, 51396), (37, 51333), (38, 51318),

Gene: Lockley_89 Start: 50614, Stop: 50357, Start Num: 24
Candidate Starts for Lockley_89:
(20, 50689), (Start: 22 @50659 has 1 MA's), (Start: 24 @50614 has 38 MA's), (26, 50557), (27, 50533), (29, 50488), (30, 50485), (38, 50371),

Gene: LunaBlu_45 Start: 32894, Stop: 32640, Start Num: 24
Candidate Starts for LunaBlu_45:
(14, 32984), (18, 32978), (20, 32969), (Start: 22 @32939 has 1 MA's), (Start: 24 @32894 has 38 MA's), (26, 32837), (27, 32813), (29, 32765), (32, 32729), (37, 32666), (38, 32651),

Gene: Magnar_90 Start: 50682, Stop: 50428, Start Num: 24
Candidate Starts for Magnar_90:
(Start: 22 @50727 has 1 MA's), (Start: 24 @50682 has 38 MA's), (26, 50625), (27, 50601), (29, 50556), (30, 50553), (32, 50520), (37, 50457), (38, 50442),

Gene: MilanaBonita_35 Start: 27884, Stop: 27630, Start Num: 24
Candidate Starts for MilanaBonita_35:
(14, 27974), (18, 27968), (20, 27959), (Start: 22 @27929 has 1 MA's), (Start: 24 @27884 has 38 MA's), (26, 27827), (27, 27803), (29, 27755), (32, 27719), (37, 27656), (38, 27641),

Gene: Mryolo_85 Start: 49110, Stop: 49364, Start Num: 24
Candidate Starts for Mryolo_85:
(14, 49020), (18, 49026), (20, 49035), (Start: 22 @49065 has 1 MA's), (Start: 24 @49110 has 38 MA's), (26, 49167), (27, 49191), (29, 49236), (30, 49239), (37, 49335), (38, 49350),

Gene: Naira_94 Start: 52422, Stop: 52165, Start Num: 24
Candidate Starts for Naira_94:
(20, 52497), (Start: 22 @52467 has 1 MA's), (Start: 24 @52422 has 38 MA's), (26, 52365), (27, 52341), (29, 52296), (30, 52293), (37, 52194), (38, 52179),

Gene: Nebkiss_157 Start: 77284, Stop: 77069, Start Num: 25
Candidate Starts for Nebkiss_157:
(23, 77296), (Start: 25 @77284 has 2 MA's), (27, 77212), (28, 77200), (37, 77092),

Gene: Nerujay_94 Start: 52064, Stop: 52318, Start Num: 24
Candidate Starts for Nerujay_94:
(14, 51974), (18, 51980), (20, 51989), (Start: 22 @52019 has 1 MA's), (Start: 24 @52064 has 38 MA's), (26, 52121), (27, 52145), (29, 52190), (30, 52193), (37, 52289), (38, 52304),

Gene: Oogway_86 Start: 51017, Stop: 50757, Start Num: 24
Candidate Starts for Oogway_86:
(10, 51182), (14, 51107), (18, 51101), (20, 51092), (Start: 22 @51062 has 1 MA's), (Start: 24 @51017 has 38 MA's), (26, 50960), (27, 50936), (31, 50882), (33, 50843), (34, 50837), (35, 50831), (37, 50786), (38, 50771),

Gene: Pari_90 Start: 49619, Stop: 49362, Start Num: 24
Candidate Starts for Pari_90:
(20, 49694), (Start: 22 @49664 has 1 MA's), (Start: 24 @49619 has 38 MA's), (26, 49562), (27, 49538), (29, 49493), (30, 49490), (38, 49376),

Gene: PascalRango_91 Start: 51715, Stop: 51461, Start Num: 24
Candidate Starts for PascalRango_91:
(14, 51823), (17, 51814), (20, 51790), (Start: 22 @51760 has 1 MA's), (Start: 24 @51715 has 38 MA's), (26, 51658), (27, 51634), (29, 51589), (32, 51553), (37, 51490), (38, 51475),

Gene: QTRlifeCrisis_85 Start: 48887, Stop: 48630, Start Num: 24
Candidate Starts for QTRlifeCrisis_85:
(10, 49070), (14, 48980), (18, 48974), (20, 48962), (Start: 22 @48932 has 1 MA's), (Start: 24 @48887 has 38 MA's), (26, 48830), (27, 48806), (29, 48758), (32, 48722), (37, 48659), (38, 48644),

Gene: Rhynn_86 Start: 51064, Stop: 51318, Start Num: 24
Candidate Starts for Rhynn_86:
(14, 50974), (18, 50980), (20, 50989), (Start: 22 @51019 has 1 MA's), (Start: 24 @51064 has 38 MA's), (26, 51121), (27, 51145), (29, 51190), (30, 51193), (37, 51289), (38, 51304),

Gene: Seabiscuit_93 Start: 50753, Stop: 50499, Start Num: 24
Candidate Starts for Seabiscuit_93:
(Start: 24 @50753 has 38 MA's), (26, 50696), (27, 50672), (29, 50627), (32, 50591), (37, 50528), (38, 50513),

Gene: Slagathor_91 Start: 51233, Stop: 50979, Start Num: 24
Candidate Starts for Slagathor_91:
(11, 51374), (20, 51308), (Start: 22 @51278 has 1 MA's), (Start: 24 @51233 has 38 MA's), (26, 51176), (27, 51152), (29, 51107), (37, 51008),

Gene: Squee_90 Start: 51392, Stop: 51135, Start Num: 24
Candidate Starts for Squee_90:

(20, 51467), (Start: 22 @51437 has 1 MA's), (Start: 24 @51392 has 38 MA's), (26, 51335), (27, 51311), (29, 51266), (30, 51263), (37, 51164), (38, 51149),

Gene: Switzer_90 Start: 51546, Stop: 51292, Start Num: 24
Candidate Starts for Switzer_90:
(14, 51654), (17, 51645), (20, 51621), (Start: 22 @51591 has 1 MA's), (Start: 24 @51546 has 38 MA's), (26, 51489), (27, 51465), (29, 51420), (32, 51384), (37, 51321), (38, 51306),

Gene: Teodoridan_94 Start: 50836, Stop: 51090, Start Num: 24
Candidate Starts for Teodoridan_94:
(14, 50746), (18, 50752), (20, 50761), (Start: 22 @50791 has 1 MA's), (Start: 24 @50836 has 38 MA's), (26, 50893), (27, 50917), (29, 50962), (30, 50965), (37, 51061), (38, 51076),