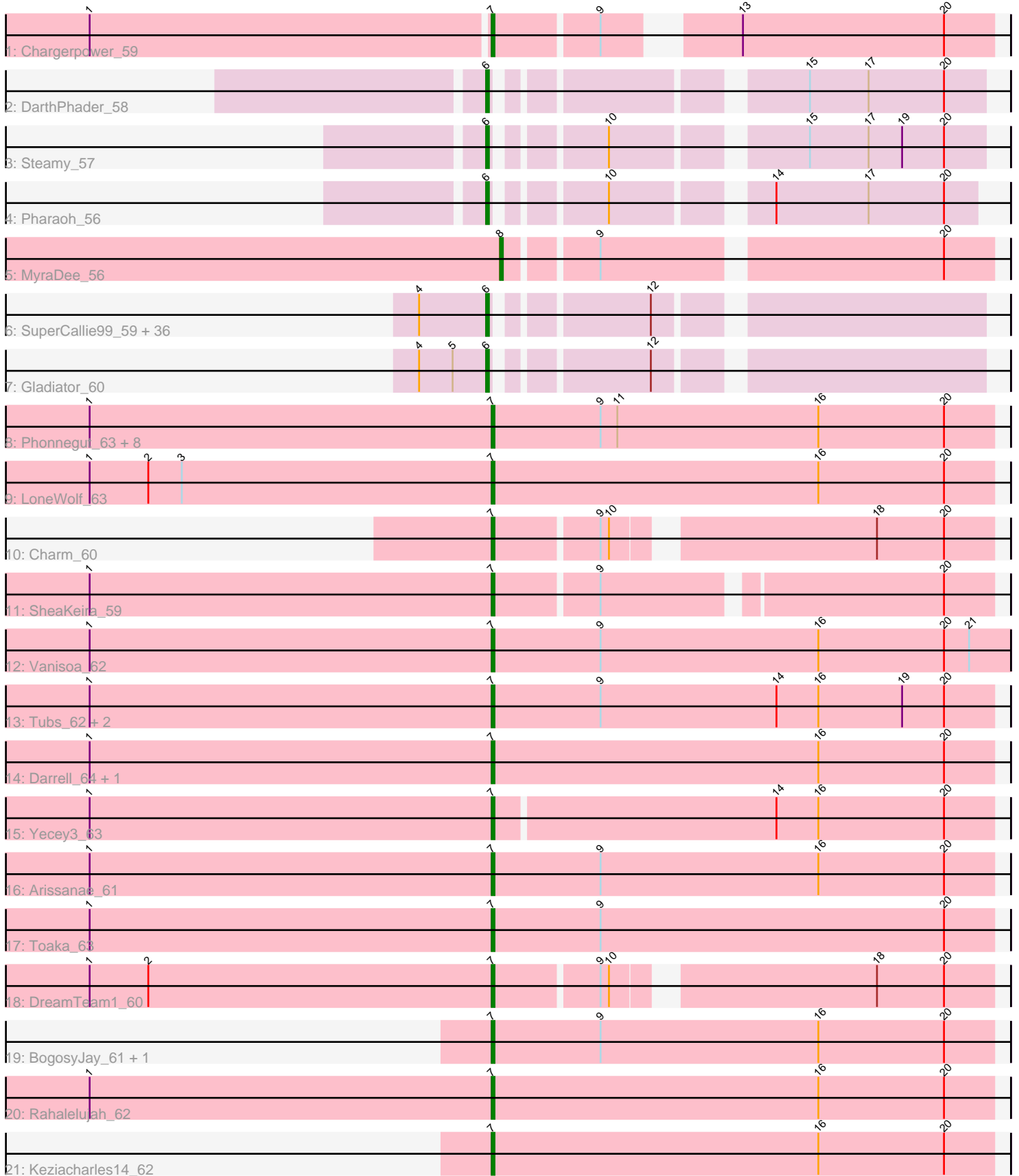


# Pham 156352



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 156352 Report

This analysis was run 04/12/24 on database version 558.

Pham number 156352 has 69 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Chargerpower\_59
- Track 2 : DarthPhader\_58
- Track 3 : Steamy\_57
- Track 4 : Pharaoh\_56
- Track 5 : MyraDee\_56
- Track 6 : SuperCallie99\_59, Hoot\_57, Jeffabunny\_63, Rifter\_63, Zaka\_63, Neeharika16\_59, Artemis2UCLA\_63, Kazan\_63, BABullseye\_55, Cookiedough\_62, Newrala\_62, Tucker\_63, Koko\_65, DaVinci\_60, Candra\_60, Hexamo\_63, Roksolana\_64, Helmet\_64, Garak\_64, McFly\_62, SmellyB\_62, ToneTone\_60, EricB\_61, WunderPhul\_63, Indra\_66, Dorothea\_59, Isiphiwo\_60, Kipper29\_62, Zulu\_64, Pmask\_61, VohminGhazi\_62, Wiks\_62, Yokurt\_62, Gruunaga\_63, Chartreuse\_59, SuperAwesome\_62, CloudWang3\_64
- Track 7 : Gladiator\_60
- Track 8 : Phonnegut\_63, Catalina\_64, Ugenie5\_59, HortumSL17\_63, Scherzo\_63, Beemo\_63, Aliter\_63, Pioneer\_63, Myxus\_62
- Track 9 : LoneWolf\_63
- Track 10 : Charm\_60
- Track 11 : SheaKeira\_59
- Track 12 : Vanisoa\_62
- Track 13 : Tubs\_62, Phaeder\_62, PackMan\_61
- Track 14 : Darrell\_64, Elephantoon\_61
- Track 15 : Yecey3\_63
- Track 16 : Arissanae\_61
- Track 17 : Toaka\_63
- Track 18 : DreamTeam1\_60
- Track 19 : BogosyJay\_61, Maminiaina\_61
- Track 20 : Rahalelujah\_62
- Track 21 : Keziacharles14\_62

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

The start number called the most often in the published annotations is 6, it was called in 35 of the 62 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artemis2UCLA\_63, BABullseye\_55, Candra\_60, Chartreuse\_59, CloudWang3\_64, Cookiedough\_62, DaVinci\_60, DarthPhader\_58, Dorothea\_59, EricB\_61, Garak\_64, Gladiator\_60, Gruunaga\_63, Helmet\_64, Hexamo\_63, Hoot\_57, Indra\_66, Isiphiwo\_60, Jeffabunny\_63, Kazan\_63, Kipper29\_62, Koko\_65, McFly\_62, Neeharika16\_59, Newrala\_62, Pharaoh\_56, Pmask\_61, Rifter\_63, Roksolana\_64, SmellyB\_62, Steamy\_57, SuperAwesome\_62, SuperCallie99\_59, ToneTone\_60, Tucker\_63, VohminGhazi\_62, Wiks\_62, WunderPhul\_63, Yokurt\_62, Zaka\_63, Zulu\_64,

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

- 

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

- Aliter\_63, Arissanae\_61, Beemo\_63, BogosyJay\_61, Catalina\_64, Chargerpower\_59, Charm\_60, Darrell\_64, DreamTeam1\_60, Elephantoon\_61, HortumSL17\_63, Keziacharles14\_62, LoneWolf\_63, Maminiaina\_61, MyraDee\_56, Myxus\_62, PackMan\_61, Phaeder\_62, Phonnegut\_63, Pioneer\_63, Rahalelujah\_62, Scherzo\_63, SheaKeira\_59, Toaka\_63, Tubs\_62, Ugenie5\_59, Vanisoa\_62, Yecey3\_63,

### Summary by start number:

Start 6:

- Found in 41 of 69 ( 59.4% ) of genes in pham
- Manual Annotations of this start: 35 of 62
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Artemis2UCLA\_63 (A6), BABullseye\_55 (A6), Candra\_60 (A6), Chartreuse\_59 (A6), CloudWang3\_64 (A6), Cookiedough\_62 (A6), DaVinci\_60 (A6), DarthPhader\_58 (A12), Dorothea\_59 (A6), EricB\_61 (A6), Garak\_64 (A6), Gladiator\_60 (A6), Gruunaga\_63 (A6), Helmet\_64 (A6), Hexamo\_63 (A6), Hoot\_57 (A6), Indra\_66 (A6), Isiphiwo\_60 (A6), Jeffabunny\_63 (A6), Kazan\_63 (A6), Kipper29\_62 (A6), Koko\_65 (A6), McFly\_62 (A6), Neeharika16\_59 (A6), Newrala\_62 (A6), Pharaoh\_56 (A12), Pmask\_61 (A6), Rifter\_63 (A6), Roksolana\_64 (A6), SmellyB\_62 (A6), Steamy\_57 (A12), SuperAwesome\_62 (A6), SuperCallie99\_59 (A6), ToneTone\_60 (A6), Tucker\_63 (A6), VohminGhazi\_62 (A6), Wiks\_62 (A6), WunderPhul\_63 (A6), Yokurt\_62 (A6), Zaka\_63 (A6), Zulu\_64 (A6),

Start 7:

- Found in 27 of 69 ( 39.1% ) of genes in pham
- Manual Annotations of this start: 26 of 62
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aliter\_63 (A9), Arissanae\_61 (A9), Beemo\_63 (A9), BogosyJay\_61 (A9), Catalina\_64 (A9), Chargerpower\_59 (A), Charm\_60 (A9), Darrell\_64 (A9), DreamTeam1\_60 (A9), Elephantoon\_61 (A9), HortumSL17\_63 (A9), Keziacharles14\_62 (A9), LoneWolf\_63 (A9), Maminiaina\_61 (A9), Myxus\_62 (A9), PackMan\_61 (A9), Phaeder\_62 (A9), Phonnegut\_63 (A9), Pioneer\_63 (A9), Rahalelujah\_62 (A9), Scherzo\_63 (A9), SheaKeira\_59 (A9), Toaka\_63 (A9), Tubs\_62 (A9), Ugenie5\_59 (A9), Vanisoa\_62 (A9), Yecey3\_63 (A9),

Start 8:

- Found in 1 of 69 ( 1.4% ) of genes in pham
- Manual Annotations of this start: 1 of 62

- Called 100.0% of time when present
- Phage (with cluster) where this start called: MyraDee\_56 (A18),

### **Summary by clusters:**

There are 5 clusters represented in this pham: A9, A, A6, A18, A12,

Info for manual annotations of cluster A:

- Start number 7 was manually annotated 1 time for cluster A.

Info for manual annotations of cluster A12:

- Start number 6 was manually annotated 3 times for cluster A12.

Info for manual annotations of cluster A18:

- Start number 8 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A6:

- Start number 6 was manually annotated 32 times for cluster A6.

Info for manual annotations of cluster A9:

- Start number 7 was manually annotated 25 times for cluster A9.

### ***Gene Information:***

Gene: Aliter\_63 Start: 39504, Stop: 39325, Start Num: 7

Candidate Starts for Aliter\_63:

(1, 39648), (Start: 7 @39504 has 26 MA's), (9, 39465), (11, 39459), (16, 39387), (20, 39342),

Gene: Arissanae\_61 Start: 40070, Stop: 39891, Start Num: 7

Candidate Starts for Arissanae\_61:

(1, 40214), (Start: 7 @40070 has 26 MA's), (9, 40031), (16, 39953), (20, 39908),

Gene: Artemis2UCLA\_63 Start: 38204, Stop: 38049, Start Num: 6

Candidate Starts for Artemis2UCLA\_63:

(4, 38228), (Start: 6 @38204 has 35 MA's), (12, 38156),

Gene: BABullseye\_55 Start: 35759, Stop: 35604, Start Num: 6

Candidate Starts for BABullseye\_55:

(4, 35783), (Start: 6 @35759 has 35 MA's), (12, 35711),

Gene: Beemo\_63 Start: 39674, Stop: 39495, Start Num: 7

Candidate Starts for Beemo\_63:

(1, 39818), (Start: 7 @39674 has 26 MA's), (9, 39635), (11, 39629), (16, 39557), (20, 39512),

Gene: BogosyJay\_61 Start: 39471, Stop: 39292, Start Num: 7

Candidate Starts for BogosyJay\_61:

(Start: 7 @39471 has 26 MA's), (9, 39432), (16, 39354), (20, 39309),

Gene: Candra\_60 Start: 38123, Stop: 37968, Start Num: 6

Candidate Starts for Candra\_60:

(4, 38147), (Start: 6 @38123 has 35 MA's), (12, 38075),

Gene: Catalina\_64 Start: 39577, Stop: 39398, Start Num: 7

Candidate Starts for Catalina\_64:

(1, 39721), (Start: 7 @39577 has 26 MA's), (9, 39538), (11, 39532), (16, 39460), (20, 39415),

Gene: Chargerpower\_59 Start: 38011, Stop: 37850, Start Num: 7

Candidate Starts for Chargerpower\_59:

(1, 38152), (Start: 7 @38011 has 26 MA's), (9, 37975), (13, 37939), (20, 37867),

Gene: Charm\_60 Start: 39202, Stop: 39038, Start Num: 7

Candidate Starts for Charm\_60:

(Start: 7 @39202 has 26 MA's), (9, 39166), (10, 39163), (18, 39079), (20, 39055),

Gene: Chartreuse\_59 Start: 37474, Stop: 37319, Start Num: 6

Candidate Starts for Chartreuse\_59:

(4, 37498), (Start: 6 @37474 has 35 MA's), (12, 37426),

Gene: CloudWang3\_64 Start: 38716, Stop: 38564, Start Num: 6

Candidate Starts for CloudWang3\_64:

(4, 38740), (Start: 6 @38716 has 35 MA's), (12, 38668),

Gene: Cookiedough\_62 Start: 38102, Stop: 37947, Start Num: 6

Candidate Starts for Cookiedough\_62:

(4, 38126), (Start: 6 @38102 has 35 MA's), (12, 38054),

Gene: DaVinci\_60 Start: 37528, Stop: 37373, Start Num: 6

Candidate Starts for DaVinci\_60:

(4, 37552), (Start: 6 @37528 has 35 MA's), (12, 37480),

Gene: Darrell\_64 Start: 40145, Stop: 39966, Start Num: 7

Candidate Starts for Darrell\_64:

(1, 40289), (Start: 7 @40145 has 26 MA's), (16, 40028), (20, 39983),

Gene: DarthPhader\_58 Start: 40398, Stop: 40243, Start Num: 6

Candidate Starts for DarthPhader\_58:

(Start: 6 @40398 has 35 MA's), (15, 40305), (17, 40284), (20, 40257),

Gene: Dorothea\_59 Start: 38100, Stop: 37945, Start Num: 6

Candidate Starts for Dorothea\_59:

(4, 38124), (Start: 6 @38100 has 35 MA's), (12, 38052),

Gene: DreamTeam1\_60 Start: 39034, Stop: 38870, Start Num: 7

Candidate Starts for DreamTeam1\_60:

(1, 39178), (2, 39157), (Start: 7 @39034 has 26 MA's), (9, 38998), (10, 38995), (18, 38911), (20, 38887),

Gene: Elephantoon\_61 Start: 38884, Stop: 38705, Start Num: 7

Candidate Starts for Elephantoon\_61:

(1, 39028), (Start: 7 @38884 has 26 MA's), (16, 38767), (20, 38722),

Gene: EricB\_61 Start: 38080, Stop: 37925, Start Num: 6

Candidate Starts for EricB\_61:

(4, 38104), (Start: 6 @38080 has 35 MA's), (12, 38032),

Gene: Garak\_64 Start: 38571, Stop: 38416, Start Num: 6

Candidate Starts for Garak\_64:

(4, 38595), (Start: 6 @38571 has 35 MA's), (12, 38523),

Gene: Gladiator\_60 Start: 37796, Stop: 37641, Start Num: 6

Candidate Starts for Gladiator\_60:

(4, 37820), (5, 37808), (Start: 6 @37796 has 35 MA's), (12, 37748),

Gene: Gruunaga\_63 Start: 38495, Stop: 38340, Start Num: 6

Candidate Starts for Gruunaga\_63:

(4, 38519), (Start: 6 @38495 has 35 MA's), (12, 38447),

Gene: Helmet\_64 Start: 38571, Stop: 38416, Start Num: 6

Candidate Starts for Helmet\_64:

(4, 38595), (Start: 6 @38571 has 35 MA's), (12, 38523),

Gene: Hexamo\_63 Start: 38201, Stop: 38046, Start Num: 6

Candidate Starts for Hexamo\_63:

(4, 38225), (Start: 6 @38201 has 35 MA's), (12, 38153),

Gene: Hoot\_57 Start: 35938, Stop: 35783, Start Num: 6

Candidate Starts for Hoot\_57:

(4, 35962), (Start: 6 @35938 has 35 MA's), (12, 35890),

Gene: HortumSL17\_63 Start: 39576, Stop: 39397, Start Num: 7

Candidate Starts for HortumSL17\_63:

(1, 39720), (Start: 7 @39576 has 26 MA's), (9, 39537), (11, 39531), (16, 39459), (20, 39414),

Gene: Indra\_66 Start: 38572, Stop: 38417, Start Num: 6

Candidate Starts for Indra\_66:

(4, 38596), (Start: 6 @38572 has 35 MA's), (12, 38524),

Gene: Isiphiwo\_60 Start: 37654, Stop: 37499, Start Num: 6

Candidate Starts for Isiphiwo\_60:

(4, 37678), (Start: 6 @37654 has 35 MA's), (12, 37606),

Gene: Jeffabunny\_63 Start: 38198, Stop: 38043, Start Num: 6

Candidate Starts for Jeffabunny\_63:

(4, 38222), (Start: 6 @38198 has 35 MA's), (12, 38150),

Gene: Kazan\_63 Start: 38093, Stop: 37938, Start Num: 6

Candidate Starts for Kazan\_63:

(4, 38117), (Start: 6 @38093 has 35 MA's), (12, 38045),

Gene: Keziacharles14\_62 Start: 40639, Stop: 40460, Start Num: 7

Candidate Starts for Keziacharles14\_62:

(Start: 7 @40639 has 26 MA's), (16, 40522), (20, 40477),

Gene: Kipper29\_62 Start: 38106, Stop: 37951, Start Num: 6

Candidate Starts for Kipper29\_62:

(4, 38130), (Start: 6 @38106 has 35 MA's), (12, 38058),

Gene: Koko\_65 Start: 39056, Stop: 38904, Start Num: 6

Candidate Starts for Koko\_65:

(4, 39080), (Start: 6 @39056 has 35 MA's), (12, 39008),

Gene: LoneWolf\_63 Start: 39606, Stop: 39427, Start Num: 7

Candidate Starts for LoneWolf\_63:

(1, 39750), (2, 39729), (3, 39717), (Start: 7 @39606 has 26 MA's), (16, 39489), (20, 39444),

Gene: Maminiaina\_61 Start: 39453, Stop: 39274, Start Num: 7

Candidate Starts for Maminiaina\_61:

(Start: 7 @39453 has 26 MA's), (9, 39414), (16, 39336), (20, 39291),

Gene: McFly\_62 Start: 38087, Stop: 37932, Start Num: 6

Candidate Starts for McFly\_62:

(4, 38111), (Start: 6 @38087 has 35 MA's), (12, 38039),

Gene: MyraDee\_56 Start: 36038, Stop: 35877, Start Num: 8

Candidate Starts for MyraDee\_56:

(Start: 8 @36038 has 1 MA's), (9, 36008), (20, 35894),

Gene: Myxus\_62 Start: 39576, Stop: 39397, Start Num: 7

Candidate Starts for Myxus\_62:

(1, 39720), (Start: 7 @39576 has 26 MA's), (9, 39537), (11, 39531), (16, 39459), (20, 39414),

Gene: Neeharika16\_59 Start: 37547, Stop: 37392, Start Num: 6

Candidate Starts for Neeharika16\_59:

(4, 37571), (Start: 6 @37547 has 35 MA's), (12, 37499),

Gene: Newrala\_62 Start: 38089, Stop: 37934, Start Num: 6

Candidate Starts for Newrala\_62:

(4, 38113), (Start: 6 @38089 has 35 MA's), (12, 38041),

Gene: PackMan\_61 Start: 39451, Stop: 39272, Start Num: 7

Candidate Starts for PackMan\_61:

(1, 39595), (Start: 7 @39451 has 26 MA's), (9, 39412), (14, 39349), (16, 39334), (19, 39304), (20, 39289),

Gene: Phaeder\_62 Start: 39451, Stop: 39272, Start Num: 7

Candidate Starts for Phaeder\_62:

(1, 39595), (Start: 7 @39451 has 26 MA's), (9, 39412), (14, 39349), (16, 39334), (19, 39304), (20, 39289),

Gene: Pharaoh\_56 Start: 39272, Stop: 39120, Start Num: 6

Candidate Starts for Pharaoh\_56:

(Start: 6 @39272 has 35 MA's), (10, 39239), (14, 39191), (17, 39158), (20, 39131),

Gene: Phonnegut\_63 Start: 39673, Stop: 39494, Start Num: 7

Candidate Starts for Phonnegut\_63:

(1, 39817), (Start: 7 @39673 has 26 MA's), (9, 39634), (11, 39628), (16, 39556), (20, 39511),

Gene: Pioneer\_63 Start: 39673, Stop: 39494, Start Num: 7

Candidate Starts for Pioneer\_63:

(1, 39817), (Start: 7 @39673 has 26 MA's), (9, 39634), (11, 39628), (16, 39556), (20, 39511),

Gene: Pmask\_61 Start: 38090, Stop: 37935, Start Num: 6

Candidate Starts for Pmask\_61:

(4, 38114), (Start: 6 @38090 has 35 MA's), (12, 38042),

Gene: Rahalelujah\_62 Start: 39206, Stop: 39027, Start Num: 7

Candidate Starts for Rahalelujah\_62:

(1, 39350), (Start: 7 @39206 has 26 MA's), (16, 39089), (20, 39044),

Gene: Rifter\_63 Start: 37698, Stop: 37543, Start Num: 6

Candidate Starts for Rifter\_63:

(4, 37722), (Start: 6 @37698 has 35 MA's), (12, 37650),

Gene: Roksolana\_64 Start: 38532, Stop: 38377, Start Num: 6

Candidate Starts for Roksolana\_64:

(4, 38556), (Start: 6 @38532 has 35 MA's), (12, 38484),

Gene: Scherzo\_63 Start: 39862, Stop: 39683, Start Num: 7

Candidate Starts for Scherzo\_63:

(1, 40006), (Start: 7 @39862 has 26 MA's), (9, 39823), (11, 39817), (16, 39745), (20, 39700),

Gene: SheaKeira\_59 Start: 39050, Stop: 38883, Start Num: 7

Candidate Starts for SheaKeira\_59:

(1, 39194), (Start: 7 @39050 has 26 MA's), (9, 39014), (20, 38900),

Gene: SmellyB\_62 Start: 38087, Stop: 37932, Start Num: 6

Candidate Starts for SmellyB\_62:

(4, 38111), (Start: 6 @38087 has 35 MA's), (12, 38039),

Gene: Steamy\_57 Start: 39000, Stop: 38845, Start Num: 6

Candidate Starts for Steamy\_57:

(Start: 6 @39000 has 35 MA's), (10, 38967), (15, 38907), (17, 38886), (19, 38874), (20, 38859),

Gene: SuperAwesome\_62 Start: 38092, Stop: 37937, Start Num: 6

Candidate Starts for SuperAwesome\_62:

(4, 38116), (Start: 6 @38092 has 35 MA's), (12, 38044),

Gene: SuperCallie99\_59 Start: 37974, Stop: 37819, Start Num: 6

Candidate Starts for SuperCallie99\_59:

(4, 37998), (Start: 6 @37974 has 35 MA's), (12, 37926),

Gene: Toaka\_63 Start: 39678, Stop: 39499, Start Num: 7

Candidate Starts for Toaka\_63:

(1, 39822), (Start: 7 @39678 has 26 MA's), (9, 39639), (20, 39516),

Gene: ToneTone\_60 Start: 38131, Stop: 37976, Start Num: 6

Candidate Starts for ToneTone\_60:

(4, 38155), (Start: 6 @38131 has 35 MA's), (12, 38083),

Gene: Tubs\_62 Start: 39451, Stop: 39272, Start Num: 7

Candidate Starts for Tubs\_62:

(1, 39595), (Start: 7 @39451 has 26 MA's), (9, 39412), (14, 39349), (16, 39334), (19, 39304), (20, 39289),



Gene: Tucker\_63 Start: 38300, Stop: 38145, Start Num: 6

Candidate Starts for Tucker\_63:

(4, 38324), (Start: 6 @38300 has 35 MA's), (12, 38252),

Gene: Ugenie5\_59 Start: 39861, Stop: 39682, Start Num: 7

Candidate Starts for Ugenie5\_59:

(1, 40005), (Start: 7 @39861 has 26 MA's), (9, 39822), (11, 39816), (16, 39744), (20, 39699),

Gene: Vanisoa\_62 Start: 40555, Stop: 40370, Start Num: 7

Candidate Starts for Vanisoa\_62:

(1, 40699), (Start: 7 @40555 has 26 MA's), (9, 40516), (16, 40438), (20, 40393), (21, 40384),

Gene: VohminGhazi\_62 Start: 38088, Stop: 37933, Start Num: 6

Candidate Starts for VohminGhazi\_62:

(4, 38112), (Start: 6 @38088 has 35 MA's), (12, 38040),

Gene: Wiks\_62 Start: 38202, Stop: 38047, Start Num: 6

Candidate Starts for Wiks\_62:

(4, 38226), (Start: 6 @38202 has 35 MA's), (12, 38154),

Gene: WunderPhul\_63 Start: 38200, Stop: 38045, Start Num: 6

Candidate Starts for WunderPhul\_63:

(4, 38224), (Start: 6 @38200 has 35 MA's), (12, 38152),

Gene: Yecey3\_63 Start: 39447, Stop: 39271, Start Num: 7

Candidate Starts for Yecey3\_63:

(1, 39591), (Start: 7 @39447 has 26 MA's), (14, 39348), (16, 39333), (20, 39288),

Gene: Yokurt\_62 Start: 38202, Stop: 38047, Start Num: 6

Candidate Starts for Yokurt\_62:

(4, 38226), (Start: 6 @38202 has 35 MA's), (12, 38154),

Gene: Zaka\_63 Start: 38202, Stop: 38047, Start Num: 6

Candidate Starts for Zaka\_63:

(4, 38226), (Start: 6 @38202 has 35 MA's), (12, 38154),

Gene: Zulu\_64 Start: 38580, Stop: 38425, Start Num: 6

Candidate Starts for Zulu\_64:

(4, 38604), (Start: 6 @38580 has 35 MA's), (12, 38532),