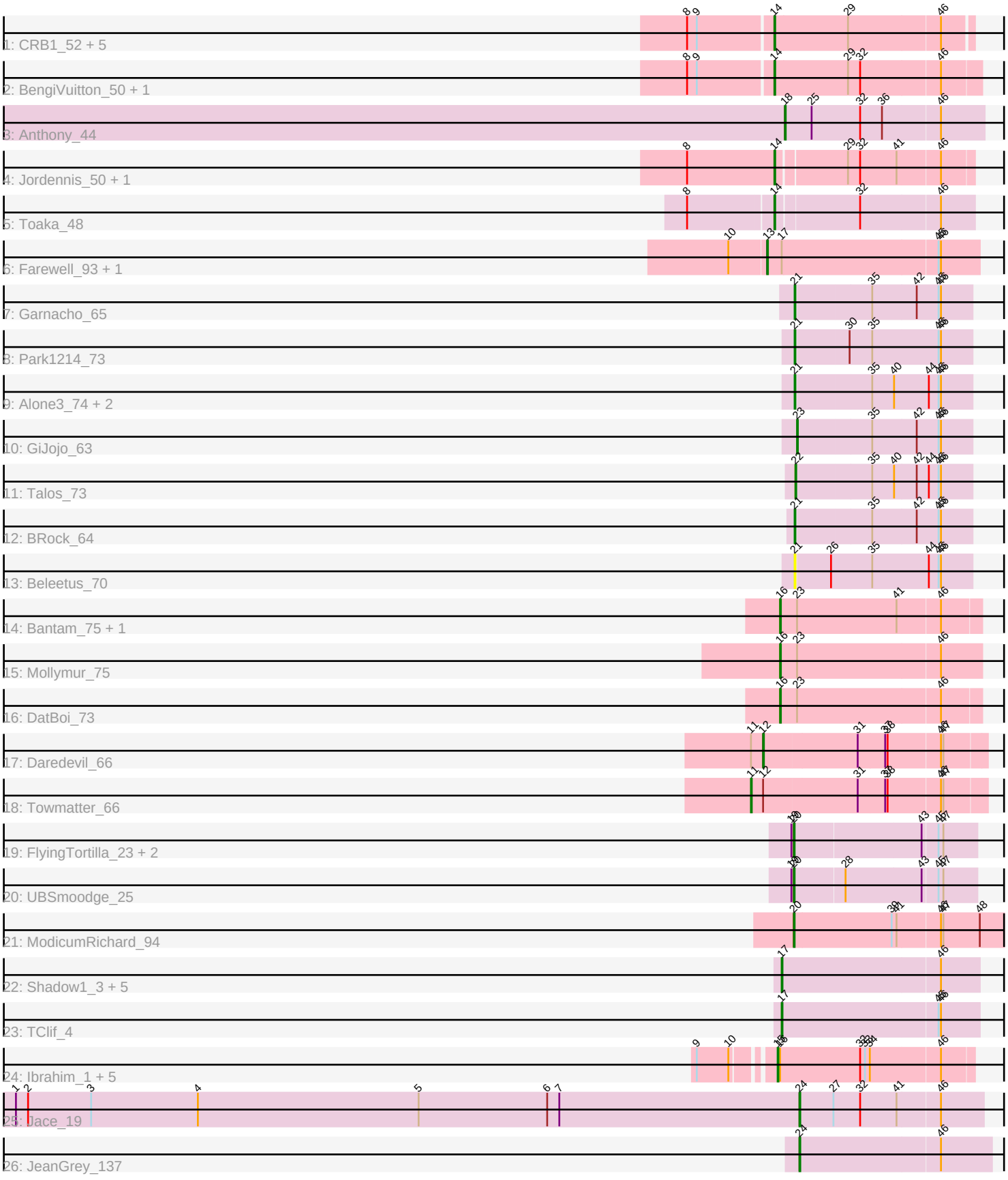
Pham 347728


1: CRB1_52 + 5
2: BengiVuitton_50 + 1
3: Anthony_44
4: Jordennis_50 + 1
5: Toaka_48
6: Farewell_93 + 1
7: Garnacho_65
8: Park1214_73
9: Alone3_74 + 2
10: GiJojo_63
11: Talos_73
12: BRock_64
13: Beleetus_70
14: Bantam_75 + 1
15: Mollymur_75
16: DatBoi_73
17: Daredevil_66
18: Towmatter_66
19: FlyingTortilla_23 + 2
20: UBSmoodge_25
21: ModicumRichard_94
22: Shadow1_3 + 5
23: TClif_4
24: Ibrahim_1 + 5
25: Dace_19
26: JeanGrey_137

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 347728 Report

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

Pham number 347728 has 49 members, 4 are drafts.

Phages represented in each track:
• Track 1 : CRB1_52, LadyBird_53, AN3_51, VA6_49, 20ES_51, First_0050
• Track 2 : BengiVuitton_50, Deloris_49
• Track 3 : Anthony_44
• Track 4 : Jordennis_50, Polyphemus_52
• Track 5 : Toaka_48
• Track 6 : Farewell_93, Sparky_92
• Track 7 : Garnacho_65
• Track 8 : Park1214_73
• Track 9 : Alone3_74, Fudan_70, LuckySocke_72
• Track 10 : GiJojo_63
• Track 11 : Talos_73
• Track 12 : BRock_64
• Track 13 : Beleetus_70
• Track 14 : Bantam_75, SpeedDemon_770
• Track 15 : Mollymur_75
• Track 16 : DatBoi_73
• Track 17 : Daredevil_66
• Track 18 : Towmatter_66
• Track 19 : FlyingTortilla_23, ScarletRaider_23, FruityLoops_22
• Track 20 : UBSmoodge_25
• Track 21 : ModicumRichard_94
• Track 22 : Shadow1_3, Krueger_4, Syra333_4, Sunflower1121_3, Ximenita_5, Tigress9_4
• Track 23 : TClif_4
• Track 24 : Ibrahim_1, RonRayGun_1, Bernal13_1, Whitty_1, ZenTime222_1, Nairb_1
• Track 25 : Jace_19
• Track 26 : JeanGrey_137

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 8 of the 45 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• 20ES_51, AN3_51, BengiVuitton_50, CRB1_52, Deloris_49, First_0050, Jordennis_50, LadyBird_53, Polyphemus_52, Toaka_48, VA6_49,

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

Genes that do not have the "Most Annotated" start:
• Alone3_74, Anthony_44, BRock_64, Bantam_75, Beleetus_70, Bernal13_1, Daredevil_66, DatBoi_73, Farewell_93, FlyingTortilla_23, FruityLoops_22, Fudan_70, Garnacho_65, GiJojo_63, Ibrahim_1, Jace_19, JeanGrey_137, Krueger_4, LuckySocke_72, ModicumRichard_94, Mollymur_75, Nairb_1, Park1214_73, RonRayGun_1, ScarletRaider_23, Shadow1_3, Sparky_92, SpeedDemon_770, Sunflower1121_3, Syra333_4, TClif_4, Talos_73, Tigress9_4, Towmatter_66, UBSmoodge_25, Whitty_1, Ximenita_5, ZenTime222_1,

Summary by start number:

Start 11:
• Found in 2 of 49 (4.1%) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Towmatter_66 (DL),

Start 12:
• Found in 2 of 49 (4.1%) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Daredevil_66 (DL),

Start 13:
• Found in 2 of 49 (4.1%) of genes in pham
• Manual Annotations of this start: 2 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Farewell_93 (AF), Sparky_92 (AF),

Start 14:
• Found in 11 of 49 (22.4%) of genes in pham
• Manual Annotations of this start: 8 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: 20ES_51 (A2), AN3_51 (A2), BengiVuitton_50 (A2), CRB1_52 (A2), Deloris_49 (A2), First_0050 (A2), Jordennis_50 (A6), LadyBird_53 (A2), Polyphemus_52 (A6), Toaka_48 (A9), VA6_49 (A2),

Start 15:
• Found in 6 of 49 (12.2%) of genes in pham
• Manual Annotations of this start: 6 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bernal13_1 (T), Ibrahim_1 (T), Nairb_1 (T), RonRayGun_1 (T), Whitty_1 (T), ZenTime222_1 (T),

Start 16:
• Found in 10 of 49 (20.4%) of genes in pham

• Manual Annotations of this start: 4 of 45
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Bantam_75 (DL), DatBoi_73 (DL), Mollymur_75 (DL), SpeedDemon_770 (DL),

Start 17:
• Found in 9 of 49 (18.4%) of genes in pham
• Manual Annotations of this start: 7 of 45
• Called 77.8% of time when present
• Phage (with cluster) where this start called: Krueger_4 (K6), Shadow1_3 (K6), Sunflower1121_3 (K6), Syra333_4 (K6), TClif_4 (K6), Tigress9_4 (K6), Ximenita_5 (K6),

Start 18:
• Found in 1 of 49 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Anthony_44 (A20),

Start 20:
• Found in 5 of 49 (10.2%) of genes in pham
• Manual Annotations of this start: 5 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: FlyingTortilla_23 (DQ), FruityLoops_22 (DQ), ModicumRichard_94 (DZ), ScarletRaider_23 (DQ), UBSmoodge_25 (DQ),

Start 21:
• Found in 7 of 49 (14.3%) of genes in pham
• Manual Annotations of this start: 6 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alone3_74 (BS), BRock_64 (BS), Beleetus_70 (BS), Fudan_70 (BS), Garnacho_65 (BS), LuckySocke_72 (BS), Park1214_73 (BS),

Start 22:
• Found in 1 of 49 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Talos_73 (BS),

Start 23:
• Found in 5 of 49 (10.2%) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 20.0% of time when present
• Phage (with cluster) where this start called: GiJojo_63 (BS),

Start 24:
• Found in 2 of 49 (4.1%) of genes in pham
• Manual Annotations of this start: 2 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jace_19 (singleton), JeanGrey_137 (singleton),

Summary by clusters:

There are 12 clusters represented in this pham: A20, DL, AF, A6, singleton, T, A2, DZ, K6, BS, A9, DQ,

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

Info for manual annotations of cluster A20:
•Start number 18 was manually annotated 1 time for cluster A20.

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

Info for manual annotations of cluster A9:
•Start number 14 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster AF:
•Start number 13 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster BS:
•Start number 21 was manually annotated 6 times for cluster BS.
•Start number 22 was manually annotated 1 time for cluster BS.
•Start number 23 was manually annotated 1 time for cluster BS.

Info for manual annotations of cluster DL:
•Start number 11 was manually annotated 1 time for cluster DL.
•Start number 12 was manually annotated 1 time for cluster DL.
•Start number 16 was manually annotated 4 times for cluster DL.

Info for manual annotations of cluster DQ:
•Start number 20 was manually annotated 4 times for cluster DQ.

Info for manual annotations of cluster DZ:
•Start number 20 was manually annotated 1 time for cluster DZ.

Info for manual annotations of cluster K6:
•Start number 17 was manually annotated 7 times for cluster K6.

Info for manual annotations of cluster T:
•Start number 15 was manually annotated 6 times for cluster T.

Gene Information:

Gene: 20ES_51 Start: 32882, Stop: 32634, Start Num: 14
Candidate Starts for 20ES_51:
(8, 32984), (9, 32972), (Start: 14 @32882 has 8 MA's), (29, 32792), (46, 32681),

Gene: AN3_51 Start: 33253, Stop: 33005, Start Num: 14
Candidate Starts for AN3_51:
(8, 33355), (9, 33343), (Start: 14 @33253 has 8 MA's), (29, 33163), (46, 33052),

Gene: Alone3_74 Start: 28535, Stop: 28747, Start Num: 21
Candidate Starts for Alone3_74:
(Start: 21 @28535 has 6 MA's), (35, 28625), (40, 28652), (44, 28694), (45, 28706), (46, 28709),

Gene: Anthony_44 Start: 30206, Stop: 29964, Start Num: 18
Candidate Starts for Anthony_44:
(Start: 18 @30206 has 1 MA's), (25, 30173), (32, 30113), (36, 30086), (46, 30017),

Gene: BRock_64 Start: 24495, Stop: 24707, Start Num: 21
Candidate Starts for BRock_64:
(Start: 21 @24495 has 6 MA's), (35, 24585), (42, 24639), (45, 24666), (46, 24669),

Gene: Bantam_75 Start: 53471, Stop: 53229, Start Num: 16
Candidate Starts for Bantam_75:
(Start: 16 @53471 has 4 MA's), (Start: 23 @53450 has 1 MA's), (41, 53327), (46, 53276),

Gene: Beleetus_70 Start: 26659, Stop: 26871, Start Num: 21
Candidate Starts for Beleetus_70:
(Start: 21 @26659 has 6 MA's), (26, 26701), (35, 26749), (44, 26818), (45, 26830), (46, 26833),

Gene: BengiVuitton_50 Start: 32835, Stop: 32587, Start Num: 14
Candidate Starts for BengiVuitton_50:
(8, 32937), (9, 32925), (Start: 14 @32835 has 8 MA's), (29, 32745), (32, 32730), (46, 32634),

Gene: Bernal13_1 Start: 89, Stop: 325, Start Num: 15
Candidate Starts for Bernal13_1:
(9, 8), (10, 47), (Start: 15 @89 has 6 MA's), (Start: 16 @92 has 4 MA's), (32, 191), (33, 197), (34, 203), (46, 287),

Gene: CRB1_52 Start: 33225, Stop: 32989, Start Num: 14
Candidate Starts for CRB1_52:
(8, 33327), (9, 33315), (Start: 14 @33225 has 8 MA's), (29, 33135), (46, 33024),

Gene: Daredevil_66 Start: 49516, Stop: 49250, Start Num: 12
Candidate Starts for Daredevil_66:
(Start: 11 @49531 has 1 MA's), (Start: 12 @49516 has 1 MA's), (31, 49402), (37, 49369), (38, 49366), (46, 49303), (47, 49300),

Gene: DatBoi_73 Start: 53464, Stop: 53222, Start Num: 16
Candidate Starts for DatBoi_73:
(Start: 16 @53464 has 4 MA's), (Start: 23 @53443 has 1 MA's), (46, 53269),

Gene: Deloris_49 Start: 32504, Stop: 32256, Start Num: 14
Candidate Starts for Deloris_49:
(8, 32606), (9, 32594), (Start: 14 @32504 has 8 MA's), (29, 32414), (32, 32399), (46, 32303),

Gene: Farewell_93 Start: 60714, Stop: 60971, Start Num: 13
Candidate Starts for Farewell_93:
(10, 60669), (Start: 13 @60714 has 2 MA's), (Start: 17 @60732 has 7 MA's), (45, 60921), (46, 60924),

Gene: First_0050 Start: 32758, Stop: 32510, Start Num: 14
Candidate Starts for First_0050:

(8, 32860), (9, 32848), (Start: 14 @32758 has 8 MA's), (29, 32668), (46, 32557),

Gene: FlyingTortilla_23 Start: 12855, Stop: 13073, Start Num: 20
Candidate Starts for FlyingTortilla_23:
(19, 12852), (Start: 20 @12855 has 5 MA's), (43, 13008), (45, 13026), (47, 13032),

Gene: FruityLoops_22 Start: 12860, Stop: 13078, Start Num: 20
Candidate Starts for FruityLoops_22:
(19, 12857), (Start: 20 @12860 has 5 MA's), (43, 13013), (45, 13031), (47, 13037),

Gene: Fudan_70 Start: 27328, Stop: 27540, Start Num: 21
Candidate Starts for Fudan_70:
(Start: 21 @27328 has 6 MA's), (35, 27418), (40, 27445), (44, 27487), (45, 27499), (46, 27502),

Gene: Garnacho_65 Start: 26235, Stop: 26447, Start Num: 21
Candidate Starts for Garnacho_65:
(Start: 21 @26235 has 6 MA's), (35, 26325), (42, 26379), (45, 26406), (46, 26409),

Gene: GiJojo_63 Start: 26714, Stop: 26926, Start Num: 23
Candidate Starts for GiJojo_63:
(Start: 23 @26714 has 1 MA's), (35, 26804), (42, 26858), (45, 26885), (46, 26888),

Gene: Ibrahim_1 Start: 89, Stop: 325, Start Num: 15
Candidate Starts for Ibrahim_1:
(9, 8), (10, 47), (Start: 15 @89 has 6 MA's), (Start: 16 @92 has 4 MA's), (32, 191), (33, 197), (34, 203), (46, 287),

Gene: Jace_19 Start: 17315, Stop: 17536, Start Num: 24
Candidate Starts for Jace_19:
(1, 16346), (2, 16361), (3, 16439), (4, 16571), (5, 16844), (6, 17003), (7, 17018), (Start: 24 @17315 has 2 MA's), (27, 17357), (32, 17390), (41, 17435), (46, 17486),

Gene: JeanGrey_137 Start: 105656, Stop: 105889, Start Num: 24
Candidate Starts for JeanGrey_137:
(Start: 24 @105656 has 2 MA's), (46, 105827),

Gene: Jordennis_50 Start: 31033, Stop: 30803, Start Num: 14
Candidate Starts for Jordennis_50:
(8, 31141), (Start: 14 @31033 has 8 MA's), (29, 30952), (32, 30937), (41, 30892), (46, 30841),

Gene: Krueger_4 Start: 823, Stop: 1062, Start Num: 17
Candidate Starts for Krueger_4:
(Start: 17 @823 has 7 MA's), (46, 1015),

Gene: LadyBird_53 Start: 33193, Stop: 32945, Start Num: 14
Candidate Starts for LadyBird_53:
(8, 33295), (9, 33283), (Start: 14 @33193 has 8 MA's), (29, 33103), (46, 32992),

Gene: LuckySocke_72 Start: 27277, Stop: 27489, Start Num: 21
Candidate Starts for LuckySocke_72:
(Start: 21 @27277 has 6 MA's), (35, 27367), (40, 27394), (44, 27436), (45, 27448), (46, 27451),

Gene: ModicumRichard_94 Start: 55434, Stop: 55703, Start Num: 20

Candidate Starts for ModicumRichard_94:
(Start: 20 @55434 has 5 MA's), (39, 55554), (41, 55560), (46, 55611), (47, 55614), (48, 55659),

Gene: Mollymur_75 Start: 54003, Stop: 53758, Start Num: 16
Candidate Starts for Mollymur_75:
(Start: 16 @54003 has 4 MA's), (Start: 23 @53982 has 1 MA's), (46, 53808),

Gene: Nairb_1 Start: 89, Stop: 325, Start Num: 15
Candidate Starts for Nairb_1:
(9, 8), (10, 47), (Start: 15 @89 has 6 MA's), (Start: 16 @92 has 4 MA's), (32, 191), (33, 197), (34, 203), (46, 287),

Gene: Park1214_73 Start: 27760, Stop: 27972, Start Num: 21
Candidate Starts for Park1214_73:
(Start: 21 @27760 has 6 MA's), (30, 27823), (35, 27850), (45, 27931), (46, 27934),

Gene: Polyphemus_52 Start: 31731, Stop: 31501, Start Num: 14
Candidate Starts for Polyphemus_52:
(8, 31839), (Start: 14 @31731 has 8 MA's), (29, 31650), (32, 31635), (41, 31590), (46, 31539),

Gene: RonRayGun_1 Start: 89, Stop: 325, Start Num: 15
Candidate Starts for RonRayGun_1:
(9, 8), (10, 47), (Start: 15 @89 has 6 MA's), (Start: 16 @92 has 4 MA's), (32, 191), (33, 197), (34, 203), (46, 287),

Gene: ScarletRaider_23 Start: 12882, Stop: 13100, Start Num: 20
Candidate Starts for ScarletRaider_23:
(19, 12879), (Start: 20 @12882 has 5 MA's), (43, 13035), (45, 13053), (47, 13059),

Gene: Shadow1_3 Start: 728, Stop: 967, Start Num: 17
Candidate Starts for Shadow1_3:
(Start: 17 @728 has 7 MA's), (46, 920),

Gene: Sparky_92 Start: 62308, Stop: 62565, Start Num: 13
Candidate Starts for Sparky_92:
(10, 62263), (Start: 13 @62308 has 2 MA's), (Start: 17 @62326 has 7 MA's), (45, 62515), (46, 62518),

Gene: SpeedDemon_770 Start: 55702, Stop: 55460, Start Num: 16
Candidate Starts for SpeedDemon_770:
(Start: 16 @55702 has 4 MA's), (Start: 23 @55681 has 1 MA's), (41, 55558), (46, 55507),

Gene: Sunflower1121_3 Start: 727, Stop: 966, Start Num: 17
Candidate Starts for Sunflower1121_3:
(Start: 17 @727 has 7 MA's), (46, 919),

Gene: Syra333_4 Start: 832, Stop: 1071, Start Num: 17
Candidate Starts for Syra333_4:
(Start: 17 @832 has 7 MA's), (46, 1024),

Gene: TClif_4 Start: 786, Stop: 1025, Start Num: 17
Candidate Starts for TClif_4:
(Start: 17 @786 has 7 MA's), (45, 975), (46, 978),

Gene: Talos_73 Start: 27089, Stop: 27301, Start Num: 22
Candidate Starts for Talos_73:
(Start: 22 @27089 has 1 MA's), (35, 27179), (40, 27206), (42, 27233), (44, 27248), (45, 27260), (46, 27263),

Gene: Tigress9_4 Start: 823, Stop: 1062, Start Num: 17
Candidate Starts for Tigress9_4:
(Start: 17 @823 has 7 MA's), (46, 1015),

Gene: Toaka_48 Start: 32116, Stop: 31880, Start Num: 14
Candidate Starts for Toaka_48:
(8, 32218), (Start: 14 @32116 has 8 MA's), (32, 32017), (46, 31921),

Gene: Towmatter_66 Start: 49610, Stop: 49329, Start Num: 11
Candidate Starts for Towmatter_66:
(Start: 11 @49610 has 1 MA's), (Start: 12 @49595 has 1 MA's), (31, 49481), (37, 49448), (38, 49445), (46, 49382), (47, 49379),

Gene: UBSmoodge_25 Start: 13351, Stop: 13569, Start Num: 20
Candidate Starts for UBSmoodge_25:
(19, 13348), (Start: 20 @13351 has 5 MA's), (28, 13411), (43, 13504), (45, 13522), (47, 13528),

Gene: VA6_49 Start: 32727, Stop: 32479, Start Num: 14
Candidate Starts for VA6_49:
(8, 32829), (9, 32817), (Start: 14 @32727 has 8 MA's), (29, 32637), (46, 32526),

Gene: Whitty_1 Start: 89, Stop: 325, Start Num: 15
Candidate Starts for Whitty_1:
(9, 8), (10, 47), (Start: 15 @89 has 6 MA's), (Start: 16 @92 has 4 MA's), (32, 191), (33, 197), (34, 203), (46, 287),

Gene: Ximenita_5 Start: 995, Stop: 1234, Start Num: 17
Candidate Starts for Ximenita_5:
(Start: 17 @995 has 7 MA's), (46, 1187),

Gene: ZenTime222_1 Start: 89, Stop: 325, Start Num: 15
Candidate Starts for ZenTime222_1:
(9, 8), (10, 47), (Start: 15 @89 has 6 MA's), (Start: 16 @92 has 4 MA's), (32, 191), (33, 197), (34, 203), (46, 287),