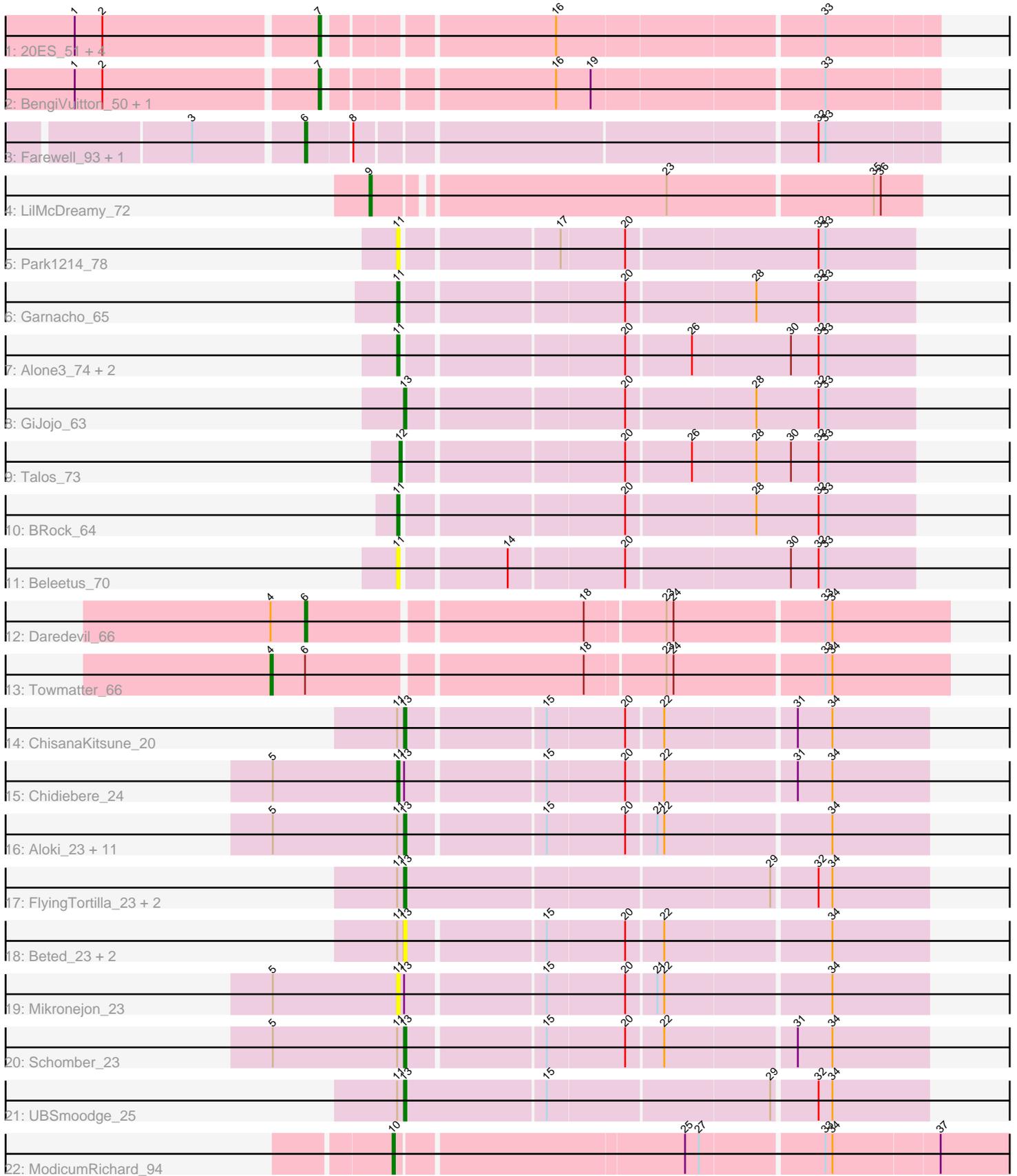# Pham 291296

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 291296 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291296 has 45 members, 19 are drafts.

Phages represented in each track:
• Track 1 : 20ES_51, LadyBird_53, AN3_51, VA6_49, First_0050
• Track 2 : BengiVuitton_50, Deloris_49
• Track 3 : Farewell_93, Sparky_92
• Track 4 : LilMcDreamy_72
• Track 5 : Park1214_78
• Track 6 : Garnacho_65
• Track 7 : Alone3_74, Fudan_74, LuckySocke_72
• Track 8 : GiJojo_63
• Track 9 : Talos_73
• Track 10 : BRock_64
• Track 11 : Beleetus_70
• Track 12 : Daredevil_66
• Track 13 : Towmatter_66
• Track 14 : ChisanaKitsune_20
• Track 15 : Chidiebere_24
• Track 16 : Aloki_23, Gray_24, Toneprano_23, Argena_23, Farrylious_22, EmoNemo_23, Hanem_24, Kabocha_25, Pakusa_23, Twin_23, Amoonguss_23, MintFritos_23
• Track 17 : FlyingTortilla_23, ScarletRaider_23, FruityLoops_22
• Track 18 : Beted_23, Lenoshki_23, Oogie_23
• Track 19 : Mikronejon_23
• Track 20 : Schomber_23
• Track 21 : UBSmoodge_25
• Track 22 : ModicumRichard_94

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

The start number called the most often in the published annotations is 13, it was called in 9 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aloki_23, Amoonguss_23, Argena_23, Beted_23, ChisanaKitsune_20, EmoNemo_23, Farrylious_22, FlyingTortilla_23, FruityLoops_22, GiJojo_63, Gray_24, Hanem_24, Kabocha_25, Lenoshki_23, MintFritos_23, Oogie_23,

Pakusa_23, ScarletRaider_23, Schomber_23, Toneprano_23, Twin_23, UBSmoodge_25,

Genes that have the "Most Annotated" start but do not call it:
• Chidiebere_24, Mikronejon_23,

Genes that do not have the "Most Annotated" start:
• 20ES_51, AN3_51, Alone3_74, BRock_64, Beleetus_70, BengiVuitton_50, Daredevil_66, Deloris_49, Farewell_93, First_0050, Fudan_74, Garnacho_65, LadyBird_53, LilMcDreamy_72, LuckySocke_72, ModicumRichard_94, Park1214_78, Sparky_92, Talos_73, Towmatter_66, VA6_49,

Summary by start number:

Start 4:
• Found in 2 of 45 (4.4%) of genes in pham
• Manual Annotations of this start: 1 of 26
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Towmatter_66 (DL),

Start 6:
• Found in 4 of 45 (8.9%) of genes in pham
• Manual Annotations of this start: 3 of 26
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Daredevil_66 (DL), Farewell_93 (AF), Sparky_92 (AF),

Start 7:
• Found in 7 of 45 (15.6%) of genes in pham
• Manual Annotations of this start: 5 of 26
• Called 100.0% of time when present
• Phage (with cluster) where this start called: 20ES_51 (A2), AN3_51 (A2), BengiVuitton_50 (A2), Deloris_49 (A2), First_0050 (A2), LadyBird_53 (A2), VA6_49 (A2),

Start 9:
• Found in 1 of 45 (2.2%) of genes in pham
• Manual Annotations of this start: 1 of 26
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LilMcDreamy_72 (B12),

Start 10:
• Found in 1 of 45 (2.2%) of genes in pham
• Manual Annotations of this start: 1 of 26
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ModicumRichard_94 (DZ),

Start 11:
• Found in 30 of 45 (66.7%) of genes in pham
• Manual Annotations of this start: 5 of 26
• Called 30.0% of time when present
• Phage (with cluster) where this start called: Alone3_74 (BS), BRock_64 (BS), Beleetus_70 (BS), Chidiebere_24 (DQ), Fudan_74 (BS), Garnacho_65 (BS),

LuckySocke_72 (BS), Mikronejon_23 (DQ), Park1214_78 (BS),

Start 12:
• Found in 1 of 45 (2.2%) of genes in pham
• Manual Annotations of this start: 1 of 26
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Talos_73 (BS),

Start 13:
• Found in 24 of 45 (53.3%) of genes in pham
• Manual Annotations of this start: 9 of 26
• Called 91.7% of time when present
• Phage (with cluster) where this start called: Aloki_23 (DQ), Amoonguss_23 (DQ), Argena_23 (DQ), Beted_23 (DQ), ChisanaKitsune_20 (DQ), EmoNemo_23 (DQ), Farrylious_22 (DQ), FlyingTortilla_23 (DQ), FruityLoops_22 (DQ), GiJojo_63 (BS), Gray_24 (DQ), Hanem_24 (DQ), Kabocha_25 (DQ), Lenoshki_23 (DQ), MintFritos_23 (DQ), Oogie_23 (DQ), Pakusa_23 (DQ), ScarletRaider_23 (DQ), Schomber_23 (DQ), Toneprano_23 (DQ), Twin_23 (DQ), UBSmoodge_25 (DQ),

Summary by clusters:

There are 7 clusters represented in this pham: DL, AF, A2, B12, BS, DZ, DQ,

Info for manual annotations of cluster A2:
•Start number 7 was manually annotated 5 times for cluster A2.

Info for manual annotations of cluster AF:
•Start number 6 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster B12:
•Start number 9 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster BS:
•Start number 11 was manually annotated 4 times for cluster BS.
•Start number 12 was manually annotated 1 time for cluster BS.
•Start number 13 was manually annotated 1 time for cluster BS.

Info for manual annotations of cluster DL:
•Start number 4 was manually annotated 1 time for cluster DL.
•Start number 6 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster DQ:
•Start number 11 was manually annotated 1 time for cluster DQ.
•Start number 13 was manually annotated 8 times for cluster DQ.

Info for manual annotations of cluster DZ:
•Start number 10 was manually annotated 1 time for cluster DZ.

Gene Information:

Gene: 20ES_51 Start: 32882, Stop: 32634, Start Num: 7

Candidate Starts for 20ES_51:
(1, 32984), (2, 32972), (Start: 7 @32882 has 5 MA's), (16, 32792), (33, 32681),

Gene: AN3_51 Start: 33253, Stop: 33005, Start Num: 7
Candidate Starts for AN3_51:
(1, 33355), (2, 33343), (Start: 7 @33253 has 5 MA's), (16, 33163), (33, 33052),

Gene: Aloki_23 Start: 11841, Stop: 12056, Start Num: 13
Candidate Starts for Aloki_23:
(5, 11784), (Start: 11 @11838 has 5 MA's), (Start: 13 @11841 has 9 MA's), (15, 11898), (20, 11931),
(21, 11943), (22, 11946), (34, 12015),

Gene: Alone3_74 Start: 28535, Stop: 28747, Start Num: 11
Candidate Starts for Alone3_74:
(Start: 11 @28535 has 5 MA's), (20, 28625), (26, 28652), (30, 28694), (32, 28706), (33, 28709),

Gene: Amoonguss_23 Start: 11844, Stop: 12059, Start Num: 13
Candidate Starts for Amoonguss_23:
(5, 11787), (Start: 11 @11841 has 5 MA's), (Start: 13 @11844 has 9 MA's), (15, 11901), (20, 11934),
(21, 11946), (22, 11949), (34, 12018),

Gene: Argena_23 Start: 11841, Stop: 12056, Start Num: 13
Candidate Starts for Argena_23:
(5, 11784), (Start: 11 @11838 has 5 MA's), (Start: 13 @11841 has 9 MA's), (15, 11898), (20, 11931),
(21, 11943), (22, 11946), (34, 12015),

Gene: BRock_64 Start: 24495, Stop: 24707, Start Num: 11
Candidate Starts for BRock_64:
(Start: 11 @24495 has 5 MA's), (20, 24585), (28, 24639), (32, 24666), (33, 24669),

Gene: Beleetus_70 Start: 26659, Stop: 26871, Start Num: 11
Candidate Starts for Beleetus_70:
(Start: 11 @26659 has 5 MA's), (14, 26701), (20, 26749), (30, 26818), (32, 26830), (33, 26833),

Gene: BengiVuitton_50 Start: 32835, Stop: 32587, Start Num: 7
Candidate Starts for BengiVuitton_50:
(1, 32937), (2, 32925), (Start: 7 @32835 has 5 MA's), (16, 32745), (19, 32730), (33, 32634),

Gene: Beted_23 Start: 11467, Stop: 11682, Start Num: 13
Candidate Starts for Beted_23:
(Start: 11 @11464 has 5 MA's), (Start: 13 @11467 has 9 MA's), (15, 11524), (20, 11557), (22, 11572),
(34, 11641),

Gene: Chidiebere_24 Start: 11838, Stop: 12056, Start Num: 11
Candidate Starts for Chidiebere_24:
(5, 11784), (Start: 11 @11838 has 5 MA's), (Start: 13 @11841 has 9 MA's), (15, 11898), (20, 11931),
(22, 11946), (31, 12000), (34, 12015),

Gene: ChisanaKitsune_20 Start: 10536, Stop: 10751, Start Num: 13
Candidate Starts for ChisanaKitsune_20:
(Start: 11 @10533 has 5 MA's), (Start: 13 @10536 has 9 MA's), (15, 10593), (20, 10626), (22, 10641),
(31, 10695), (34, 10710),

Gene: Daredevil_66 Start: 49516, Stop: 49250, Start Num: 6
Candidate Starts for Daredevil_66:
(Start: 4 @49531 has 1 MA's), (Start: 6 @49516 has 3 MA's), (18, 49402), (23, 49369), (24, 49366), (33, 49303), (34, 49300),

Gene: Deloris_49 Start: 32504, Stop: 32256, Start Num: 7
Candidate Starts for Deloris_49:
(1, 32606), (2, 32594), (Start: 7 @32504 has 5 MA's), (16, 32414), (19, 32399), (33, 32303),

Gene: EmoNemo_23 Start: 11841, Stop: 12056, Start Num: 13
Candidate Starts for EmoNemo_23:
(5, 11784), (Start: 11 @11838 has 5 MA's), (Start: 13 @11841 has 9 MA's), (15, 11898), (20, 11931), (21, 11943), (22, 11946), (34, 12015),

Gene: Farewell_93 Start: 60714, Stop: 60971, Start Num: 6
Candidate Starts for Farewell_93:
(3, 60669), (Start: 6 @60714 has 3 MA's), (8, 60732), (32, 60921), (33, 60924),

Gene: Farrylious_22 Start: 11594, Stop: 11809, Start Num: 13
Candidate Starts for Farrylious_22:
(5, 11537), (Start: 11 @11591 has 5 MA's), (Start: 13 @11594 has 9 MA's), (15, 11651), (20, 11684), (21, 11696), (22, 11699), (34, 11768),

Gene: First_0050 Start: 32758, Stop: 32510, Start Num: 7
Candidate Starts for First_0050:
(1, 32860), (2, 32848), (Start: 7 @32758 has 5 MA's), (16, 32668), (33, 32557),

Gene: FlyingTortilla_23 Start: 12855, Stop: 13073, Start Num: 13
Candidate Starts for FlyingTortilla_23:
(Start: 11 @12852 has 5 MA's), (Start: 13 @12855 has 9 MA's), (29, 13008), (32, 13026), (34, 13032),

Gene: FruityLoops_22 Start: 12860, Stop: 13078, Start Num: 13
Candidate Starts for FruityLoops_22:
(Start: 11 @12857 has 5 MA's), (Start: 13 @12860 has 9 MA's), (29, 13013), (32, 13031), (34, 13037),

Gene: Fudan_74 Start: 27328, Stop: 27540, Start Num: 11
Candidate Starts for Fudan_74:
(Start: 11 @27328 has 5 MA's), (20, 27418), (26, 27445), (30, 27487), (32, 27499), (33, 27502),

Gene: Garnacho_65 Start: 26235, Stop: 26447, Start Num: 11
Candidate Starts for Garnacho_65:
(Start: 11 @26235 has 5 MA's), (20, 26325), (28, 26379), (32, 26406), (33, 26409),

Gene: GiJojo_63 Start: 26714, Stop: 26926, Start Num: 13
Candidate Starts for GiJojo_63:
(Start: 13 @26714 has 9 MA's), (20, 26804), (28, 26858), (32, 26885), (33, 26888),

Gene: Gray_24 Start: 11841, Stop: 12056, Start Num: 13
Candidate Starts for Gray_24:
(5, 11784), (Start: 11 @11838 has 5 MA's), (Start: 13 @11841 has 9 MA's), (15, 11898), (20, 11931), (21, 11943), (22, 11946), (34, 12015),

Gene: Hanem_24 Start: 11841, Stop: 12056, Start Num: 13

Candidate Starts for Hanem_24:
(5, 11784), (Start: 11 @11838 has 5 MA's), (Start: 13 @11841 has 9 MA's), (15, 11898), (20, 11931), (21, 11943), (22, 11946), (34, 12015),

Gene: Kabocha_25 Start: 12654, Stop: 12869, Start Num: 13
Candidate Starts for Kabocha_25:
(5, 12597), (Start: 11 @12651 has 5 MA's), (Start: 13 @12654 has 9 MA's), (15, 12711), (20, 12744), (21, 12756), (22, 12759), (34, 12828),

Gene: LadyBird_53 Start: 33193, Stop: 32945, Start Num: 7
Candidate Starts for LadyBird_53:
(1, 33295), (2, 33283), (Start: 7 @33193 has 5 MA's), (16, 33103), (33, 32992),

Gene: Lenoshki_23 Start: 11467, Stop: 11682, Start Num: 13
Candidate Starts for Lenoshki_23:
(Start: 11 @11464 has 5 MA's), (Start: 13 @11467 has 9 MA's), (15, 11524), (20, 11557), (22, 11572), (34, 11641),

Gene: LilMcDreamy_72 Start: 60756, Stop: 60983, Start Num: 9
Candidate Starts for LilMcDreamy_72:
(Start: 9 @60756 has 1 MA's), (23, 60876), (35, 60963), (36, 60966),

Gene: LuckySocke_72 Start: 27277, Stop: 27489, Start Num: 11
Candidate Starts for LuckySocke_72:
(Start: 11 @27277 has 5 MA's), (20, 27367), (26, 27394), (30, 27436), (32, 27448), (33, 27451),

Gene: Mikronejon_23 Start: 11838, Stop: 12056, Start Num: 11
Candidate Starts for Mikronejon_23:
(5, 11784), (Start: 11 @11838 has 5 MA's), (Start: 13 @11841 has 9 MA's), (15, 11898), (20, 11931), (21, 11943), (22, 11946), (34, 12015),

Gene: MintFritos_23 Start: 11841, Stop: 12056, Start Num: 13
Candidate Starts for MintFritos_23:
(5, 11784), (Start: 11 @11838 has 5 MA's), (Start: 13 @11841 has 9 MA's), (15, 11898), (20, 11931), (21, 11943), (22, 11946), (34, 12015),

Gene: ModicumRichard_94 Start: 55434, Stop: 55703, Start Num: 10
Candidate Starts for ModicumRichard_94:
(Start: 10 @55434 has 1 MA's), (25, 55554), (27, 55560), (33, 55611), (34, 55614), (37, 55659),

Gene: Oogie_23 Start: 11493, Stop: 11708, Start Num: 13
Candidate Starts for Oogie_23:
(Start: 11 @11490 has 5 MA's), (Start: 13 @11493 has 9 MA's), (15, 11550), (20, 11583), (22, 11598), (34, 11667),

Gene: Pakusa_23 Start: 11583, Stop: 11798, Start Num: 13
Candidate Starts for Pakusa_23:
(5, 11526), (Start: 11 @11580 has 5 MA's), (Start: 13 @11583 has 9 MA's), (15, 11640), (20, 11673), (21, 11685), (22, 11688), (34, 11757),

Gene: Park1214_78 Start: 27760, Stop: 27972, Start Num: 11
Candidate Starts for Park1214_78:
(Start: 11 @27760 has 5 MA's), (17, 27823), (20, 27850), (32, 27931), (33, 27934),

Gene: ScarletRaider_23 Start: 12882, Stop: 13100, Start Num: 13
Candidate Starts for ScarletRaider_23:
(Start: 11 @12879 has 5 MA's), (Start: 13 @12882 has 9 MA's), (29, 13035), (32, 13053), (34, 13059),

Gene: Schomber_23 Start: 11591, Stop: 11806, Start Num: 13
Candidate Starts for Schomber_23:
(5, 11534), (Start: 11 @11588 has 5 MA's), (Start: 13 @11591 has 9 MA's), (15, 11648), (20, 11681), (22, 11696), (31, 11750), (34, 11765),

Gene: Sparky_92 Start: 62308, Stop: 62565, Start Num: 6
Candidate Starts for Sparky_92:
(3, 62263), (Start: 6 @62308 has 3 MA's), (8, 62326), (32, 62515), (33, 62518),

Gene: Talos_73 Start: 27089, Stop: 27301, Start Num: 12
Candidate Starts for Talos_73:
(Start: 12 @27089 has 1 MA's), (20, 27179), (26, 27206), (28, 27233), (30, 27248), (32, 27260), (33, 27263),

Gene: Toneprano_23 Start: 11841, Stop: 12056, Start Num: 13
Candidate Starts for Toneprano_23:
(5, 11784), (Start: 11 @11838 has 5 MA's), (Start: 13 @11841 has 9 MA's), (15, 11898), (20, 11931), (21, 11943), (22, 11946), (34, 12015),

Gene: Towmatter_66 Start: 49610, Stop: 49329, Start Num: 4
Candidate Starts for Towmatter_66:
(Start: 4 @49610 has 1 MA's), (Start: 6 @49595 has 3 MA's), (18, 49481), (23, 49448), (24, 49445), (33, 49382), (34, 49379),

Gene: Twin_23 Start: 11841, Stop: 12056, Start Num: 13
Candidate Starts for Twin_23:
(5, 11784), (Start: 11 @11838 has 5 MA's), (Start: 13 @11841 has 9 MA's), (15, 11898), (20, 11931), (21, 11943), (22, 11946), (34, 12015),

Gene: UBSmoodge_25 Start: 13351, Stop: 13569, Start Num: 13
Candidate Starts for UBSmoodge_25:
(Start: 11 @13348 has 5 MA's), (Start: 13 @13351 has 9 MA's), (15, 13411), (29, 13504), (32, 13522), (34, 13528),

Gene: VA6_49 Start: 32727, Stop: 32479, Start Num: 7
Candidate Starts for VA6_49:
(1, 32829), (2, 32817), (Start: 7 @32727 has 5 MA's), (16, 32637), (33, 32526),