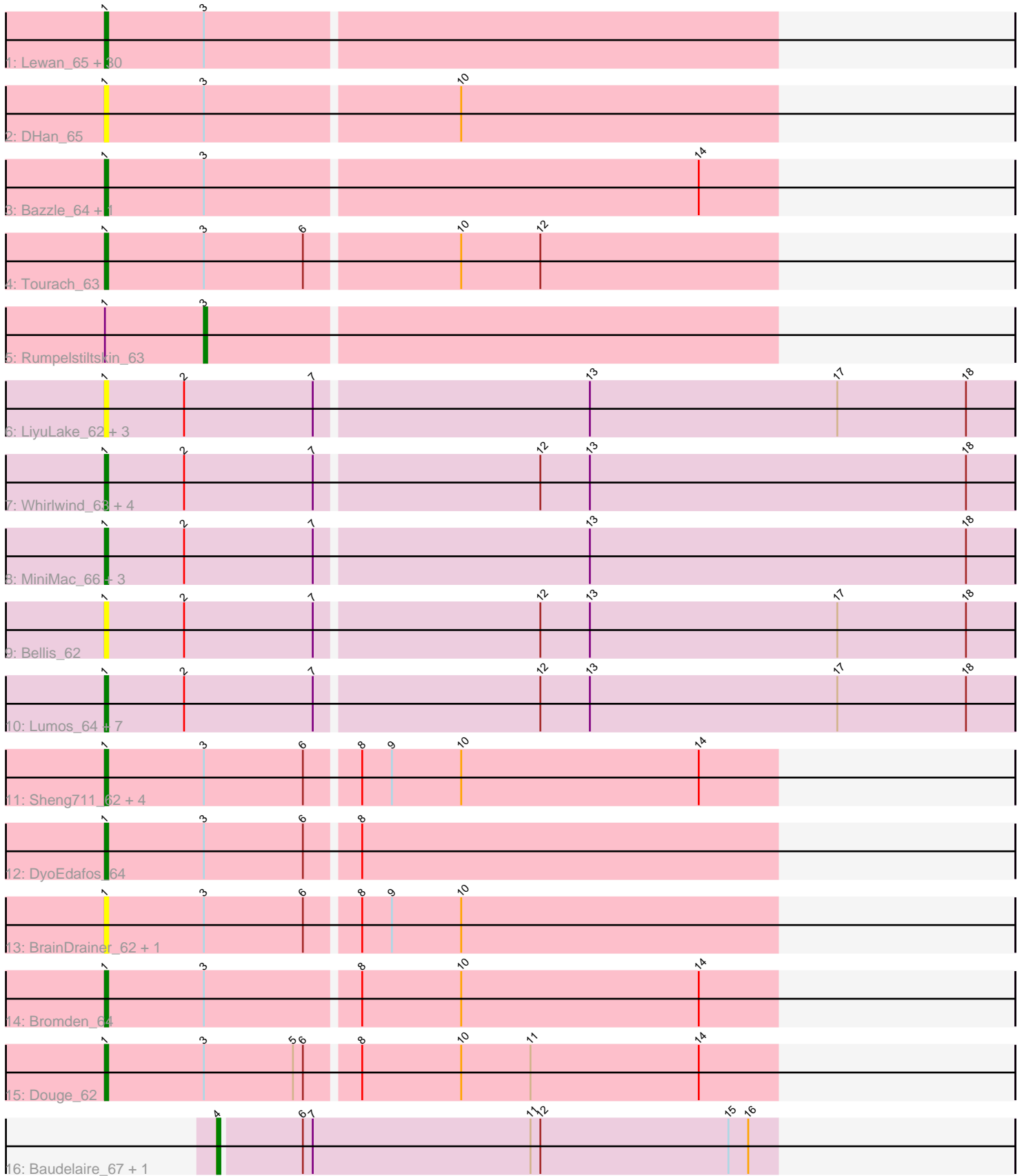


Pham 196509



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 196509 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196509 has 70 members, 20 are drafts.

Phages represented in each track:

- Track 1 : Lewan\_65, Crossroads\_64, Finemlucis\_64, Breezona\_64, BobsGarage\_64, GuuelaD\_63, Soap141\_64, Kahlid\_64, Nicholasp3\_64, Claus\_64, Netyap\_65, Faith1\_64, BigCheese\_64, MkaliMitinis3\_65, Baoshan\_62, Sarshaun\_64, Loadrie\_63, Miley16\_64, DanBing\_64, Wigglewiggle\_64, DrSeegs\_64, Vetrix\_64, ZhongYanYuan\_62, LilDestine\_64, Itos\_63, Zakai\_65, Wilder\_65, Hafay\_65, Gardann\_65, Winky\_64, Gabriela\_61
- Track 2 : DHan\_65
- Track 3 : Bazzle\_64, Archie\_64
- Track 4 : Tourach\_63
- Track 5 : Rumpelstiltskin\_63
- Track 6 : LiyuLake\_62, BourbonZero\_63, Ellson\_62, KirDoubleO7\_61
- Track 7 : Whirlwind\_63, Samty\_63, Finnry\_63, Moostard\_62, Krypton555\_64
- Track 8 : MiniMac\_66, DuncansLeg\_63, MiniLon\_66, Lolly9\_62
- Track 9 : Bellis\_62
- Track 10 : Lumos\_64, Jubie\_62, MsGreen\_63, Snenia\_62, Nicholas\_62, Jobypre\_63, Clautastrophe\_62, Kingsolomon\_62
- Track 11 : Sheng711\_62, Quby\_62, Chaser\_60, Douzhi\_62, PYPDinur\_60
- Track 12 : DyoEdafos\_64
- Track 13 : BrainDrainer\_62, FarmResident\_64
- Track 14 : Bromden\_64
- Track 15 : Douge\_62
- Track 16 : Baudelaire\_67, Aegeus\_67

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

The start number called the most often in the published annotations is 1, it was called in 47 of the 50 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Archie\_64, Baoshan\_62, Bazzle\_64, Bellis\_62, BigCheese\_64, BobsGarage\_64, BourbonZero\_63, BrainDrainer\_62, Breezona\_64, Bromden\_64, Chaser\_60, Claus\_64, Clautastrophe\_62, Crossroads\_64, DHan\_65, DanBing\_64, Douge\_62, Douzhi\_62, DrSeegs\_64, DuncansLeg\_63, DyoEdafos\_64, Ellson\_62, Faith1\_64, FarmResident\_64, Finemlucis\_64, Finnry\_63, Gabriela\_61, Gardann\_65,

GuuelaD\_63, Hafay\_65, Itos\_63, Jobypre\_63, Jubie\_62, Kahlid\_64, Kingsolomon\_62, KirDoubleO7\_61, Krypton555\_64, Lewan\_65, LilDestine\_64, LiyuLake\_62, Loadrie\_63, Lolly9\_62, Lumos\_64, Miley16\_64, MiniLon\_66, MiniMac\_66, MkaliMitinis3\_65, Moostard\_62, MsGreen\_63, Netyap\_65, Nicholas\_62, Nicholasp3\_64, PYPDinur\_60, Quby\_62, Samty\_63, Sarshaun\_64, Sheng711\_62, Snenia\_62, Soap141\_64, Tourach\_63, Vetrix\_64, Whirlwind\_63, Wigglewiggle\_64, Wilder\_65, Winky\_64, Zakai\_65, ZhongYanYuan\_62,

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

- Rumpelstiltskin\_63,

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

- Aegeus\_67, Baudelaire\_67,

### Summary by start number:

Start 1:

- Found in 68 of 70 ( 97.1% ) of genes in pham
- Manual Annotations of this start: 47 of 50
- Called 98.5% of time when present
- Phage (with cluster) where this start called: Archie\_64 (L2), Baoshan\_62 (L2), Bazzle\_64 (L2), Bellis\_62 (L3), BigCheese\_64 (L2), BobsGarage\_64 (L2), BourbonZero\_63 (L3), BrainDrainer\_62 (L4), Breezona\_64 (L2), Bromden\_64 (L4), Chaser\_60 (L4), Claus\_64 (L2), Clautastrophe\_62 (L3), Crossroads\_64 (L2), DHan\_65 (L2), DanBing\_64 (L2), Douge\_62 (L4), Douzhi\_62 (L4), DrSeegs\_64 (L2), DuncansLeg\_63 (L3), DyoEdafos\_64 (L4), Ellson\_62 (L3), Faith1\_64 (L2), FarmResident\_64 (L4), Finemlucis\_64 (L2), Finnry\_63 (L3), Gabriela\_61 (L2), Gardann\_65 (L2), GuuelaD\_63 (L2), Hafay\_65 (L2), Itos\_63 (L2), Jobypre\_63 (L3), Jubie\_62 (L3), Kahlid\_64 (L2), Kingsolomon\_62 (L3), KirDoubleO7\_61 (L3), Krypton555\_64 (L3), Lewan\_65 (L2), LilDestine\_64 (L2), LiyuLake\_62 (L3), Loadrie\_63 (L2), Lolly9\_62 (L3), Lumos\_64 (L3), Miley16\_64 (L2), MiniLon\_66 (L3), MiniMac\_66 (L3), MkaliMitinis3\_65 (L2), Moostard\_62 (L3), MsGreen\_63 (L3), Netyap\_65 (L2), Nicholas\_62 (L3), Nicholasp3\_64 (L2), PYPDinur\_60 (L4), Quby\_62 (L4), Samty\_63 (L3), Sarshaun\_64 (L2), Sheng711\_62 (L4), Snenia\_62 (L3), Soap141\_64 (L2), Tourach\_63 (L2), Vetrix\_64 (L2), Whirlwind\_63 (L3), Wigglewiggle\_64 (L2), Wilder\_65 (L2), Winky\_64 (L2), Zakai\_65 (L2), ZhongYanYuan\_62 (L2),

Start 3:

- Found in 46 of 70 ( 65.7% ) of genes in pham
- Manual Annotations of this start: 1 of 50
- Called 2.2% of time when present
- Phage (with cluster) where this start called: Rumpelstiltskin\_63 (L2),

Start 4:

- Found in 2 of 70 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 2 of 50
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aegeus\_67 (L5), Baudelaire\_67 (L5),

### Summary by clusters:

There are 4 clusters represented in this pham: L4, L5, L2, L3,

Info for manual annotations of cluster L2:

- Start number 1 was manually annotated 27 times for cluster L2.
- Start number 3 was manually annotated 1 time for cluster L2.

Info for manual annotations of cluster L3:

- Start number 1 was manually annotated 16 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 1 was manually annotated 4 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 4 was manually annotated 2 times for cluster L5.

### **Gene Information:**

Gene: Aegeus\_67 Start: 45507, Stop: 45674, Start Num: 4

Candidate Starts for Aegeus\_67:

(Start: 4 @45507 has 2 MA's), (6, 45531), (7, 45534), (11, 45600), (12, 45603), (15, 45660), (16, 45666),

Gene: Archie\_64 Start: 45720, Stop: 45920, Start Num: 1

Candidate Starts for Archie\_64:

(Start: 1 @45720 has 47 MA's), (Start: 3 @45750 has 1 MA's), (14, 45897),

Gene: Baoshan\_62 Start: 45422, Stop: 45622, Start Num: 1

Candidate Starts for Baoshan\_62:

(Start: 1 @45422 has 47 MA's), (Start: 3 @45452 has 1 MA's),

Gene: Baudelaire\_67 Start: 45507, Stop: 45674, Start Num: 4

Candidate Starts for Baudelaire\_67:

(Start: 4 @45507 has 2 MA's), (6, 45531), (7, 45534), (11, 45600), (12, 45603), (15, 45660), (16, 45666),

Gene: Bazzle\_64 Start: 45790, Stop: 45990, Start Num: 1

Candidate Starts for Bazzle\_64:

(Start: 1 @45790 has 47 MA's), (Start: 3 @45820 has 1 MA's), (14, 45967),

Gene: Bellis\_62 Start: 45533, Stop: 45805, Start Num: 1

Candidate Starts for Bellis\_62:

(Start: 1 @45533 has 47 MA's), (2, 45557), (7, 45596), (12, 45662), (13, 45677), (17, 45752), (18, 45791),

Gene: BigCheese\_64 Start: 45479, Stop: 45679, Start Num: 1

Candidate Starts for BigCheese\_64:

(Start: 1 @45479 has 47 MA's), (Start: 3 @45509 has 1 MA's),

Gene: BobsGarage\_64 Start: 45479, Stop: 45679, Start Num: 1

Candidate Starts for BobsGarage\_64:

(Start: 1 @45479 has 47 MA's), (Start: 3 @45509 has 1 MA's),

Gene: BourbonZero\_63 Start: 45578, Stop: 45850, Start Num: 1  
Candidate Starts for BourbonZero\_63:  
(Start: 1 @45578 has 47 MA's), (2, 45602), (7, 45641), (13, 45722), (17, 45797), (18, 45836),

Gene: BrainDrainer\_62 Start: 44348, Stop: 44548, Start Num: 1  
Candidate Starts for BrainDrainer\_62:  
(Start: 1 @44348 has 47 MA's), (Start: 3 @44378 has 1 MA's), (6, 44408), (8, 44423), (9, 44432), (10, 44453),

Gene: Breezona\_64 Start: 45479, Stop: 45679, Start Num: 1  
Candidate Starts for Breezona\_64:  
(Start: 1 @45479 has 47 MA's), (Start: 3 @45509 has 1 MA's),

Gene: Bromden\_64 Start: 45458, Stop: 45658, Start Num: 1  
Candidate Starts for Bromden\_64:  
(Start: 1 @45458 has 47 MA's), (Start: 3 @45488 has 1 MA's), (8, 45533), (10, 45563), (14, 45635),

Gene: Chaser\_60 Start: 44120, Stop: 44320, Start Num: 1  
Candidate Starts for Chaser\_60:  
(Start: 1 @44120 has 47 MA's), (Start: 3 @44150 has 1 MA's), (6, 44180), (8, 44195), (9, 44204), (10, 44225), (14, 44297),

Gene: Claus\_64 Start: 45560, Stop: 45760, Start Num: 1  
Candidate Starts for Claus\_64:  
(Start: 1 @45560 has 47 MA's), (Start: 3 @45590 has 1 MA's),

Gene: Clautastrophe\_62 Start: 45530, Stop: 45802, Start Num: 1  
Candidate Starts for Clautastrophe\_62:  
(Start: 1 @45530 has 47 MA's), (2, 45554), (7, 45593), (12, 45659), (13, 45674), (17, 45749), (18, 45788),

Gene: Crossroads\_64 Start: 45557, Stop: 45757, Start Num: 1  
Candidate Starts for Crossroads\_64:  
(Start: 1 @45557 has 47 MA's), (Start: 3 @45587 has 1 MA's),

Gene: DHan\_65 Start: 45460, Stop: 45660, Start Num: 1  
Candidate Starts for DHan\_65:  
(Start: 1 @45460 has 47 MA's), (Start: 3 @45490 has 1 MA's), (10, 45565),

Gene: DanBing\_64 Start: 45429, Stop: 45629, Start Num: 1  
Candidate Starts for DanBing\_64:  
(Start: 1 @45429 has 47 MA's), (Start: 3 @45459 has 1 MA's),

Gene: Douge\_62 Start: 44126, Stop: 44326, Start Num: 1  
Candidate Starts for Douge\_62:  
(Start: 1 @44126 has 47 MA's), (Start: 3 @44156 has 1 MA's), (5, 44183), (6, 44186), (8, 44201), (10, 44231), (11, 44252), (14, 44303),

Gene: Douzhi\_62 Start: 44179, Stop: 44379, Start Num: 1  
Candidate Starts for Douzhi\_62:  
(Start: 1 @44179 has 47 MA's), (Start: 3 @44209 has 1 MA's), (6, 44239), (8, 44254), (9, 44263), (10, 44284), (14, 44356),

Gene: DrSeegs\_64 Start: 45479, Stop: 45679, Start Num: 1  
Candidate Starts for DrSeegs\_64:  
(Start: 1 @45479 has 47 MA's), (Start: 3 @45509 has 1 MA's),

Gene: DuncansLeg\_63 Start: 45566, Stop: 45838, Start Num: 1  
Candidate Starts for DuncansLeg\_63:  
(Start: 1 @45566 has 47 MA's), (2, 45590), (7, 45629), (13, 45710), (18, 45824),

Gene: DyoEdafos\_64 Start: 44399, Stop: 44599, Start Num: 1  
Candidate Starts for DyoEdafos\_64:  
(Start: 1 @44399 has 47 MA's), (Start: 3 @44429 has 1 MA's), (6, 44459), (8, 44474),

Gene: Ellson\_62 Start: 45594, Stop: 45866, Start Num: 1  
Candidate Starts for Ellson\_62:  
(Start: 1 @45594 has 47 MA's), (2, 45618), (7, 45657), (13, 45738), (17, 45813), (18, 45852),

Gene: Faith1\_64 Start: 45479, Stop: 45679, Start Num: 1  
Candidate Starts for Faith1\_64:  
(Start: 1 @45479 has 47 MA's), (Start: 3 @45509 has 1 MA's),

Gene: FarmResident\_64 Start: 44142, Stop: 44342, Start Num: 1  
Candidate Starts for FarmResident\_64:  
(Start: 1 @44142 has 47 MA's), (Start: 3 @44172 has 1 MA's), (6, 44202), (8, 44217), (9, 44226), (10, 44247),

Gene: Finemlucis\_64 Start: 45800, Stop: 46000, Start Num: 1  
Candidate Starts for Finemlucis\_64:  
(Start: 1 @45800 has 47 MA's), (Start: 3 @45830 has 1 MA's),

Gene: Finnry\_63 Start: 45794, Stop: 46066, Start Num: 1  
Candidate Starts for Finnry\_63:  
(Start: 1 @45794 has 47 MA's), (2, 45818), (7, 45857), (12, 45923), (13, 45938), (18, 46052),

Gene: Gabriela\_61 Start: 43929, Stop: 44129, Start Num: 1  
Candidate Starts for Gabriela\_61:  
(Start: 1 @43929 has 47 MA's), (Start: 3 @43959 has 1 MA's),

Gene: Gardann\_65 Start: 45515, Stop: 45715, Start Num: 1  
Candidate Starts for Gardann\_65:  
(Start: 1 @45515 has 47 MA's), (Start: 3 @45545 has 1 MA's),

Gene: GuuelaD\_63 Start: 45594, Stop: 45794, Start Num: 1  
Candidate Starts for GuuelaD\_63:  
(Start: 1 @45594 has 47 MA's), (Start: 3 @45624 has 1 MA's),

Gene: Hafay\_65 Start: 45583, Stop: 45783, Start Num: 1  
Candidate Starts for Hafay\_65:  
(Start: 1 @45583 has 47 MA's), (Start: 3 @45613 has 1 MA's),

Gene: Itos\_63 Start: 44385, Stop: 44585, Start Num: 1  
Candidate Starts for Itos\_63:  
(Start: 1 @44385 has 47 MA's), (Start: 3 @44415 has 1 MA's),

Gene: Jobypre\_63 Start: 45530, Stop: 45802, Start Num: 1  
Candidate Starts for Jobypre\_63:  
(Start: 1 @45530 has 47 MA's), (2, 45554), (7, 45593), (12, 45659), (13, 45674), (17, 45749), (18, 45788),

Gene: Jubie\_62 Start: 45665, Stop: 45937, Start Num: 1  
Candidate Starts for Jubie\_62:  
(Start: 1 @45665 has 47 MA's), (2, 45689), (7, 45728), (12, 45794), (13, 45809), (17, 45884), (18, 45923),

Gene: Kahlid\_64 Start: 45485, Stop: 45685, Start Num: 1  
Candidate Starts for Kahlid\_64:  
(Start: 1 @45485 has 47 MA's), (Start: 3 @45515 has 1 MA's),

Gene: Kingsolomon\_62 Start: 45537, Stop: 45809, Start Num: 1  
Candidate Starts for Kingsolomon\_62:  
(Start: 1 @45537 has 47 MA's), (2, 45561), (7, 45600), (12, 45666), (13, 45681), (17, 45756), (18, 45795),

Gene: KirDoubleO7\_61 Start: 45568, Stop: 45840, Start Num: 1  
Candidate Starts for KirDoubleO7\_61:  
(Start: 1 @45568 has 47 MA's), (2, 45592), (7, 45631), (13, 45712), (17, 45787), (18, 45826),

Gene: Krypton555\_64 Start: 45762, Stop: 46034, Start Num: 1  
Candidate Starts for Krypton555\_64:  
(Start: 1 @45762 has 47 MA's), (2, 45786), (7, 45825), (12, 45891), (13, 45906), (18, 46020),

Gene: Lewan\_65 Start: 45539, Stop: 45739, Start Num: 1  
Candidate Starts for Lewan\_65:  
(Start: 1 @45539 has 47 MA's), (Start: 3 @45569 has 1 MA's),

Gene: LilDestine\_64 Start: 45512, Stop: 45712, Start Num: 1  
Candidate Starts for LilDestine\_64:  
(Start: 1 @45512 has 47 MA's), (Start: 3 @45542 has 1 MA's),

Gene: LiyuLake\_62 Start: 45584, Stop: 45856, Start Num: 1  
Candidate Starts for LiyuLake\_62:  
(Start: 1 @45584 has 47 MA's), (2, 45608), (7, 45647), (13, 45728), (17, 45803), (18, 45842),

Gene: Loadrie\_63 Start: 45567, Stop: 45767, Start Num: 1  
Candidate Starts for Loadrie\_63:  
(Start: 1 @45567 has 47 MA's), (Start: 3 @45597 has 1 MA's),

Gene: Lolly9\_62 Start: 45358, Stop: 45630, Start Num: 1  
Candidate Starts for Lolly9\_62:  
(Start: 1 @45358 has 47 MA's), (2, 45382), (7, 45421), (13, 45502), (18, 45616),

Gene: Lumos\_64 Start: 45527, Stop: 45799, Start Num: 1  
Candidate Starts for Lumos\_64:  
(Start: 1 @45527 has 47 MA's), (2, 45551), (7, 45590), (12, 45656), (13, 45671), (17, 45746), (18, 45785),

Gene: Miley16\_64 Start: 45479, Stop: 45679, Start Num: 1

Candidate Starts for Miley16\_64:  
(Start: 1 @45479 has 47 MA's), (Start: 3 @45509 has 1 MA's),

Gene: MiniLon\_66 Start: 45359, Stop: 45631, Start Num: 1  
Candidate Starts for MiniLon\_66:  
(Start: 1 @45359 has 47 MA's), (2, 45383), (7, 45422), (13, 45503), (18, 45617),

Gene: MiniMac\_66 Start: 45357, Stop: 45629, Start Num: 1  
Candidate Starts for MiniMac\_66:  
(Start: 1 @45357 has 47 MA's), (2, 45381), (7, 45420), (13, 45501), (18, 45615),

Gene: MkaliMitinis3\_65 Start: 45551, Stop: 45751, Start Num: 1  
Candidate Starts for MkaliMitinis3\_65:  
(Start: 1 @45551 has 47 MA's), (Start: 3 @45581 has 1 MA's),

Gene: Moostard\_62 Start: 45533, Stop: 45805, Start Num: 1  
Candidate Starts for Moostard\_62:  
(Start: 1 @45533 has 47 MA's), (2, 45557), (7, 45596), (12, 45662), (13, 45677), (18, 45791),

Gene: MsGreen\_63 Start: 45530, Stop: 45802, Start Num: 1  
Candidate Starts for MsGreen\_63:  
(Start: 1 @45530 has 47 MA's), (2, 45554), (7, 45593), (12, 45659), (13, 45674), (17, 45749), (18, 45788),

Gene: Netyap\_65 Start: 45480, Stop: 45680, Start Num: 1  
Candidate Starts for Netyap\_65:  
(Start: 1 @45480 has 47 MA's), (Start: 3 @45510 has 1 MA's),

Gene: Nicholas\_62 Start: 45537, Stop: 45809, Start Num: 1  
Candidate Starts for Nicholas\_62:  
(Start: 1 @45537 has 47 MA's), (2, 45561), (7, 45600), (12, 45666), (13, 45681), (17, 45756), (18, 45795),

Gene: Nicholasp3\_64 Start: 45515, Stop: 45715, Start Num: 1  
Candidate Starts for Nicholasp3\_64:  
(Start: 1 @45515 has 47 MA's), (Start: 3 @45545 has 1 MA's),

Gene: PYPDinur\_60 Start: 44209, Stop: 44409, Start Num: 1  
Candidate Starts for PYPDinur\_60:  
(Start: 1 @44209 has 47 MA's), (Start: 3 @44239 has 1 MA's), (6, 44269), (8, 44284), (9, 44293), (10, 44314), (14, 44386),

Gene: Quby\_62 Start: 44107, Stop: 44307, Start Num: 1  
Candidate Starts for Quby\_62:  
(Start: 1 @44107 has 47 MA's), (Start: 3 @44137 has 1 MA's), (6, 44167), (8, 44182), (9, 44191), (10, 44212), (14, 44284),

Gene: Rumpelstiltskin\_63 Start: 44938, Stop: 45108, Start Num: 3  
Candidate Starts for Rumpelstiltskin\_63:  
(Start: 1 @44908 has 47 MA's), (Start: 3 @44938 has 1 MA's),

Gene: Samty\_63 Start: 45538, Stop: 45810, Start Num: 1  
Candidate Starts for Samty\_63:



(Start: 1 @45538 has 47 MA's), (2, 45562), (7, 45601), (12, 45667), (13, 45682), (18, 45796),

Gene: Sarshaun\_64 Start: 45575, Stop: 45775, Start Num: 1

Candidate Starts for Sarshaun\_64:

(Start: 1 @45575 has 47 MA's), (Start: 3 @45605 has 1 MA's),

Gene: Sheng711\_62 Start: 44186, Stop: 44386, Start Num: 1

Candidate Starts for Sheng711\_62:

(Start: 1 @44186 has 47 MA's), (Start: 3 @44216 has 1 MA's), (6, 44246), (8, 44261), (9, 44270), (10, 44291), (14, 44363),

Gene: Snenia\_62 Start: 45531, Stop: 45803, Start Num: 1

Candidate Starts for Snenia\_62:

(Start: 1 @45531 has 47 MA's), (2, 45555), (7, 45594), (12, 45660), (13, 45675), (17, 45750), (18, 45789),

Gene: Soap141\_64 Start: 45575, Stop: 45775, Start Num: 1

Candidate Starts for Soap141\_64:

(Start: 1 @45575 has 47 MA's), (Start: 3 @45605 has 1 MA's),

Gene: Tourach\_63 Start: 45564, Stop: 45764, Start Num: 1

Candidate Starts for Tourach\_63:

(Start: 1 @45564 has 47 MA's), (Start: 3 @45594 has 1 MA's), (6, 45624), (10, 45669), (12, 45693),

Gene: Vetrix\_64 Start: 45519, Stop: 45719, Start Num: 1

Candidate Starts for Vetrix\_64:

(Start: 1 @45519 has 47 MA's), (Start: 3 @45549 has 1 MA's),

Gene: Whirlwind\_63 Start: 45352, Stop: 45624, Start Num: 1

Candidate Starts for Whirlwind\_63:

(Start: 1 @45352 has 47 MA's), (2, 45376), (7, 45415), (12, 45481), (13, 45496), (18, 45610),

Gene: Wigglewigggle\_64 Start: 45539, Stop: 45739, Start Num: 1

Candidate Starts for Wigglewigggle\_64:

(Start: 1 @45539 has 47 MA's), (Start: 3 @45569 has 1 MA's),

Gene: Wilder\_65 Start: 45485, Stop: 45685, Start Num: 1

Candidate Starts for Wilder\_65:

(Start: 1 @45485 has 47 MA's), (Start: 3 @45515 has 1 MA's),

Gene: Winky\_64 Start: 45479, Stop: 45679, Start Num: 1

Candidate Starts for Winky\_64:

(Start: 1 @45479 has 47 MA's), (Start: 3 @45509 has 1 MA's),

Gene: Zakai\_65 Start: 45805, Stop: 46005, Start Num: 1

Candidate Starts for Zakai\_65:

(Start: 1 @45805 has 47 MA's), (Start: 3 @45835 has 1 MA's),

Gene: ZhongYanYuan\_62 Start: 45374, Stop: 45574, Start Num: 1

Candidate Starts for ZhongYanYuan\_62:

(Start: 1 @45374 has 47 MA's), (Start: 3 @45404 has 1 MA's),