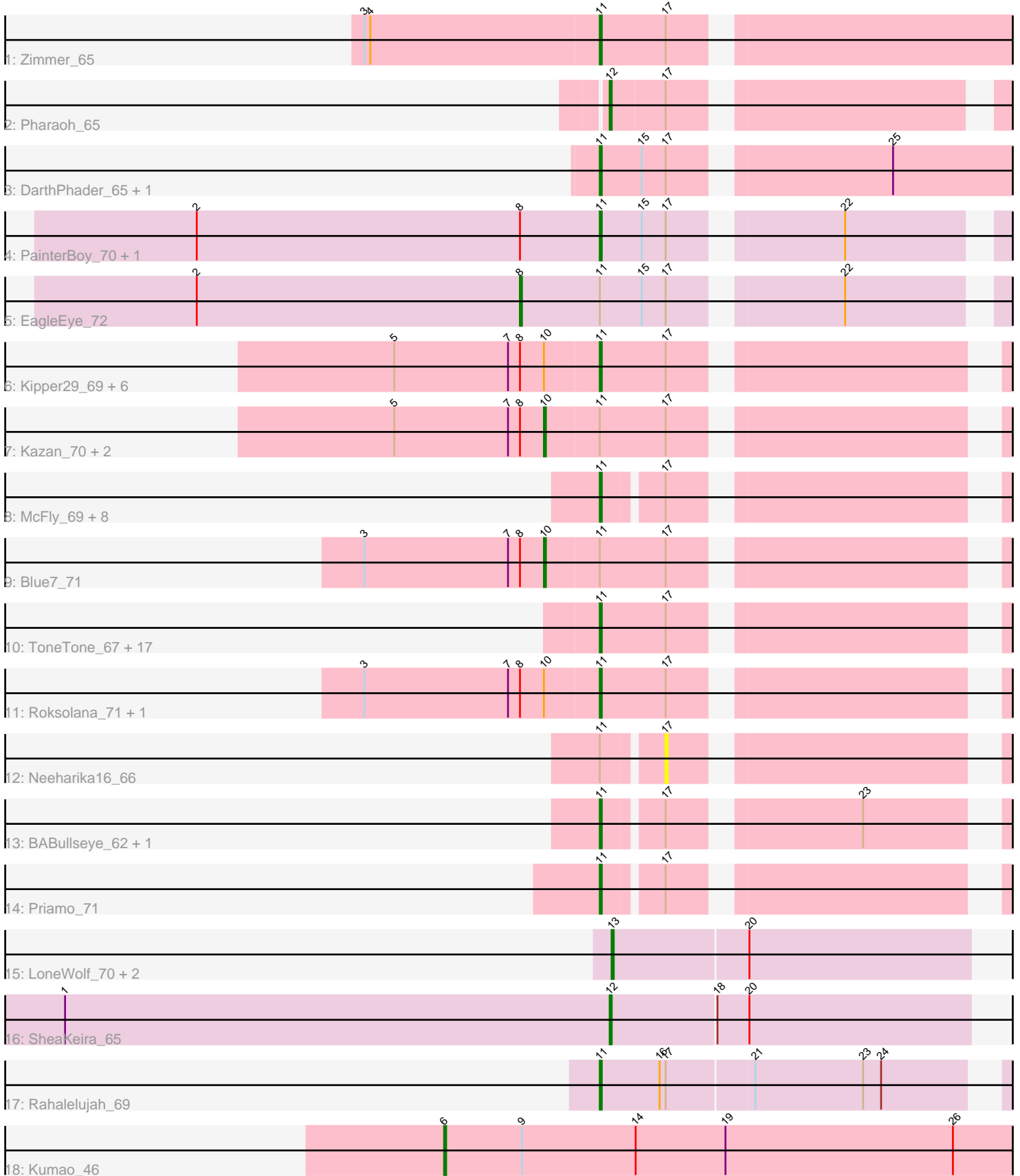


Pham 157897



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 157897 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157897 has 57 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Zimmer_65
- Track 2 : Pharaoh_65
- Track 3 : DarthPhader_65, Refuge_65
- Track 4 : PainterBoy_70, Lucyedi_71
- Track 5 : EagleEye_72
- Track 6 : Kipper29_69, EricB_68, Hoot_64, VohminGhazi_69, Candra_67, Newrala_69, GreedyLawyer_66
- Track 7 : Kazan_70, SmellyB_69, SuperAwesome_69
- Track 8 : McFly_69, Isiphiwo_67, Dorothea_66, Pmask_68, Chartreuse_66, DaVinci_67, SuperCallie99_66, Cookiedough_69, JewelBug_69
- Track 9 : Blue7_71
- Track 10 : ToneTone_67, Artemis2UCLA_70, Zaka_70, Koko_72, Gladiator_67, Tucker_70, Hexamo_70, Helmet_71, Yokurt_69, Garak_71, Jeffabunny_70, WunderPhul_70, Rifter_70, Hammer_70, Wiks_69, Zulu_71, CloudWang3_71, Indra_73
- Track 11 : Roksolana_71, Gruunaga_70
- Track 12 : Neeharika16_66
- Track 13 : BABullseye_62, Jordennis_68
- Track 14 : Priamo_71
- Track 15 : LoneWolf_70, BogosyJay_70, Maminiaina_70
- Track 16 : SheaKeira_65
- Track 17 : Rahalelujah_69
- Track 18 : Kumao_46

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

The start number called the most often in the published annotations is 11, it was called in 40 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artemis2UCLA_70, BABullseye_62, Candra_67, Chartreuse_66, CloudWang3_71, Cookiedough_69, DaVinci_67, DarthPhader_65, Dorothea_66, EricB_68, Garak_71, Gladiator_67, GreedyLawyer_66, Gruunaga_70, Hammer_70, Helmet_71, Hexamo_70, Hoot_64, Indra_73, Isiphiwo_67, Jeffabunny_70, JewelBug_69,

Jordennis_68, Kipper29_69, Koko_72, Lucyedi_71, McFly_69, Newrala_69, PainterBoy_70, Pmask_68, Priamo_71, Rahalelujah_69, Refuge_65, Rifter_70, Roksolana_71, SuperCallie99_66, ToneTone_67, Tucker_70, VohminGhazi_69, Wiks_69, WunderPhul_70, Yokurt_69, Zaka_70, Zimmer_65, Zulu_71,

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

- Blue7_71, EagleEye_72, Kazan_70, Neeharika16_66, SmellyB_69, SuperAwesome_69,

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

- BogosyJay_70, Kumao_46, LoneWolf_70, Maminiaina_70, Pharaoh_65, SheaKeira_65,

Summary by start number:

Start 6:

- Found in 1 of 57 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumao_46 (singleton),

Start 8:

- Found in 16 of 57 (28.1%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 6.2% of time when present
- Phage (with cluster) where this start called: EagleEye_72 (A16),

Start 10:

- Found in 13 of 57 (22.8%) of genes in pham
- Manual Annotations of this start: 4 of 51
- Called 30.8% of time when present
- Phage (with cluster) where this start called: Blue7_71 (A6), Kazan_70 (A6), SmellyB_69 (A6), SuperAwesome_69 (A6),

Start 11:

- Found in 51 of 57 (89.5%) of genes in pham
- Manual Annotations of this start: 40 of 51
- Called 88.2% of time when present
- Phage (with cluster) where this start called: Artemis2UCLA_70 (A6), BABullseye_62 (A6), Candra_67 (A6), Chartreuse_66 (A6), CloudWang3_71 (A6), Cookiedough_69 (A6), DaVinci_67 (A6), DarthPhader_65 (A12), Dorothea_66 (A6), EricB_68 (A6), Garak_71 (A6), Gladiator_67 (A6), GreedyLawyer_66 (A6), Gruunaga_70 (A6), Hammer_70 (A6), Helmet_71 (A6), Hexamo_70 (A6), Hoot_64 (A6), Indra_73 (A6), Isiphiwo_67 (A6), Jeffabunny_70 (A6), JewelBug_69 (A6), Jordennis_68 (A6), Kipper29_69 (A6), Koko_72 (A6), Lucyedi_71 (A16), McFly_69 (A6), Newrala_69 (A6), PainterBoy_70 (A16), Pmask_68 (A6), Priamo_71 (A6), Rahalelujah_69 (A9), Refuge_65 (A12), Rifter_70 (A6), Roksolana_71 (A6), SuperCallie99_66 (A6), ToneTone_67 (A6), Tucker_70 (A6), VohminGhazi_69 (A6), Wiks_69 (A6), WunderPhul_70 (A6), Yokurt_69 (A6), Zaka_70 (A6), Zimmer_65 (A12), Zulu_71 (A6),

Start 12:

- Found in 2 of 57 (3.5%) of genes in pham

- Manual Annotations of this start: 2 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pharaoh_65 (A12), SheaKeira_65 (A9),

Start 13:

- Found in 3 of 57 (5.3%) of genes in pham
- Manual Annotations of this start: 3 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BogosyJay_70 (A9), LoneWolf_70 (A9), Maminiaina_70 (A9),

Start 17:

- Found in 52 of 57 (91.2%) of genes in pham
- No Manual Annotations of this start.
- Called 1.9% of time when present
- Phage (with cluster) where this start called: Neeharika16_66 (A6),

Summary by clusters:

There are 5 clusters represented in this pham: A9, singleton, A6, A16, A12,

Info for manual annotations of cluster A12:

- Start number 11 was manually annotated 3 times for cluster A12.
- Start number 12 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A16:

- Start number 8 was manually annotated 1 time for cluster A16.
- Start number 11 was manually annotated 2 times for cluster A16.

Info for manual annotations of cluster A6:

- Start number 10 was manually annotated 4 times for cluster A6.
- Start number 11 was manually annotated 34 times for cluster A6.

Info for manual annotations of cluster A9:

- Start number 11 was manually annotated 1 time for cluster A9.
- Start number 12 was manually annotated 1 time for cluster A9.
- Start number 13 was manually annotated 3 times for cluster A9.

Gene Information:

Gene: Artemis2UCLA_70 Start: 40238, Stop: 40059, Start Num: 11

Candidate Starts for Artemis2UCLA_70:

(Start: 11 @40238 has 40 MA's), (17, 40205),

Gene: BABullseye_62 Start: 37899, Stop: 37726, Start Num: 11

Candidate Starts for BABullseye_62:

(Start: 11 @37899 has 40 MA's), (17, 37872), (23, 37788),

Gene: Blue7_71 Start: 40393, Stop: 40187, Start Num: 10

Candidate Starts for Blue7_71:

(3, 40483), (7, 40411), (Start: 8 @40405 has 1 MA's), (Start: 10 @40393 has 4 MA's), (Start: 11 @40366 has 40 MA's), (17, 40333),

Gene: BogosyJay_70 Start: 41590, Stop: 41414, Start Num: 13
Candidate Starts for BogosyJay_70:
(Start: 13 @41590 has 3 MA's), (20, 41524),

Gene: Candra_67 Start: 40269, Stop: 40090, Start Num: 11
Candidate Starts for Candra_67:
(5, 40371), (7, 40314), (Start: 8 @40308 has 1 MA's), (Start: 10 @40296 has 4 MA's), (Start: 11 @40269 has 40 MA's), (17, 40236),

Gene: Chartreuse_66 Start: 39579, Stop: 39406, Start Num: 11
Candidate Starts for Chartreuse_66:
(Start: 11 @39579 has 40 MA's), (17, 39552),

Gene: CloudWang3_71 Start: 40750, Stop: 40571, Start Num: 11
Candidate Starts for CloudWang3_71:
(Start: 11 @40750 has 40 MA's), (17, 40717),

Gene: Cookiedough_69 Start: 40207, Stop: 40034, Start Num: 11
Candidate Starts for Cookiedough_69:
(Start: 11 @40207 has 40 MA's), (17, 40180),

Gene: DaVinci_67 Start: 39633, Stop: 39460, Start Num: 11
Candidate Starts for DaVinci_67:
(Start: 11 @39633 has 40 MA's), (17, 39606),

Gene: DarthPhader_65 Start: 42262, Stop: 42065, Start Num: 11
Candidate Starts for DarthPhader_65:
(Start: 11 @42262 has 40 MA's), (15, 42241), (17, 42229), (25, 42130),

Gene: Dorothea_66 Start: 40205, Stop: 40032, Start Num: 11
Candidate Starts for Dorothea_66:
(Start: 11 @40205 has 40 MA's), (17, 40178),

Gene: EagleEye_72 Start: 41949, Stop: 41728, Start Num: 8
Candidate Starts for EagleEye_72:
(2, 42111), (Start: 8 @41949 has 1 MA's), (Start: 11 @41910 has 40 MA's), (15, 41889), (17, 41877), (22, 41802),

Gene: EricB_68 Start: 40226, Stop: 40047, Start Num: 11
Candidate Starts for EricB_68:
(5, 40328), (7, 40271), (Start: 8 @40265 has 1 MA's), (Start: 10 @40253 has 4 MA's), (Start: 11 @40226 has 40 MA's), (17, 40193),

Gene: Garak_71 Start: 40605, Stop: 40426, Start Num: 11
Candidate Starts for Garak_71:
(Start: 11 @40605 has 40 MA's), (17, 40572),

Gene: Gladiator_67 Start: 39830, Stop: 39651, Start Num: 11
Candidate Starts for Gladiator_67:
(Start: 11 @39830 has 40 MA's), (17, 39797),

Gene: GreedyLawyer_66 Start: 40199, Stop: 40020, Start Num: 11
Candidate Starts for GreedyLawyer_66:
(5, 40301), (7, 40244), (Start: 8 @40238 has 1 MA's), (Start: 10 @40226 has 4 MA's), (Start: 11 @40199 has 40 MA's), (17, 40166),

Gene: Gruunaga_70 Start: 40563, Stop: 40384, Start Num: 11
Candidate Starts for Gruunaga_70:
(3, 40680), (7, 40608), (Start: 8 @40602 has 1 MA's), (Start: 10 @40590 has 4 MA's), (Start: 11 @40563 has 40 MA's), (17, 40530),

Gene: Hammer_70 Start: 40170, Stop: 39991, Start Num: 11
Candidate Starts for Hammer_70:
(Start: 11 @40170 has 40 MA's), (17, 40137),

Gene: Helmet_71 Start: 40605, Stop: 40426, Start Num: 11
Candidate Starts for Helmet_71:
(Start: 11 @40605 has 40 MA's), (17, 40572),

Gene: Hexamo_70 Start: 40235, Stop: 40056, Start Num: 11
Candidate Starts for Hexamo_70:
(Start: 11 @40235 has 40 MA's), (17, 40202),

Gene: Hoot_64 Start: 38084, Stop: 37905, Start Num: 11
Candidate Starts for Hoot_64:
(5, 38186), (7, 38129), (Start: 8 @38123 has 1 MA's), (Start: 10 @38111 has 4 MA's), (Start: 11 @38084 has 40 MA's), (17, 38051),

Gene: Indra_73 Start: 40606, Stop: 40427, Start Num: 11
Candidate Starts for Indra_73:
(Start: 11 @40606 has 40 MA's), (17, 40573),

Gene: Isiphiwo_67 Start: 39765, Stop: 39586, Start Num: 11
Candidate Starts for Isiphiwo_67:
(Start: 11 @39765 has 40 MA's), (17, 39732),

Gene: Jeffabunny_70 Start: 40232, Stop: 40053, Start Num: 11
Candidate Starts for Jeffabunny_70:
(Start: 11 @40232 has 40 MA's), (17, 40199),

Gene: JewelBug_69 Start: 40499, Stop: 40326, Start Num: 11
Candidate Starts for JewelBug_69:
(Start: 11 @40499 has 40 MA's), (17, 40472),

Gene: Jordennis_68 Start: 39980, Stop: 39807, Start Num: 11
Candidate Starts for Jordennis_68:
(Start: 11 @39980 has 40 MA's), (17, 39953), (23, 39869),

Gene: Kazan_70 Start: 40266, Stop: 40060, Start Num: 10
Candidate Starts for Kazan_70:
(5, 40341), (7, 40284), (Start: 8 @40278 has 1 MA's), (Start: 10 @40266 has 4 MA's), (Start: 11 @40239 has 40 MA's), (17, 40206),

Gene: Kipper29_69 Start: 40252, Stop: 40073, Start Num: 11
Candidate Starts for Kipper29_69:
(5, 40354), (7, 40297), (Start: 8 @40291 has 1 MA's), (Start: 10 @40279 has 4 MA's), (Start: 11 @40252 has 40 MA's), (17, 40219),

Gene: Koko_72 Start: 41090, Stop: 40911, Start Num: 11
Candidate Starts for Koko_72:
(Start: 11 @41090 has 40 MA's), (17, 41057),

Gene: Kumao_46 Start: 37602, Stop: 37892, Start Num: 6
Candidate Starts for Kumao_46:
(Start: 6 @37602 has 1 MA's), (9, 37641), (14, 37698), (19, 37743), (26, 37857),

Gene: LoneWolf_70 Start: 41439, Stop: 41263, Start Num: 13
Candidate Starts for LoneWolf_70:
(Start: 13 @41439 has 3 MA's), (20, 41373),

Gene: Lucyedi_71 Start: 42106, Stop: 41924, Start Num: 11
Candidate Starts for Lucyedi_71:
(2, 42307), (Start: 8 @42145 has 1 MA's), (Start: 11 @42106 has 40 MA's), (15, 42085), (17, 42073), (22, 41998),

Gene: Maminiaina_70 Start: 41572, Stop: 41396, Start Num: 13
Candidate Starts for Maminiaina_70:
(Start: 13 @41572 has 3 MA's), (20, 41506),

Gene: McFly_69 Start: 40192, Stop: 40019, Start Num: 11
Candidate Starts for McFly_69:
(Start: 11 @40192 has 40 MA's), (17, 40165),

Gene: Neeharika16_66 Start: 39632, Stop: 39486, Start Num: 17
Candidate Starts for Neeharika16_66:
(Start: 11 @39659 has 40 MA's), (17, 39632),

Gene: Newrala_69 Start: 40200, Stop: 40021, Start Num: 11
Candidate Starts for Newrala_69:
(5, 40302), (7, 40245), (Start: 8 @40239 has 1 MA's), (Start: 10 @40227 has 4 MA's), (Start: 11 @40200 has 40 MA's), (17, 40167),

Gene: PainterBoy_70 Start: 41815, Stop: 41633, Start Num: 11
Candidate Starts for PainterBoy_70:
(2, 42016), (Start: 8 @41854 has 1 MA's), (Start: 11 @41815 has 40 MA's), (15, 41794), (17, 41782), (22, 41707),

Gene: Pharaoh_65 Start: 41502, Stop: 41326, Start Num: 12
Candidate Starts for Pharaoh_65:
(Start: 12 @41502 has 2 MA's), (17, 41475),

Gene: Pmask_68 Start: 40195, Stop: 40022, Start Num: 11
Candidate Starts for Pmask_68:
(Start: 11 @40195 has 40 MA's), (17, 40168),

Gene: Priamo_71 Start: 40046, Stop: 39873, Start Num: 11

Candidate Starts for Priamo_71:
(Start: 11 @40046 has 40 MA's), (17, 40019),

Gene: Rahalelujah_69 Start: 41050, Stop: 40859, Start Num: 11
Candidate Starts for Rahalelujah_69:
(Start: 11 @41050 has 40 MA's), (16, 41020), (17, 41017), (21, 40975), (23, 40921), (24, 40912),

Gene: Refuge_65 Start: 42312, Stop: 42115, Start Num: 11
Candidate Starts for Refuge_65:
(Start: 11 @42312 has 40 MA's), (15, 42291), (17, 42279), (25, 42180),

Gene: Rifter_70 Start: 39766, Stop: 39587, Start Num: 11
Candidate Starts for Rifter_70:
(Start: 11 @39766 has 40 MA's), (17, 39733),

Gene: Roksolana_71 Start: 40600, Stop: 40421, Start Num: 11
Candidate Starts for Roksolana_71:
(3, 40717), (7, 40645), (Start: 8 @40639 has 1 MA's), (Start: 10 @40627 has 4 MA's), (Start: 11 @40600 has 40 MA's), (17, 40567),

Gene: SheaKeira_65 Start: 40520, Stop: 40344, Start Num: 12
Candidate Starts for SheaKeira_65:
(1, 40793), (Start: 12 @40520 has 2 MA's), (18, 40469), (20, 40454),

Gene: SmellyB_69 Start: 40260, Stop: 40054, Start Num: 10
Candidate Starts for SmellyB_69:
(5, 40335), (7, 40278), (Start: 8 @40272 has 1 MA's), (Start: 10 @40260 has 4 MA's), (Start: 11 @40233 has 40 MA's), (17, 40200),

Gene: SuperAwesome_69 Start: 40265, Stop: 40059, Start Num: 10
Candidate Starts for SuperAwesome_69:
(5, 40340), (7, 40283), (Start: 8 @40277 has 1 MA's), (Start: 10 @40265 has 4 MA's), (Start: 11 @40238 has 40 MA's), (17, 40205),

Gene: SuperCallie99_66 Start: 40079, Stop: 39906, Start Num: 11
Candidate Starts for SuperCallie99_66:
(Start: 11 @40079 has 40 MA's), (17, 40052),

Gene: ToneTone_67 Start: 40165, Stop: 39986, Start Num: 11
Candidate Starts for ToneTone_67:
(Start: 11 @40165 has 40 MA's), (17, 40132),

Gene: Tucker_70 Start: 40368, Stop: 40189, Start Num: 11
Candidate Starts for Tucker_70:
(Start: 11 @40368 has 40 MA's), (17, 40335),

Gene: VohminGhazi_69 Start: 40234, Stop: 40055, Start Num: 11
Candidate Starts for VohminGhazi_69:
(5, 40336), (7, 40279), (Start: 8 @40273 has 1 MA's), (Start: 10 @40261 has 4 MA's), (Start: 11 @40234 has 40 MA's), (17, 40201),

Gene: Wiks_69 Start: 40236, Stop: 40057, Start Num: 11
Candidate Starts for Wiks_69:

(Start: 11 @40236 has 40 MA's), (17, 40203),

Gene: WunderPhul_70 Start: 40234, Stop: 40055, Start Num: 11

Candidate Starts for WunderPhul_70:

(Start: 11 @40234 has 40 MA's), (17, 40201),

Gene: Yokurt_69 Start: 40236, Stop: 40057, Start Num: 11

Candidate Starts for Yokurt_69:

(Start: 11 @40236 has 40 MA's), (17, 40203),

Gene: Zaka_70 Start: 40236, Stop: 40057, Start Num: 11

Candidate Starts for Zaka_70:

(Start: 11 @40236 has 40 MA's), (17, 40203),

Gene: Zimmer_65 Start: 42012, Stop: 41815, Start Num: 11

Candidate Starts for Zimmer_65:

(3, 42129), (4, 42126), (Start: 11 @42012 has 40 MA's), (17, 41979),

Gene: Zulu_71 Start: 40614, Stop: 40435, Start Num: 11

Candidate Starts for Zulu_71:

(Start: 11 @40614 has 40 MA's), (17, 40581),