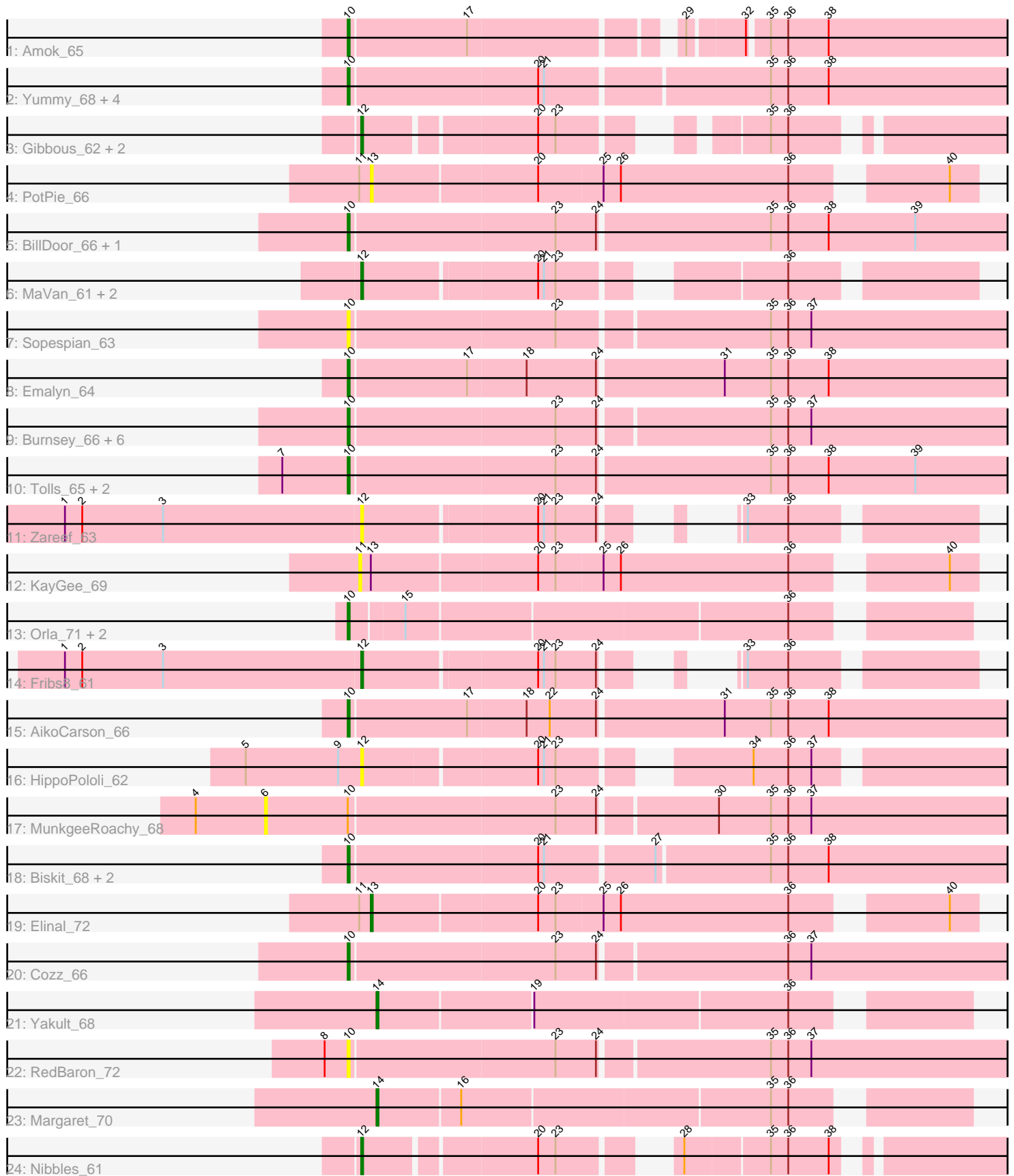


# Pham 153293



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 153293 Report

This analysis was run 04/28/24 on database version 559.

Pham number 153293 has 45 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Amok\_65
- Track 2 : Yummy\_68, Buttrmlkdreams\_68, Troje\_68, Horseradish\_68, SweatNTears\_68
- Track 3 : Gibbous\_62, Cleo\_58, Dre3\_62
- Track 4 : PotPie\_66
- Track 5 : BillDoor\_66, AndPeggy\_59
- Track 6 : MaVan\_61, Azira\_61, Survivors\_63
- Track 7 : Sopespian\_63
- Track 8 : Emalyn\_64
- Track 9 : Burnsey\_66, GoldHunter\_68, Quasar\_67, Agatha\_67, Nina\_66, Elliott\_66, PsychoKiller\_65
- Track 10 : Tolls\_65, Yarn\_60, SteamedHams\_64
- Track 11 : Zareef\_63
- Track 12 : KayGee\_69
- Track 13 : Orla\_71, Hexbug\_70, Nodigi\_70
- Track 14 : Fribs8\_61
- Track 15 : AikoCarson\_66
- Track 16 : HippoPololi\_62
- Track 17 : MunkgeeRoachy\_68
- Track 18 : Biskit\_68, SketchMex\_66, MScarn\_70
- Track 19 : Elinal\_72
- Track 20 : Cozz\_66
- Track 21 : Yakult\_68
- Track 22 : RedBaron\_72
- Track 23 : Margaret\_70
- Track 24 : Nibbles\_61

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

The start number called the most often in the published annotations is 10, it was called in 24 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agatha\_67, AikoCarson\_66, Amok\_65, AndPeggy\_59, BillDoor\_66, Biskit\_68, Burnsey\_66, Buttrmlkdreams\_68, Cozz\_66, Elliott\_66, Emalyn\_64, GoldHunter\_68, Hexbug\_70, Horseradish\_68, MScarn\_70, Nina\_66, Nodigi\_70, Orla\_71, PsychoKiller\_65, Quasar\_67, RedBaron\_72, SketchMex\_66, Sopespian\_63, SteamedHams\_64, SweatNTears\_68, Tolls\_65, Troje\_68, Yarn\_60, Yummy\_68,

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

- MunkgeeRoachy\_68,

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

- Azira\_61, Cleo\_58, Dre3\_62, Elinal\_72, Fribs8\_61, Gibbous\_62, HippoPololi\_62, KayGee\_69, MaVan\_61, Margaret\_70, Nibbles\_61, PotPie\_66, Survivors\_63, Yakult\_68, Zareef\_63,

### Summary by start number:

Start 6:

- Found in 1 of 45 ( 2.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MunkgeeRoachy\_68 (CT),

Start 10:

- Found in 30 of 45 ( 66.7% ) of genes in pham
- Manual Annotations of this start: 24 of 35
- Called 96.7% of time when present
- Phage (with cluster) where this start called: Agatha\_67 (CT), AikoCarson\_66 (CT), Amok\_65 (CT), AndPeggy\_59 (CT), BillDoor\_66 (CT), Biskit\_68 (CT), Burnsey\_66 (CT), Buttrmlkdreams\_68 (CT), Cozz\_66 (CT), Elliott\_66 (CT), Emalyn\_64 (CT), GoldHunter\_68 (CT), Hexbug\_70 (CT), Horseradish\_68 (CT), MScarn\_70 (CT), Nina\_66 (CT), Nodigi\_70 (CT), Orla\_71 (CT), PsychoKiller\_65 (CT), Quasar\_67 (CT), RedBaron\_72 (CT), SketchMex\_66 (CT), Sopespian\_63 (CT), SteamedHams\_64 (CT), SweatNTears\_68 (CT), Tolls\_65 (CT), Troje\_68 (CT), Yarn\_60 (CT), Yummy\_68 (CT),

Start 11:

- Found in 3 of 45 ( 6.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: KayGee\_69 (CT),

Start 12:

- Found in 10 of 45 ( 22.2% ) of genes in pham
- Manual Annotations of this start: 8 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azira\_61 (CT), Cleo\_58 (CT), Dre3\_62 (CT), Fribs8\_61 (CT), Gibbous\_62 (CT), HippoPololi\_62 (CT), MaVan\_61 (CT), Nibbles\_61 (CT), Survivors\_63 (CT), Zareef\_63 (CT),

Start 13:

- Found in 3 of 45 ( 6.7% ) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 66.7% of time when present

- Phage (with cluster) where this start called: Elinal\_72 (CT), PotPie\_66 (CT),

Start 14:

- Found in 2 of 45 ( 4.4% ) of genes in pham
- Manual Annotations of this start: 2 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Margaret\_70 (CT), Yakult\_68 (CT),

### **Summary by clusters:**

There is one cluster represented in this pham: CT

Info for manual annotations of cluster CT:

- Start number 10 was manually annotated 24 times for cluster CT.
- Start number 12 was manually annotated 8 times for cluster CT.
- Start number 13 was manually annotated 1 time for cluster CT.
- Start number 14 was manually annotated 2 times for cluster CT.

### **Gene Information:**

Gene: Agatha\_67 Start: 44923, Stop: 45270, Start Num: 10

Candidate Starts for Agatha\_67:

(Start: 10 @44923 has 24 MA's), (23, 45028), (24, 45049), (35, 45133), (36, 45142), (37, 45154),

Gene: AikoCarson\_66 Start: 43861, Stop: 44205, Start Num: 10

Candidate Starts for AikoCarson\_66:

(Start: 10 @43861 has 24 MA's), (17, 43921), (18, 43951), (22, 43963), (24, 43987), (31, 44050), (35, 44074), (36, 44083), (38, 44104),

Gene: Amok\_65 Start: 43922, Stop: 44245, Start Num: 10

Candidate Starts for Amok\_65:

(Start: 10 @43922 has 24 MA's), (17, 43982), (29, 44078), (32, 44105), (35, 44114), (36, 44123), (38, 44144),

Gene: AndPeggy\_59 Start: 42903, Stop: 43259, Start Num: 10

Candidate Starts for AndPeggy\_59:

(Start: 10 @42903 has 24 MA's), (23, 43008), (24, 43029), (35, 43116), (36, 43125), (38, 43146), (39, 43191),

Gene: Azira\_61 Start: 43329, Stop: 43604, Start Num: 12

Candidate Starts for Azira\_61:

(Start: 12 @43329 has 8 MA's), (20, 43416), (21, 43419), (23, 43425), (36, 43518),

Gene: BillDoor\_66 Start: 43170, Stop: 43514, Start Num: 10

Candidate Starts for BillDoor\_66:

(Start: 10 @43170 has 24 MA's), (23, 43275), (24, 43296), (35, 43383), (36, 43392), (38, 43413), (39, 43458),

Gene: Biskit\_68 Start: 44427, Stop: 44768, Start Num: 10

Candidate Starts for Biskit\_68:

(Start: 10 @44427 has 24 MA's), (20, 44523), (21, 44526), (27, 44580), (35, 44637), (36, 44646), (38, 44667),

Gene: Burnsey\_66 Start: 44510, Stop: 44857, Start Num: 10

Candidate Starts for Burnsey\_66:

(Start: 10 @44510 has 24 MA's), (23, 44615), (24, 44636), (35, 44720), (36, 44729), (37, 44741),

Gene: Buttrmlkdreams\_68 Start: 44596, Stop: 44937, Start Num: 10

Candidate Starts for Buttrmlkdreams\_68:

(Start: 10 @44596 has 24 MA's), (20, 44692), (21, 44695), (35, 44806), (36, 44815), (38, 44836),

Gene: Cleo\_58 Start: 42745, Stop: 43035, Start Num: 12

Candidate Starts for Cleo\_58:

(Start: 12 @42745 has 8 MA's), (20, 42829), (23, 42838), (35, 42913), (36, 42922),

Gene: Cozz\_66 Start: 44925, Stop: 45272, Start Num: 10

Candidate Starts for Cozz\_66:

(Start: 10 @44925 has 24 MA's), (23, 45030), (24, 45051), (36, 45144), (37, 45156),

Gene: Dre3\_62 Start: 43722, Stop: 44006, Start Num: 12

Candidate Starts for Dre3\_62:

(Start: 12 @43722 has 8 MA's), (20, 43806), (23, 43815), (35, 43890), (36, 43899),

Gene: Elinal\_72 Start: 46702, Stop: 46995, Start Num: 13

Candidate Starts for Elinal\_72:

(11, 46696), (Start: 13 @46702 has 1 MA's), (20, 46786), (23, 46795), (25, 46819), (26, 46828), (36, 46915), (40, 46981),

Gene: Elliott\_66 Start: 44394, Stop: 44741, Start Num: 10

Candidate Starts for Elliott\_66:

(Start: 10 @44394 has 24 MA's), (23, 44499), (24, 44520), (35, 44604), (36, 44613), (37, 44625),

Gene: Emalyn\_64 Start: 42590, Stop: 42934, Start Num: 10

Candidate Starts for Emalyn\_64:

(Start: 10 @42590 has 24 MA's), (17, 42650), (18, 42680), (24, 42716), (31, 42779), (35, 42803), (36, 42812), (38, 42833),

Gene: Fribs8\_61 Start: 43989, Stop: 44237, Start Num: 12

Candidate Starts for Fribs8\_61:

(1, 43836), (2, 43845), (3, 43887), (Start: 12 @43989 has 8 MA's), (20, 44076), (21, 44079), (23, 44085), (24, 44106), (33, 44130), (36, 44151),

Gene: Gibbous\_62 Start: 43722, Stop: 44006, Start Num: 12

Candidate Starts for Gibbous\_62:

(Start: 12 @43722 has 8 MA's), (20, 43806), (23, 43815), (35, 43890), (36, 43899),

Gene: GoldHunter\_68 Start: 44914, Stop: 45261, Start Num: 10

Candidate Starts for GoldHunter\_68:

(Start: 10 @44914 has 24 MA's), (23, 45019), (24, 45040), (35, 45124), (36, 45133), (37, 45145),

Gene: Hexbug\_70 Start: 45712, Stop: 46008, Start Num: 10

Candidate Starts for Hexbug\_70:

(Start: 10 @45712 has 24 MA's), (15, 45739), (36, 45931),

Gene: HippoPololi\_62 Start: 42890, Stop: 43195, Start Num: 12

Candidate Starts for HippoPololi\_62:

(5, 42830), (9, 42878), (Start: 12 @42890 has 8 MA's), (20, 42977), (21, 42980), (23, 42986), (34, 43064), (36, 43082), (37, 43094),

Gene: Horseradish\_68 Start: 44360, Stop: 44701, Start Num: 10

Candidate Starts for Horseradish\_68:

(Start: 10 @44360 has 24 MA's), (20, 44456), (21, 44459), (35, 44570), (36, 44579), (38, 44600),

Gene: KayGee\_69 Start: 46683, Stop: 46982, Start Num: 11

Candidate Starts for KayGee\_69:

(11, 46683), (Start: 13 @46689 has 1 MA's), (20, 46773), (23, 46782), (25, 46806), (26, 46815), (36, 46902), (40, 46968),

Gene: MScarn\_70 Start: 44274, Stop: 44615, Start Num: 10

Candidate Starts for MScarn\_70:

(Start: 10 @44274 has 24 MA's), (20, 44370), (21, 44373), (27, 44427), (35, 44484), (36, 44493), (38, 44514),

Gene: MaVan\_61 Start: 43359, Stop: 43634, Start Num: 12

Candidate Starts for MaVan\_61:

(Start: 12 @43359 has 8 MA's), (20, 43446), (21, 43449), (23, 43455), (36, 43548),

Gene: Margaret\_70 Start: 44928, Stop: 45212, Start Num: 14

Candidate Starts for Margaret\_70:

(Start: 14 @44928 has 2 MA's), (16, 44970), (35, 45126), (36, 45135),

Gene: MunkgeeRoachy\_68 Start: 44197, Stop: 44586, Start Num: 6

Candidate Starts for MunkgeeRoachy\_68:

(4, 44161), (6, 44197), (Start: 10 @44239 has 24 MA's), (23, 44344), (24, 44365), (30, 44422), (35, 44449), (36, 44458), (37, 44470),

Gene: Nibbles\_61 Start: 43241, Stop: 43534, Start Num: 12

Candidate Starts for Nibbles\_61:

(Start: 12 @43241 has 8 MA's), (20, 43325), (23, 43334), (28, 43376), (35, 43418), (36, 43427), (38, 43448),

Gene: Nina\_66 Start: 44997, Stop: 45344, Start Num: 10

Candidate Starts for Nina\_66:

(Start: 10 @44997 has 24 MA's), (23, 45102), (24, 45123), (35, 45207), (36, 45216), (37, 45228),

Gene: Nodigi\_70 Start: 45733, Stop: 46029, Start Num: 10

Candidate Starts for Nodigi\_70:

(Start: 10 @45733 has 24 MA's), (15, 45760), (36, 45952),

Gene: Orla\_71 Start: 45864, Stop: 46160, Start Num: 10

Candidate Starts for Orla\_71:

(Start: 10 @45864 has 24 MA's), (15, 45891), (36, 46083),

Gene: PotPie\_66 Start: 46599, Stop: 46892, Start Num: 13

Candidate Starts for PotPie\_66:

(11, 46593), (Start: 13 @46599 has 1 MA's), (20, 46683), (25, 46716), (26, 46725), (36, 46812), (40, 46878),

Gene: PsychoKiller\_65 Start: 44395, Stop: 44742, Start Num: 10

Candidate Starts for PsychoKiller\_65:

(Start: 10 @44395 has 24 MA's), (23, 44500), (24, 44521), (35, 44605), (36, 44614), (37, 44626),

Gene: Quasar\_67 Start: 45284, Stop: 45631, Start Num: 10

Candidate Starts for Quasar\_67:

(Start: 10 @45284 has 24 MA's), (23, 45389), (24, 45410), (35, 45494), (36, 45503), (37, 45515),

Gene: RedBaron\_72 Start: 45821, Stop: 46168, Start Num: 10

Candidate Starts for RedBaron\_72:

(8, 45809), (Start: 10 @45821 has 24 MA's), (23, 45926), (24, 45947), (35, 46031), (36, 46040), (37, 46052),

Gene: SketchMex\_66 Start: 44427, Stop: 44768, Start Num: 10

Candidate Starts for SketchMex\_66:

(Start: 10 @44427 has 24 MA's), (20, 44523), (21, 44526), (27, 44580), (35, 44637), (36, 44646), (38, 44667),

Gene: Sopespian\_63 Start: 44396, Stop: 44743, Start Num: 10

Candidate Starts for Sopespian\_63:

(Start: 10 @44396 has 24 MA's), (23, 44501), (35, 44606), (36, 44615), (37, 44627),

Gene: SteamedHams\_64 Start: 42880, Stop: 43224, Start Num: 10

Candidate Starts for SteamedHams\_64:

(7, 42847), (Start: 10 @42880 has 24 MA's), (23, 42985), (24, 43006), (35, 43093), (36, 43102), (38, 43123), (39, 43168),

Gene: Survivors\_63 Start: 43394, Stop: 43669, Start Num: 12

Candidate Starts for Survivors\_63:

(Start: 12 @43394 has 8 MA's), (20, 43481), (21, 43484), (23, 43490), (36, 43583),

Gene: SweatNTears\_68 Start: 44522, Stop: 44863, Start Num: 10

Candidate Starts for SweatNTears\_68:

(Start: 10 @44522 has 24 MA's), (20, 44618), (21, 44621), (35, 44732), (36, 44741), (38, 44762),

Gene: Tolls\_65 Start: 43151, Stop: 43495, Start Num: 10

Candidate Starts for Tolls\_65:

(7, 43118), (Start: 10 @43151 has 24 MA's), (23, 43256), (24, 43277), (35, 43364), (36, 43373), (38, 43394), (39, 43439),

Gene: Troje\_68 Start: 44497, Stop: 44838, Start Num: 10

Candidate Starts for Troje\_68:

(Start: 10 @44497 has 24 MA's), (20, 44593), (21, 44596), (35, 44707), (36, 44716), (38, 44737),

Gene: Yakult\_68 Start: 45428, Stop: 45712, Start Num: 14

Candidate Starts for Yakult\_68:

(Start: 14 @45428 has 2 MA's), (19, 45506), (36, 45635),

Gene: Yarn\_60 Start: 42908, Stop: 43252, Start Num: 10

Candidate Starts for Yarn\_60:

(7, 42875), (Start: 10 @42908 has 24 MA's), (23, 43013), (24, 43034), (35, 43121), (36, 43130), (38, 43151), (39, 43196),

Gene: Yummy\_68 Start: 44474, Stop: 44815, Start Num: 10

Candidate Starts for Yummy\_68:

(Start: 10 @44474 has 24 MA's), (20, 44570), (21, 44573), (35, 44684), (36, 44693), (38, 44714),

Gene: Zareef\_63 Start: 43331, Stop: 43579, Start Num: 12

Candidate Starts for Zareef\_63:

(1, 43178), (2, 43187), (3, 43229), (Start: 12 @43331 has 8 MA's), (20, 43418), (21, 43421), (23, 43427), (24, 43448), (33, 43472), (36, 43493),