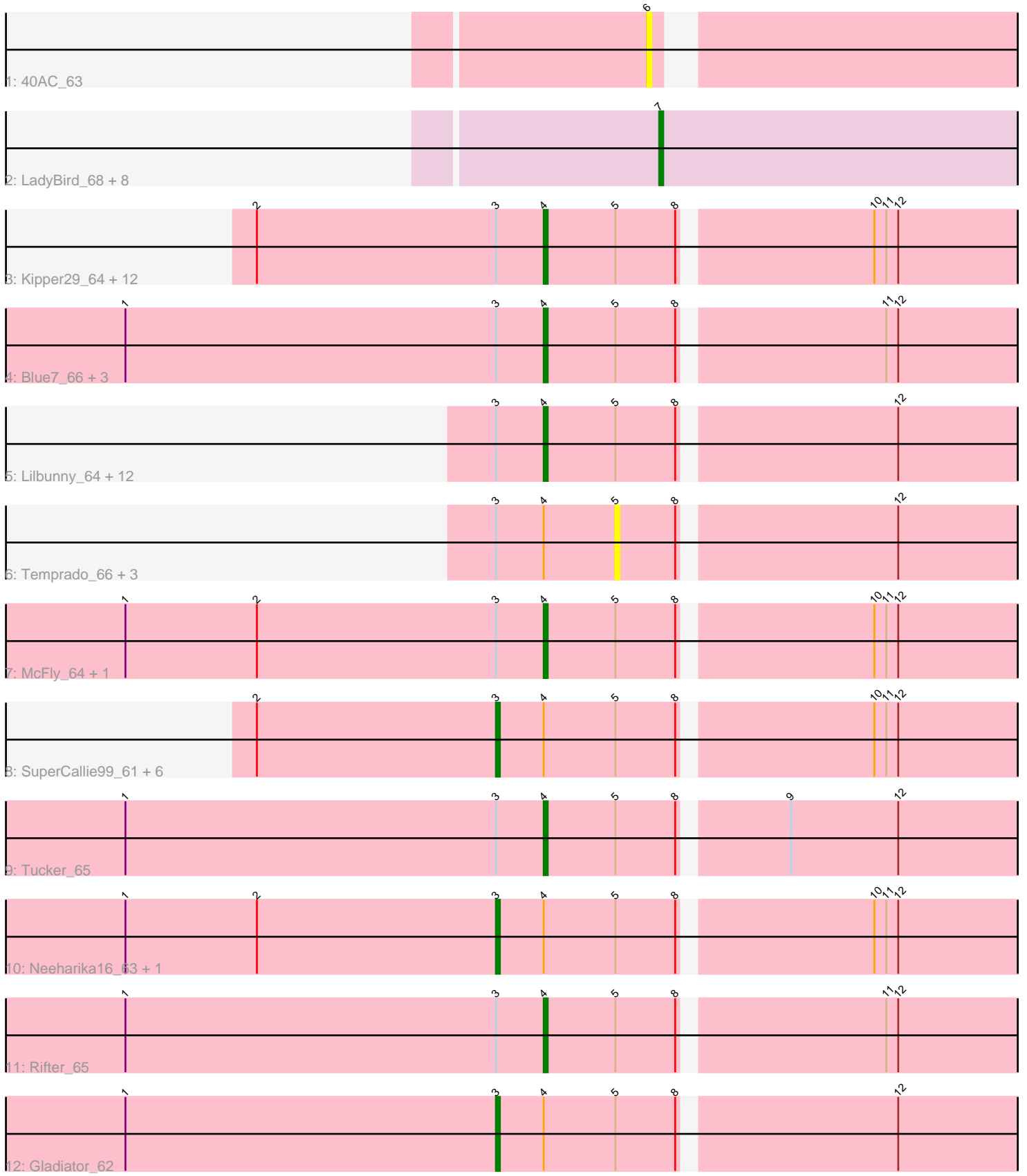


Pham 216195



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 216195 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216195 has 58 members, 12 are drafts.

Phages represented in each track:

- Track 1 : 40AC_63
- Track 2 : LadyBird_68, AN3_66, 20ES_66, LionsBait_64, Deloris_64, CRB1_66, VA6_64, BengiVuitton_64, First_0065
- Track 3 : Kipper29_64, Kazan_65, EricB_63, Hoot_59, VohminGhazi_64, SuperAwesome_64, Candra_62, JewelBug_64, Isiphiwo_62, BABullseye_57, DaVinci_62, SmellyB_64, Newrala_64
- Track 4 : Blue7_66, Roksolana_66, Hammer_65, Gruunaga_65
- Track 5 : Lilbunny_64, Koko_67, Zaka_65, Artemis2UCLA_65, Hexamo_65, Indra_68, Yokurt_64, Wiks_64, WunderPhul_65, Jeffabunny_65, ToneTone_62, Zulu_66, CloudWang3_66
- Track 6 : Temprado_66, Helmet_66, Garak_66, BlessJoy_64
- Track 7 : McFly_64, Cookiedough_64
- Track 8 : SuperCallie99_61, Dorothea_64, Jordennis_63, Priamo_66, Blinn1_67, Polyphemus_64, Chartreuse_61
- Track 9 : Tucker_65
- Track 10 : Neeharika16_63, Pmask_63
- Track 11 : Rifter_65
- Track 12 : Gladiator_62

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

The start number called the most often in the published annotations is 4, it was called in 33 of the 46 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artemis2UCLA_65, BABullseye_57, Blue7_66, Candra_62, CloudWang3_66, Cookiedough_64, DaVinci_62, EricB_63, Gruunaga_65, Hammer_65, Hexamo_65, Hoot_59, Indra_68, Isiphiwo_62, Jeffabunny_65, JewelBug_64, Kazan_65, Kipper29_64, Koko_67, Lilbunny_64, McFly_64, Newrala_64, Rifter_65, Roksolana_66, SmellyB_64, SuperAwesome_64, ToneTone_62, Tucker_65, VohminGhazi_64, Wiks_64, WunderPhul_65, Yokurt_64, Zaka_65, Zulu_66,

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

- BlessJoy_64, Blinn1_67, Chartreuse_61, Dorothea_64, Garak_66, Gladiator_62, Helmet_66, Jordennis_63, Neeharika16_63, Pmask_63, Polyphemos_64, Priamo_66, SuperCallie99_61, Temprado_66,

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

- 20ES_66, 40AC_63, AN3_66, BengiVuitton_64, CRB1_66, Deloris_64, First_0065, LadyBird_68, LionsBait_64, VA6_64,

Summary by start number:

Start 3:

- Found in 48 of 58 (82.8%) of genes in pham
- Manual Annotations of this start: 8 of 46
- Called 20.8% of time when present
- Phage (with cluster) where this start called: Blinn1_67 (A6), Chartreuse_61 (A6), Dorothea_64 (A6), Gladiator_62 (A6), Jordennis_63 (A6), Neeharika16_63 (A6), Pmask_63 (A6), Polyphemos_64 (A6), Priamo_66 (A6), SuperCallie99_61 (A6),

Start 4:

- Found in 48 of 58 (82.8%) of genes in pham
- Manual Annotations of this start: 33 of 46
- Called 70.8% of time when present
- Phage (with cluster) where this start called: Artemis2UCLA_65 (A6), BABullseye_57 (A6), Blue7_66 (A6), Candra_62 (A6), CloudWang3_66 (A6), Cookiedough_64 (A6), DaVinci_62 (A6), EricB_63 (A6), Gruunaga_65 (A6), Hammer_65 (A6), Hexamo_65 (A6), Hoot_59 (A6), Indra_68 (A6), Isiphiwo_62 (A6), Jeffabunny_65 (A6), JewelBug_64 (A6), Kazan_65 (A6), Kipper29_64 (A6), Koko_67 (A6), Lilbunny_64 (A6), McFly_64 (A6), Newrala_64 (A6), Rifter_65 (A6), Roksolana_66 (A6), SmellyB_64 (A6), SuperAwesome_64 (A6), ToneTone_62 (A6), Tucker_65 (A6), VohminGhazi_64 (A6), Wiks_64 (A6), WunderPhul_65 (A6), Yokurt_64 (A6), Zaka_65 (A6), Zulu_66 (A6),

Start 5:

- Found in 48 of 58 (82.8%) of genes in pham
- No Manual Annotations of this start.
- Called 8.3% of time when present
- Phage (with cluster) where this start called: BlessJoy_64 (A6), Garak_66 (A6), Helmet_66 (A6), Temprado_66 (A6),

Start 6:

- Found in 1 of 58 (1.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 40AC_63 (A17),

Start 7:

- Found in 9 of 58 (15.5%) of genes in pham
- Manual Annotations of this start: 5 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 20ES_66 (A2), AN3_66 (A2), BengiVuitton_64 (A2), CRB1_66 (A2), Deloris_64 (A2), First_0065 (A2), LadyBird_68 (A2), LionsBait_64 (A2), VA6_64 (A2),

Summary by clusters:

There are 3 clusters represented in this pham: A17, A2, A6,

Info for manual annotations of cluster A2:

- Start number 7 was manually annotated 5 times for cluster A2.

Info for manual annotations of cluster A6:

- Start number 3 was manually annotated 8 times for cluster A6.
- Start number 4 was manually annotated 33 times for cluster A6.

Gene Information:

Gene: 20ES_66 Start: 40354, Stop: 40241, Start Num: 7

Candidate Starts for 20ES_66:

(Start: 7 @40354 has 5 MA's),

Gene: 40AC_63 Start: 41089, Stop: 40973, Start Num: 6

Candidate Starts for 40AC_63:

(6, 41089),

Gene: AN3_66 Start: 39069, Stop: 38956, Start Num: 7

Candidate Starts for AN3_66:

(Start: 7 @39069 has 5 MA's),

Gene: Artemis2UCLA_65 Start: 38809, Stop: 38669, Start Num: 4

Candidate Starts for Artemis2UCLA_65:

(Start: 3 @38821 has 8 MA's), (Start: 4 @38809 has 33 MA's), (5, 38791), (8, 38776), (12, 38725),

Gene: BABullseye_57 Start: 36364, Stop: 36215, Start Num: 4

Candidate Starts for BABullseye_57:

(2, 36436), (Start: 3 @36376 has 8 MA's), (Start: 4 @36364 has 33 MA's), (5, 36346), (8, 36331), (10, 36286), (11, 36283), (12, 36280),

Gene: BengiVuitton_64 Start: 40331, Stop: 40212, Start Num: 7

Candidate Starts for BengiVuitton_64:

(Start: 7 @40331 has 5 MA's),

Gene: BlessJoy_64 Start: 39217, Stop: 39095, Start Num: 5

Candidate Starts for BlessJoy_64:

(Start: 3 @39247 has 8 MA's), (Start: 4 @39235 has 33 MA's), (5, 39217), (8, 39202), (12, 39151),

Gene: Blinn1_67 Start: 38905, Stop: 38744, Start Num: 3

Candidate Starts for Blinn1_67:

(2, 38965), (Start: 3 @38905 has 8 MA's), (Start: 4 @38893 has 33 MA's), (5, 38875), (8, 38860), (10, 38815), (11, 38812), (12, 38809),

Gene: Blue7_66 Start: 38903, Stop: 38763, Start Num: 4

Candidate Starts for Blue7_66:

(1, 39008), (Start: 3 @38915 has 8 MA's), (Start: 4 @38903 has 33 MA's), (5, 38885), (8, 38870), (11, 38822), (12, 38819),

Gene: CRB1_66 Start: 40877, Stop: 40758, Start Num: 7

Candidate Starts for CRB1_66:

(Start: 7 @40877 has 5 MA's),

Gene: Candra_62 Start: 38728, Stop: 38579, Start Num: 4

Candidate Starts for Candra_62:

(2, 38800), (Start: 3 @38740 has 8 MA's), (Start: 4 @38728 has 33 MA's), (5, 38710), (8, 38695), (10, 38650), (11, 38647), (12, 38644),

Gene: Chartreuse_61 Start: 38091, Stop: 37930, Start Num: 3

Candidate Starts for Chartreuse_61:

(2, 38151), (Start: 3 @38091 has 8 MA's), (Start: 4 @38079 has 33 MA's), (5, 38061), (8, 38046), (10, 38001), (11, 37998), (12, 37995),

Gene: CloudWang3_66 Start: 39321, Stop: 39181, Start Num: 4

Candidate Starts for CloudWang3_66:

(Start: 3 @39333 has 8 MA's), (Start: 4 @39321 has 33 MA's), (5, 39303), (8, 39288), (12, 39237),

Gene: Cookiedough_64 Start: 38707, Stop: 38558, Start Num: 4

Candidate Starts for Cookiedough_64:

(1, 38812), (2, 38779), (Start: 3 @38719 has 8 MA's), (Start: 4 @38707 has 33 MA's), (5, 38689), (8, 38674), (10, 38629), (11, 38626), (12, 38623),

Gene: DaVinci_62 Start: 38133, Stop: 37984, Start Num: 4

Candidate Starts for DaVinci_62:

(2, 38205), (Start: 3 @38145 has 8 MA's), (Start: 4 @38133 has 33 MA's), (5, 38115), (8, 38100), (10, 38055), (11, 38052), (12, 38049),

Gene: Deloris_64 Start: 40027, Stop: 39908, Start Num: 7

Candidate Starts for Deloris_64:

(Start: 7 @40027 has 5 MA's),

Gene: Dorothea_64 Start: 38717, Stop: 38556, Start Num: 3

Candidate Starts for Dorothea_64:

(2, 38777), (Start: 3 @38717 has 8 MA's), (Start: 4 @38705 has 33 MA's), (5, 38687), (8, 38672), (10, 38627), (11, 38624), (12, 38621),

Gene: EricB_63 Start: 38685, Stop: 38536, Start Num: 4

Candidate Starts for EricB_63:

(2, 38757), (Start: 3 @38697 has 8 MA's), (Start: 4 @38685 has 33 MA's), (5, 38667), (8, 38652), (10, 38607), (11, 38604), (12, 38601),

Gene: First_0065 Start: 40254, Stop: 40141, Start Num: 7

Candidate Starts for First_0065:

(Start: 7 @40254 has 5 MA's),

Gene: Garak_66 Start: 39158, Stop: 39036, Start Num: 5

Candidate Starts for Garak_66:

(Start: 3 @39188 has 8 MA's), (Start: 4 @39176 has 33 MA's), (5, 39158), (8, 39143), (12, 39092),

Gene: Gladiator_62 Start: 38413, Stop: 38261, Start Num: 3

Candidate Starts for Gladiator_62:

(1, 38506), (Start: 3 @38413 has 8 MA's), (Start: 4 @38401 has 33 MA's), (5, 38383), (8, 38368), (12, 38317),

Gene: Gruunaga_65 Start: 39100, Stop: 38960, Start Num: 4

Candidate Starts for Gruunaga_65:

(1, 39205), (Start: 3 @39112 has 8 MA's), (Start: 4 @39100 has 33 MA's), (5, 39082), (8, 39067), (11, 39019), (12, 39016),

Gene: Hammer_65 Start: 38707, Stop: 38567, Start Num: 4

Candidate Starts for Hammer_65:

(1, 38812), (Start: 3 @38719 has 8 MA's), (Start: 4 @38707 has 33 MA's), (5, 38689), (8, 38674), (11, 38626), (12, 38623),

Gene: Helmet_66 Start: 39158, Stop: 39036, Start Num: 5

Candidate Starts for Helmet_66:

(Start: 3 @39188 has 8 MA's), (Start: 4 @39176 has 33 MA's), (5, 39158), (8, 39143), (12, 39092),

Gene: Hexamo_65 Start: 38806, Stop: 38666, Start Num: 4

Candidate Starts for Hexamo_65:

(Start: 3 @38818 has 8 MA's), (Start: 4 @38806 has 33 MA's), (5, 38788), (8, 38773), (12, 38722),

Gene: Hoot_59 Start: 36543, Stop: 36394, Start Num: 4

Candidate Starts for Hoot_59:

(2, 36615), (Start: 3 @36555 has 8 MA's), (Start: 4 @36543 has 33 MA's), (5, 36525), (8, 36510), (10, 36465), (11, 36462), (12, 36459),

Gene: Indra_68 Start: 39177, Stop: 39037, Start Num: 4

Candidate Starts for Indra_68:

(Start: 3 @39189 has 8 MA's), (Start: 4 @39177 has 33 MA's), (5, 39159), (8, 39144), (12, 39093),

Gene: Isiphiwo_62 Start: 38259, Stop: 38110, Start Num: 4

Candidate Starts for Isiphiwo_62:

(2, 38331), (Start: 3 @38271 has 8 MA's), (Start: 4 @38259 has 33 MA's), (5, 38241), (8, 38226), (10, 38181), (11, 38178), (12, 38175),

Gene: Jeffabunny_65 Start: 38803, Stop: 38663, Start Num: 4

Candidate Starts for Jeffabunny_65:

(Start: 3 @38815 has 8 MA's), (Start: 4 @38803 has 33 MA's), (5, 38785), (8, 38770), (12, 38719),

Gene: JewelBug_64 Start: 38964, Stop: 38815, Start Num: 4

Candidate Starts for JewelBug_64:

(2, 39036), (Start: 3 @38976 has 8 MA's), (Start: 4 @38964 has 33 MA's), (5, 38946), (8, 38931), (10, 38886), (11, 38883), (12, 38880),

Gene: Jordennis_63 Start: 38457, Stop: 38296, Start Num: 3

Candidate Starts for Jordennis_63:

(2, 38517), (Start: 3 @38457 has 8 MA's), (Start: 4 @38445 has 33 MA's), (5, 38427), (8, 38412), (10, 38367), (11, 38364), (12, 38361),

Gene: Kazan_65 Start: 38698, Stop: 38549, Start Num: 4

Candidate Starts for Kazan_65:

(2, 38770), (Start: 3 @38710 has 8 MA's), (Start: 4 @38698 has 33 MA's), (5, 38680), (8, 38665), (10, 38620), (11, 38617), (12, 38614),

Gene: Kipper29_64 Start: 38711, Stop: 38562, Start Num: 4

Candidate Starts for Kipper29_64:

(2, 38783), (Start: 3 @38723 has 8 MA's), (Start: 4 @38711 has 33 MA's), (5, 38693), (8, 38678), (10, 38633), (11, 38630), (12, 38627),

Gene: Koko_67 Start: 39661, Stop: 39521, Start Num: 4

Candidate Starts for Koko_67:

(Start: 3 @39673 has 8 MA's), (Start: 4 @39661 has 33 MA's), (5, 39643), (8, 39628), (12, 39577),

Gene: LadyBird_68 Start: 40839, Stop: 40720, Start Num: 7

Candidate Starts for LadyBird_68:

(Start: 7 @40839 has 5 MA's),

Gene: Lilbunny_64 Start: 38807, Stop: 38667, Start Num: 4

Candidate Starts for Lilbunny_64:

(Start: 3 @38819 has 8 MA's), (Start: 4 @38807 has 33 MA's), (5, 38789), (8, 38774), (12, 38723),

Gene: LionsBait_64 Start: 41431, Stop: 41303, Start Num: 7

Candidate Starts for LionsBait_64:

(Start: 7 @41431 has 5 MA's),

Gene: McFly_64 Start: 38692, Stop: 38543, Start Num: 4

Candidate Starts for McFly_64:

(1, 38797), (2, 38764), (Start: 3 @38704 has 8 MA's), (Start: 4 @38692 has 33 MA's), (5, 38674), (8, 38659), (10, 38614), (11, 38611), (12, 38608),

Gene: Neeharika16_63 Start: 38164, Stop: 38003, Start Num: 3

Candidate Starts for Neeharika16_63:

(1, 38257), (2, 38224), (Start: 3 @38164 has 8 MA's), (Start: 4 @38152 has 33 MA's), (5, 38134), (8, 38119), (10, 38074), (11, 38071), (12, 38068),

Gene: Newrala_64 Start: 38694, Stop: 38545, Start Num: 4

Candidate Starts for Newrala_64:

(2, 38766), (Start: 3 @38706 has 8 MA's), (Start: 4 @38694 has 33 MA's), (5, 38676), (8, 38661), (10, 38616), (11, 38613), (12, 38610),

Gene: Pmask_63 Start: 38707, Stop: 38546, Start Num: 3

Candidate Starts for Pmask_63:

(1, 38800), (2, 38767), (Start: 3 @38707 has 8 MA's), (Start: 4 @38695 has 33 MA's), (5, 38677), (8, 38662), (10, 38617), (11, 38614), (12, 38611),

Gene: Polyphemus_64 Start: 39092, Stop: 38931, Start Num: 3

Candidate Starts for Polyphemus_64:

(2, 39152), (Start: 3 @39092 has 8 MA's), (Start: 4 @39080 has 33 MA's), (5, 39062), (8, 39047), (10, 39002), (11, 38999), (12, 38996),

Gene: Priamo_66 Start: 38523, Stop: 38362, Start Num: 3

Candidate Starts for Priamo_66:

(2, 38583), (Start: 3 @38523 has 8 MA's), (Start: 4 @38511 has 33 MA's), (5, 38493), (8, 38478), (10, 38433), (11, 38430), (12, 38427),

Gene: Riffer_65 Start: 38303, Stop: 38163, Start Num: 4

Candidate Starts for Riffer_65:

(1, 38408), (Start: 3 @38315 has 8 MA's), (Start: 4 @38303 has 33 MA's), (5, 38285), (8, 38270), (11, 38222), (12, 38219),

Gene: Roksolana_66 Start: 39137, Stop: 38997, Start Num: 4

Candidate Starts for Roksolana_66:

(1, 39242), (Start: 3 @39149 has 8 MA's), (Start: 4 @39137 has 33 MA's), (5, 39119), (8, 39104), (11, 39056), (12, 39053),

Gene: SmellyB_64 Start: 38692, Stop: 38543, Start Num: 4

Candidate Starts for SmellyB_64:

(2, 38764), (Start: 3 @38704 has 8 MA's), (Start: 4 @38692 has 33 MA's), (5, 38674), (8, 38659), (10, 38614), (11, 38611), (12, 38608),

Gene: SuperAwesome_64 Start: 38697, Stop: 38548, Start Num: 4

Candidate Starts for SuperAwesome_64:

(2, 38769), (Start: 3 @38709 has 8 MA's), (Start: 4 @38697 has 33 MA's), (5, 38679), (8, 38664), (10, 38619), (11, 38616), (12, 38613),

Gene: SuperCallie99_61 Start: 38591, Stop: 38430, Start Num: 3

Candidate Starts for SuperCallie99_61:

(2, 38651), (Start: 3 @38591 has 8 MA's), (Start: 4 @38579 has 33 MA's), (5, 38561), (8, 38546), (10, 38501), (11, 38498), (12, 38495),

Gene: Temprado_66 Start: 39158, Stop: 39036, Start Num: 5

Candidate Starts for Temprado_66:

(Start: 3 @39188 has 8 MA's), (Start: 4 @39176 has 33 MA's), (5, 39158), (8, 39143), (12, 39092),

Gene: ToneTone_62 Start: 38736, Stop: 38596, Start Num: 4

Candidate Starts for ToneTone_62:

(Start: 3 @38748 has 8 MA's), (Start: 4 @38736 has 33 MA's), (5, 38718), (8, 38703), (12, 38652),

Gene: Tucker_65 Start: 38905, Stop: 38765, Start Num: 4

Candidate Starts for Tucker_65:

(1, 39010), (Start: 3 @38917 has 8 MA's), (Start: 4 @38905 has 33 MA's), (5, 38887), (8, 38872), (9, 38848), (12, 38821),

Gene: VA6_64 Start: 40247, Stop: 40134, Start Num: 7

Candidate Starts for VA6_64:

(Start: 7 @40247 has 5 MA's),

Gene: VohminGhazi_64 Start: 38693, Stop: 38544, Start Num: 4

Candidate Starts for VohminGhazi_64:

(2, 38765), (Start: 3 @38705 has 8 MA's), (Start: 4 @38693 has 33 MA's), (5, 38675), (8, 38660), (10, 38615), (11, 38612), (12, 38609),

Gene: Wiks_64 Start: 38807, Stop: 38667, Start Num: 4

Candidate Starts for Wiks_64:

(Start: 3 @38819 has 8 MA's), (Start: 4 @38807 has 33 MA's), (5, 38789), (8, 38774), (12, 38723),

Gene: WunderPhul_65 Start: 38805, Stop: 38665, Start Num: 4

Candidate Starts for WunderPhul_65:

(Start: 3 @38817 has 8 MA's), (Start: 4 @38805 has 33 MA's), (5, 38787), (8, 38772), (12, 38721),

Gene: Yokurt_64 Start: 38807, Stop: 38667, Start Num: 4

Candidate Starts for Yokurt_64:

(Start: 3 @38819 has 8 MA's), (Start: 4 @38807 has 33 MA's), (5, 38789), (8, 38774), (12, 38723),

Gene: Zaka_65 Start: 38807, Stop: 38667, Start Num: 4

Candidate Starts for Zaka_65:

(Start: 3 @38819 has 8 MA's), (Start: 4 @38807 has 33 MA's), (5, 38789), (8, 38774), (12, 38723),

Gene: Zulu_66 Start: 39185, Stop: 39045, Start Num: 4

Candidate Starts for Zulu_66:

(Start: 3 @39197 has 8 MA's), (Start: 4 @39185 has 33 MA's), (5, 39167), (8, 39152), (12, 39101),