

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 291099 Report

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

Pham number 291099 has 77 members, 19 are drafts.

Phages represented in each track:

- Track 1 : Steamy_85
- Track 2 : Zimmer_87
- Track 3 : DarthPhader_86
- Track 4 : Refuge_88
- Track 5 : Jeeves_88
- Track 6 : Sunhee_87
- Track 7 : Luchador_85
- Track 8 : Superchunk_86, Caraxes_87
- Track 9 : Rachaly_83, BobSwaget_80, Miko_81
- Track 10 : Bactobuster_78, Phaded_80, Tristan_82
- Track 11 : IronMan_83, Landor_84
- Track 12 : Iwokeuplikedis_90
- Track 13 : ForesterFrank_81
- Track 14 : Trixie_86
- Track 15 : Herbertwm_86
- Track 16 : Pukovnik_81
- Track 17 : Odin_85
- Track 18 : Lokk_81
- Track 19 : Jaan_84
- Track 20 : Chargerpower_86
- Track 21 : Alma_88
- Track 22 : LoneWolf_90
- Track 23 : Jiawan_88, Hanray_88, RyeScarlet_91, Horex_89, Onglai_88
- Track 24 : Tubs_90, Phonnegut_90, Aliter_83, Ugenie5_77, Eidsmoe_88, Beemo_90, Sachima_86, Conquerage_88, EdogawaKiddo_89, Phaeder_90, Scherzo_88, Catalina_92, Lilleskat_87, HortumSL17_91, Qobbit_88, Myxus_90, PackMan_85, ExplosioNervosa_88, Priya_88, Pioneer_90, Fayely_88, Ayanochan_88, Spouty_88
- Track 25 : Vanisoa_85
- Track 26 : Celestialunch_85
- Track 27 : MegTheThird_86
- Track 28 : Yecey3_91
- Track 29 : Minispark_87, Bellris_87, Rahalelujah_89, CogOmlette_87
- Track 30 : Arissanae_85
- Track 31 : DreamTeam1_85, Charm_85, SheaKeira_85
- Track 32 : Toaka_88
- Track 33 : Keziacharles14_87

- Track 34 : EmyBug_87
- Track 35 : WorldCup_88
- Track 36 : Darrell_88
- Track 37 : Elephantoon_90
- Track 38 : Klodlith_86
- Track 39 : Maminiaina_89, BogosyJay_89

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

The start number called the most often in the published annotations is 23, it was called in 49 of the 58 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aliter_83, Arissanae_85, Ayanochan_88, Bactobuster_78, Beemo_90, BobSwaget_80, BogosyJay_89, Caraxes_87, Catalina_92, Chargerpower_86, Charm_85, Conquerage_88, DarthPhader_86, DreamTeam1_85, EdogawaKiddo_89, Eidsmoe_88, ExplosioNervosa_88, Fayely_88, ForesterFrank_81, Hanray_88, Herbertwm_86, Horex_89, HortumSL17_91, IronMan_83, Iwokeuplikedis_90, Jaan_84, Jeeves_88, Jiawan_88, Klodlith_86, Landor_84, Lilleskat_87, Lökk_81, Luchador_85, Maminiaina_89, MegTheThird_86, Miko_81, Myxus_90, Onglai_88, PackMan_85, Phaded_80, Phaeder_90, Phonnegut_90, Pioneer_90, Priya_88, Pukovnik_81, Qobbit_88, Rachaly_83, Refuge_88, RyeScarlet_91, Sachima_86, Scherzo_88, SheaKeira_85, Spouty_88, Steamy_85, Sunhee_87, Superchunk_86, Toaka_88, Tristan_82, Tubs_90, Ugenie5_77, Vanisoa_85, Yecey3_91, Zimmer_87,

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

- Alma_88, Celestialunch_85, EmyBug_87, Keziacharles14_87, LoneWolf_90, Odin_85, Trixie_86,

Genes that do not have the "Most Annotated" start:

- Bellris_87, CogOmlette_87, Darrell_88, Elephantoon_90, Minispark_87, Rahalelujah_89, WorldCup_88,

Summary by start number:

Start 17:

- Found in 1 of 77 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 58
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Darrell_88 (A9),

Start 18:

- Found in 40 of 77 (51.9%) of genes in pham
- Manual Annotations of this start: 4 of 58
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Alma_88 (A9), EmyBug_87 (A9), Keziacharles14_87 (A9), LoneWolf_90 (A9),

Start 19:

- Found in 2 of 77 (2.6%) of genes in pham

- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Celestiallunch_85 (A9),

Start 20:

- Found in 14 of 77 (18.2%) of genes in pham
- Manual Annotations of this start: 2 of 58
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Odin_85 (A2), Trixie_86 (A2),

Start 21:

- Found in 2 of 77 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 58
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Elephantoon_90 (A9),

Start 22:

- Found in 5 of 77 (6.5%) of genes in pham
- Manual Annotations of this start: 1 of 58
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bellris_87 (A9), CogOmlette_87 (A9), Minispark_87 (A9), Rahalelujah_89 (A9), WorldCup_88 (A9),

Start 23:

- Found in 70 of 77 (90.9%) of genes in pham
- Manual Annotations of this start: 49 of 58
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Aliter_83 (A9), Arissanae_85 (A9), Ayanochan_88 (A9), Bactobuster_78 (A2), Beemo_90 (A9), BobSwaget_80 (A2), BogosyJay_89 (A9), Caraxes_87 (A2), Catalina_92 (A9), Chargerpower_86 (A22), Charm_85 (A9), Conquerage_88 (A9), DarthPhader_86 (A12), DreamTeam1_85 (A9), EdogawaKiddo_89 (A9), Eidsmoe_88 (A9), ExplosioNervosa_88 (A9), Fayely_88 (A9), ForesterFrank_81 (A2), Hanray_88 (A9), Herbertwm_86 (A2), Horex_89 (A9), HortumSL17_91 (A9), IronMan_83 (A2), Iwokeuplikedis_90 (A2), Jaan_84 (A2), Jeeves_88 (A14), Jiawan_88 (A9), Klodlith_86 (A9), Landor_84 (A2), Lilleskat_87 (A9), Lokk_81 (A2), Luchador_85 (A14), Maminaiaina_89 (A9), MegTheThird_86 (A9), Miko_81 (A2), Myxus_90 (A9), Onglai_88 (A9), PackMan_85 (A9), Phaded_80 (A2), Phaeder_90 (A9), Phonnegut_90 (A9), Pioneer_90 (A9), Priya_88 (A9), Pukovnik_81 (A2), Qobbit_88 (A9), Rachaly_83 (A2), Refuge_88 (A12), RyeScarlet_91 (A9), Sachima_86 (A9), Scherzo_88 (A9), SheaKeira_85 (A9), Spouty_88 (A9), Steamy_85 (A12), Sunhee_87 (A14), Superchunk_86 (A2), Toaka_88 (A9), Tristan_82 (A2), Tubs_90 (A9), Ugenie5_77 (A9), Vanisoa_85 (A9), Yecey3_91 (A9), Zimmer_87 (A12),

Summary by clusters:

There are 5 clusters represented in this pham: A9, A14, A22, A2, A12,

Info for manual annotations of cluster A12:

- Start number 23 was manually annotated 4 times for cluster A12.

Info for manual annotations of cluster A14:

- Start number 23 was manually annotated 2 times for cluster A14.

Info for manual annotations of cluster A2:

- Start number 20 was manually annotated 2 times for cluster A2.
- Start number 23 was manually annotated 14 times for cluster A2.

Info for manual annotations of cluster A22:

- Start number 23 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A9:

- Start number 17 was manually annotated 1 time for cluster A9.
- Start number 18 was manually annotated 4 times for cluster A9.
- Start number 21 was manually annotated 1 time for cluster A9.
- Start number 22 was manually annotated 1 time for cluster A9.
- Start number 23 was manually annotated 28 times for cluster A9.

Gene Information:

Gene: Aliter_83 Start: 46251, Stop: 46006, Start Num: 23

Candidate Starts for Aliter_83:

(Start: 18 @46278 has 4 MA's), (Start: 23 @46251 has 49 MA's), (29, 46215), (33, 46188),

Gene: Alma_88 Start: 49120, Stop: 48845, Start Num: 18

Candidate Starts for Alma_88:

(Start: 18 @49120 has 4 MA's), (Start: 23 @49093 has 49 MA's), (33, 49030), (45, 48973),

Gene: Arissanae_85 Start: 48962, Stop: 48717, Start Num: 23

Candidate Starts for Arissanae_85:

(Start: 23 @48962 has 49 MA's), (26, 48941), (33, 48899),

Gene: Ayanochan_88 Start: 48874, Stop: 48629, Start Num: 23

Candidate Starts for Ayanochan_88:

(Start: 18 @48901 has 4 MA's), (Start: 23 @48874 has 49 MA's), (29, 48838), (33, 48811),

Gene: Bactobuster_78 Start: 47603, Stop: 47352, Start Num: 23

Candidate Starts for Bactobuster_78:

(6, 47975), (13, 47696), (Start: 23 @47603 has 49 MA's), (58, 47372),

Gene: Beemo_90 Start: 49084, Stop: 48839, Start Num: 23

Candidate Starts for Beemo_90:

(Start: 18 @49111 has 4 MA's), (Start: 23 @49084 has 49 MA's), (29, 49048), (33, 49021),

Gene: Bellris_87 Start: 48609, Stop: 48355, Start Num: 22

Candidate Starts for Bellris_87:

(Start: 18 @48633 has 4 MA's), (Start: 22 @48609 has 1 MA's), (26, 48588), (33, 48546), (56, 48387),

Gene: BobSwaget_80 Start: 46489, Stop: 46259, Start Num: 23

Candidate Starts for BobSwaget_80:

(Start: 20 @46504 has 2 MA's), (Start: 23 @46489 has 49 MA's), (35, 46426),

Gene: BogosyJay_89 Start: 49135, Stop: 48884, Start Num: 23

Candidate Starts for BogosyJay_89:

(Start: 23 @49135 has 49 MA's), (28, 49114), (33, 49078), (56, 48916),

Gene: Caraxes_87 Start: 47583, Stop: 47341, Start Num: 23

Candidate Starts for Caraxes_87:

(Start: 20 @47598 has 2 MA's), (Start: 23 @47583 has 49 MA's), (40, 47484),

Gene: Catalina_92 Start: 49198, Stop: 48953, Start Num: 23

Candidate Starts for Catalina_92:

(Start: 18 @49225 has 4 MA's), (Start: 23 @49198 has 49 MA's), (29, 49162), (33, 49135),

Gene: Celestiallunch_85 Start: 48365, Stop: 48090, Start Num: 19

Candidate Starts for Celestiallunch_85:

(1, 48890), (4, 48761), (19, 48365), (Start: 23 @48341 has 49 MA's), (26, 48320), (33, 48278),

Gene: Chargerpower_86 Start: 47145, Stop: 46894, Start Num: 23

Candidate Starts for Chargerpower_86:

(5, 47541), (7, 47505), (12, 47286), (Start: 20 @47160 has 2 MA's), (Start: 23 @47145 has 49 MA's),

Gene: Charm_85 Start: 48488, Stop: 48237, Start Num: 23

Candidate Starts for Charm_85:

(Start: 23 @48488 has 49 MA's), (28, 48461), (33, 48425), (54, 48308),

Gene: CogOmlette_87 Start: 48606, Stop: 48352, Start Num: 22

Candidate Starts for CogOmlette_87:

(Start: 18 @48630 has 4 MA's), (Start: 22 @48606 has 1 MA's), (26, 48585), (33, 48543), (56, 48384),

Gene: Conquerage_88 Start: 48859, Stop: 48614, Start Num: 23

Candidate Starts for Conquerage_88:

(Start: 18 @48886 has 4 MA's), (Start: 23 @48859 has 49 MA's), (29, 48823), (33, 48796),

Gene: Darrell_88 Start: 48317, Stop: 48039, Start Num: 17

Candidate Starts for Darrell_88:

(15, 48359), (Start: 17 @48317 has 1 MA's), (Start: 21 @48293 has 1 MA's), (33, 48230), (50, 48155), (56, 48071),

Gene: DarthPhader_86 Start: 50000, Stop: 49740, Start Num: 23

Candidate Starts for DarthPhader_86:

(Start: 23 @50000 has 49 MA's), (33, 49940), (50, 49853), (54, 49808),

Gene: DreamTeam1_85 Start: 48336, Stop: 48085, Start Num: 23

Candidate Starts for DreamTeam1_85:

(Start: 23 @48336 has 49 MA's), (28, 48309), (33, 48273), (54, 48156),

Gene: EdogawaKiddo_89 Start: 49161, Stop: 48916, Start Num: 23

Candidate Starts for EdogawaKiddo_89:

(Start: 18 @49188 has 4 MA's), (Start: 23 @49161 has 49 MA's), (29, 49125), (33, 49098),

Gene: Eidsmoe_88 Start: 48852, Stop: 48607, Start Num: 23

Candidate Starts for Eidsmoe_88:

(Start: 18 @48879 has 4 MA's), (Start: 23 @48852 has 49 MA's), (29, 48816), (33, 48789),

Gene: Elephantoon_90 Start: 49016, Stop: 48762, Start Num: 21

Candidate Starts for Elephantoon_90:

(Start: 21 @49016 has 1 MA's), (24, 49004), (33, 48953), (50, 48878), (56, 48794),

Gene: EmyBug_87 Start: 48881, Stop: 48609, Start Num: 18

Candidate Starts for EmyBug_87:

(Start: 18 @48881 has 4 MA's), (Start: 23 @48854 has 49 MA's), (29, 48818), (33, 48791),

Gene: ExplosioNervosa_88 Start: 48920, Stop: 48675, Start Num: 23

Candidate Starts for ExplosioNervosa_88:

(Start: 18 @48947 has 4 MA's), (Start: 23 @48920 has 49 MA's), (29, 48884), (33, 48857),

Gene: Fayely_88 Start: 48828, Stop: 48583, Start Num: 23

Candidate Starts for Fayely_88:

(Start: 18 @48855 has 4 MA's), (Start: 23 @48828 has 49 MA's), (29, 48792), (33, 48765),

Gene: ForesterFrank_81 Start: 48650, Stop: 48381, Start Num: 23

Candidate Starts for ForesterFrank_81:

(9, 48845), (11, 48794), (Start: 20 @48665 has 2 MA's), (Start: 23 @48650 has 49 MA's), (30, 48617), (52, 48470), (54, 48452), (57, 48404),

Gene: Hanray_88 Start: 49149, Stop: 48895, Start Num: 23

Candidate Starts for Hanray_88:

(Start: 18 @49176 has 4 MA's), (Start: 23 @49149 has 49 MA's), (33, 49086), (40, 49038), (47, 49017), (49, 49011), (54, 48966),

Gene: Herbertwm_86 Start: 49248, Stop: 48952, Start Num: 23

Candidate Starts for Herbertwm_86:

(Start: 23 @49248 has 49 MA's), (32, 49188), (38, 49137), (53, 49050),

Gene: Holec_89 Start: 49162, Stop: 48908, Start Num: 23

Candidate Starts for Holec_89:

(Start: 18 @49189 has 4 MA's), (Start: 23 @49162 has 49 MA's), (33, 49099), (40, 49051), (47, 49030), (49, 49024), (54, 48979),

Gene: HortumSL17_91 Start: 49196, Stop: 48951, Start Num: 23

Candidate Starts for HortumSL17_91:

(Start: 18 @49223 has 4 MA's), (Start: 23 @49196 has 49 MA's), (29, 49160), (33, 49133),

Gene: IronMan_83 Start: 49127, Stop: 48876, Start Num: 23

Candidate Starts for IronMan_83:

(Start: 23 @49127 has 49 MA's), (58, 48896),

Gene: Iwokeuplikedis_90 Start: 49128, Stop: 48847, Start Num: 23

Candidate Starts for Iwokeuplikedis_90:

(Start: 23 @49128 has 49 MA's), (29, 49092), (33, 49065), (37, 49044), (39, 49017), (48, 48993), (54, 48942),

Gene: Jaan_84 Start: 49235, Stop: 48984, Start Num: 23

Candidate Starts for Jaan_84:

(6, 49607), (13, 49328), (Start: 23 @49235 has 49 MA's), (36, 49157), (58, 49004),

Gene: Jeeves_88 Start: 47130, Stop: 46858, Start Num: 23

Candidate Starts for Jeeves_88:

(14, 47208), (Start: 20 @47145 has 2 MA's), (Start: 23 @47130 has 49 MA's), (33, 47067), (34, 47061), (38, 47019), (40, 47001), (51, 46965),

Gene: Jiawan_88 Start: 49179, Stop: 48925, Start Num: 23

Candidate Starts for Jiawan_88:

(Start: 18 @49206 has 4 MA's), (Start: 23 @49179 has 49 MA's), (33, 49116), (40, 49068), (47, 49047), (49, 49041), (54, 48996),

Gene: Keziacharles14_87 Start: 49677, Stop: 49432, Start Num: 18

Candidate Starts for Keziacharles14_87:

(Start: 18 @49677 has 4 MA's), (Start: 23 @49653 has 49 MA's), (33, 49590), (40, 49551), (46, 49539), (55, 49455),

Gene: Klodlith_86 Start: 48558, Stop: 48307, Start Num: 23

Candidate Starts for Klodlith_86:

(Start: 23 @48558 has 49 MA's), (27, 48534), (28, 48531), (33, 48495), (54, 48378),

Gene: Landor_84 Start: 49160, Stop: 48909, Start Num: 23

Candidate Starts for Landor_84:

(Start: 23 @49160 has 49 MA's), (58, 48929),

Gene: Lilleskat_87 Start: 49150, Stop: 48905, Start Num: 23

Candidate Starts for Lilleskat_87:

(Start: 18 @49177 has 4 MA's), (Start: 23 @49150 has 49 MA's), (29, 49114), (33, 49087),

Gene: Lokk_81 Start: 47110, Stop: 46880, Start Num: 23

Candidate Starts for Lokk_81:

(10, 47272), (Start: 20 @47125 has 2 MA's), (Start: 23 @47110 has 49 MA's), (35, 47047),

Gene: LoneWolf_90 Start: 49212, Stop: 48946, Start Num: 18

Candidate Starts for LoneWolf_90:

(Start: 18 @49212 has 4 MA's), (Start: 23 @49188 has 49 MA's), (33, 49128), (42, 49083), (45, 49074), (56, 48978),

Gene: Luchador_85 Start: 48225, Stop: 47965, Start Num: 23

Candidate Starts for Luchador_85:

(Start: 23 @48225 has 49 MA's), (27, 48201), (33, 48162), (40, 48108),

Gene: Maminiaina_89 Start: 49117, Stop: 48866, Start Num: 23

Candidate Starts for Maminiaina_89:

(Start: 23 @49117 has 49 MA's), (28, 49096), (33, 49060), (56, 48898),

Gene: MegTheThird_86 Start: 48559, Stop: 48308, Start Num: 23

Candidate Starts for MegTheThird_86:

(2, 49105), (3, 49042), (4, 48979), (19, 48583), (Start: 23 @48559 has 49 MA's), (26, 48538), (33, 48496),

Gene: Miko_81 Start: 47875, Stop: 47645, Start Num: 23

Candidate Starts for Miko_81:

(Start: 20 @47890 has 2 MA's), (Start: 23 @47875 has 49 MA's), (35, 47812),

Gene: Minispark_87 Start: 48603, Stop: 48349, Start Num: 22

Candidate Starts for Minispark_87:

(Start: 18 @48627 has 4 MA's), (Start: 22 @48603 has 1 MA's), (26, 48582), (33, 48540), (56, 48381),

Gene: Myxus_90 Start: 49196, Stop: 48951, Start Num: 23

Candidate Starts for Myxus_90:

(Start: 18 @49223 has 4 MA's), (Start: 23 @49196 has 49 MA's), (29, 49160), (33, 49133),

Gene: Odin_85 Start: 48071, Stop: 47814, Start Num: 20

Candidate Starts for Odin_85:

(Start: 20 @48071 has 2 MA's), (Start: 23 @48056 has 49 MA's), (40, 47957),

Gene: Onglai_88 Start: 47351, Stop: 47097, Start Num: 23

Candidate Starts for Onglai_88:

(Start: 18 @47378 has 4 MA's), (Start: 23 @47351 has 49 MA's), (33, 47288), (40, 47240), (47, 47219), (49, 47213), (54, 47168),

Gene: PackMan_85 Start: 47110, Stop: 46865, Start Num: 23

Candidate Starts for PackMan_85:

(Start: 18 @47137 has 4 MA's), (Start: 23 @47110 has 49 MA's), (29, 47074), (33, 47047),

Gene: Phaded_80 Start: 49118, Stop: 48867, Start Num: 23

Candidate Starts for Phaded_80:

(6, 49490), (13, 49211), (Start: 23 @49118 has 49 MA's), (58, 48887),

Gene: Phaeder_90 Start: 49071, Stop: 48826, Start Num: 23

Candidate Starts for Phaeder_90:

(Start: 18 @49098 has 4 MA's), (Start: 23 @49071 has 49 MA's), (29, 49035), (33, 49008),

Gene: Phonnegut_90 Start: 49083, Stop: 48838, Start Num: 23

Candidate Starts for Phonnegut_90:

(Start: 18 @49110 has 4 MA's), (Start: 23 @49083 has 49 MA's), (29, 49047), (33, 49020),

Gene: Pioneer_90 Start: 49083, Stop: 48838, Start Num: 23

Candidate Starts for Pioneer_90:

(Start: 18 @49110 has 4 MA's), (Start: 23 @49083 has 49 MA's), (29, 49047), (33, 49020),

Gene: Priya_88 Start: 48855, Stop: 48610, Start Num: 23

Candidate Starts for Priya_88:

(Start: 18 @48882 has 4 MA's), (Start: 23 @48855 has 49 MA's), (29, 48819), (33, 48792),

Gene: Pukovnik_81 Start: 48588, Stop: 48337, Start Num: 23

Candidate Starts for Pukovnik_81:

(Start: 23 @48588 has 49 MA's), (28, 48561), (58, 48357),

Gene: Qobbit_88 Start: 48817, Stop: 48572, Start Num: 23

Candidate Starts for Qobbit_88:

(Start: 18 @48844 has 4 MA's), (Start: 23 @48817 has 49 MA's), (29, 48781), (33, 48754),

Gene: Rachaly_83 Start: 48018, Stop: 47788, Start Num: 23

Candidate Starts for Rachaly_83:

(Start: 20 @48033 has 2 MA's), (Start: 23 @48018 has 49 MA's), (35, 47955),

Gene: Rahalelujah_89 Start: 48618, Stop: 48364, Start Num: 22

Candidate Starts for Rahalelujah_89:

(Start: 18 @48642 has 4 MA's), (Start: 22 @48618 has 1 MA's), (26, 48597), (33, 48555), (56, 48396),

Gene: Refuge_88 Start: 50832, Stop: 50584, Start Num: 23

Candidate Starts for Refuge_88:

(Start: 23 @50832 has 49 MA's), (33, 50775), (56, 50616),

Gene: RyeScarlet_91 Start: 49069, Stop: 48815, Start Num: 23

Candidate Starts for RyeScarlet_91:

(Start: 18 @49096 has 4 MA's), (Start: 23 @49069 has 49 MA's), (33, 49006), (40, 48958), (47, 48937), (49, 48931), (54, 48886),

Gene: Sachima_86 Start: 49098, Stop: 48853, Start Num: 23

Candidate Starts for Sachima_86:

(Start: 18 @49125 has 4 MA's), (Start: 23 @49098 has 49 MA's), (29, 49062), (33, 49035),

Gene: Scherzo_88 Start: 49115, Stop: 48870, Start Num: 23

Candidate Starts for Scherzo_88:

(Start: 18 @49142 has 4 MA's), (Start: 23 @49115 has 49 MA's), (29, 49079), (33, 49052),

Gene: SheaKeira_85 Start: 48361, Stop: 48110, Start Num: 23

Candidate Starts for SheaKeira_85:

(Start: 23 @48361 has 49 MA's), (28, 48334), (33, 48298), (54, 48181),

Gene: Spouty_88 Start: 48854, Stop: 48609, Start Num: 23

Candidate Starts for Spouty_88:

(Start: 18 @48881 has 4 MA's), (Start: 23 @48854 has 49 MA's), (29, 48818), (33, 48791),

Gene: Steamy_85 Start: 49811, Stop: 49554, Start Num: 23

Candidate Starts for Steamy_85:

(Start: 23 @49811 has 49 MA's), (33, 49751), (54, 49625),

Gene: Sunhee_87 Start: 46599, Stop: 46327, Start Num: 23

Candidate Starts for Sunhee_87:

(Start: 20 @46614 has 2 MA's), (Start: 23 @46599 has 49 MA's), (31, 46557), (33, 46536), (34, 46530), (38, 46488), (40, 46470),

Gene: Superchunk_86 Start: 47583, Stop: 47341, Start Num: 23

Candidate Starts for Superchunk_86:

(Start: 20 @47598 has 2 MA's), (Start: 23 @47583 has 49 MA's), (40, 47484),

Gene: Toaka_88 Start: 48957, Stop: 48709, Start Num: 23

Candidate Starts for Toaka_88:

(16, 49023), (Start: 18 @48981 has 4 MA's), (Start: 20 @48969 has 2 MA's), (Start: 23 @48957 has 49 MA's), (29, 48921), (33, 48894), (42, 48846), (45, 48837), (54, 48780),

Gene: Tristan_82 Start: 48950, Stop: 48699, Start Num: 23

Candidate Starts for Tristan_82:

(6, 49322), (13, 49043), (Start: 23 @48950 has 49 MA's), (58, 48719),

Gene: Trixie_86 Start: 49391, Stop: 49113, Start Num: 20

Candidate Starts for Trixie_86:

(8, 49589), (Start: 20 @49391 has 2 MA's), (Start: 23 @49376 has 49 MA's), (25, 49361), (33, 49313), (41, 49253), (43, 49244), (44, 49241), (54, 49181),

Gene: Tubs_90 Start: 49071, Stop: 48826, Start Num: 23

Candidate Starts for Tubs_90:

(Start: 18 @49098 has 4 MA's), (Start: 23 @49071 has 49 MA's), (29, 49035), (33, 49008),

Gene: Ugenie5_77 Start: 46559, Stop: 46314, Start Num: 23

Candidate Starts for Ugenie5_77:

(Start: 18 @46586 has 4 MA's), (Start: 23 @46559 has 49 MA's), (29, 46523), (33, 46496),

Gene: Vanisoa_85 Start: 49296, Stop: 49042, Start Num: 23

Candidate Starts for Vanisoa_85:

(16, 49362), (Start: 18 @49320 has 4 MA's), (Start: 20 @49308 has 2 MA's), (Start: 23 @49296 has 49 MA's), (26, 49275), (33, 49233), (40, 49185), (49, 49158), (54, 49113),

Gene: WorldCup_88 Start: 48754, Stop: 48503, Start Num: 22

Candidate Starts for WorldCup_88:

(Start: 18 @48778 has 4 MA's), (Start: 22 @48754 has 1 MA's), (26, 48733), (33, 48691), (54, 48571), (56, 48535),

Gene: Yecey3_91 Start: 48834, Stop: 48583, Start Num: 23

Candidate Starts for Yecey3_91:

(Start: 23 @48834 has 49 MA's), (33, 48771), (56, 48615),

Gene: Zimmer_87 Start: 50279, Stop: 50019, Start Num: 23

Candidate Starts for Zimmer_87:

(Start: 18 @50306 has 4 MA's), (Start: 23 @50279 has 49 MA's), (33, 50222), (43, 50153), (44, 50150), (50, 50135), (54, 50090),