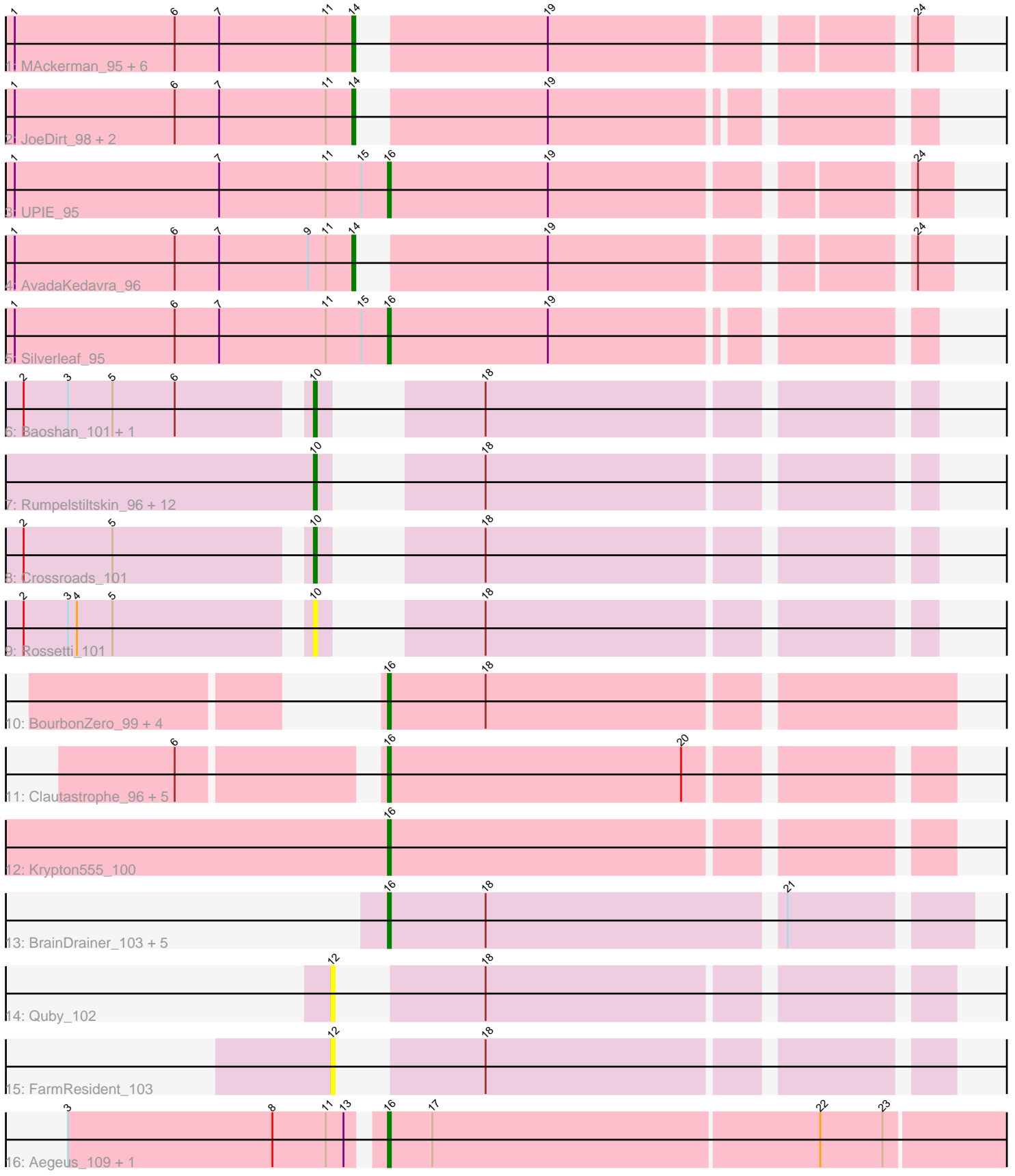


Pham 305076



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 305076 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305076 has 52 members, 13 are drafts.

Phages represented in each track:

- Track 1 : MAckerman\_95, Tyson\_98, Zaria\_97, Acquire49\_96, Halena\_94, Wyatt2\_97, Calm\_98
- Track 2 : JoeDirt\_98, Rose5\_98, Enceladus\_93
- Track 3 : UPIE\_95
- Track 4 : AvadaKedavra\_96
- Track 5 : Silverleaf\_95
- Track 6 : Baoshan\_101, DanBing\_100
- Track 7 : Rumpelstiltskin\_96, Itos\_100, SoJulia\_102, Nicholasp3\_100, Finemlucis\_101, Kahlid\_99, Archie\_97, Zakai\_101, Gabriela\_100, LilDestine\_98, Bazzle\_97, Underpass\_92, BobsGarage\_99
- Track 8 : Crossroads\_101
- Track 9 : Rossetti\_101
- Track 10 : BourbonZero\_99, DuncansLeg\_99, KirDoubleO7\_96, Ellson\_97, LiyuLake\_97
- Track 11 : Clautastrophe\_96, Bellis\_98, Jubie\_97, Samty\_97, Finnry\_98, MsGreen\_98
- Track 12 : Krypton555\_100
- Track 13 : BrainDrainer\_103, Douzhi\_102, PYPDinur\_102, Sheng711\_103, Bromden\_102, Douge\_102
- Track 14 : Quby\_102
- Track 15 : FarmResident\_103
- Track 16 : Aegeus\_109, Baudelaire\_109

### ***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 14 of the 39 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Archie\_97, Baoshan\_101, Bazzle\_97, BobsGarage\_99, Crossroads\_101, DanBing\_100, Finemlucis\_101, Gabriela\_100, Itos\_100, Kahlid\_99, LilDestine\_98, Nicholasp3\_100, Rossetti\_101, Rumpelstiltskin\_96, SoJulia\_102, Underpass\_92, Zakai\_101,

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

- 

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

- Acquire49\_96, Aegeus\_109, AvadaKedavra\_96, Baudelaire\_109, Bellis\_98, BourbonZero\_99, BrainDrainer\_103, Bromden\_102, Calm\_98, Clautastrophe\_96, Douge\_102, Douzhi\_102, DuncansLeg\_99, Ellson\_97, Enceladus\_93, FarmResident\_103, Finnry\_98, Halena\_94, JoeDirt\_98, Jubie\_97, KirDoubleO7\_96, Krypton555\_100, LiyuLake\_97, MAckerman\_95, MsGreen\_98, PYPDinur\_102, Quby\_102, Rose5\_98, Samty\_97, Sheng711\_103, Silverleaf\_95, Tyson\_98, UPIE\_95, Wyatt2\_97, Zaria\_97,

### Summary by start number:

Start 10:

- Found in 17 of 52 ( 32.7% ) of genes in pham
- Manual Annotations of this start: 14 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Archie\_97 (L2), Baoshan\_101 (L2), Bazzle\_97 (L2), BobsGarage\_99 (L2), Crossroads\_101 (L2), DanBing\_100 (L2), Finemlucis\_101 (L2), Gabriela\_100 (L2), Itos\_100 (L2), Kahlid\_99 (L2), LilDestine\_98 (L2), Nicholasp3\_100 (L2), Rossetti\_101 (L2), Rumpelstiltskin\_96 (L2), SoJulia\_102 (L2), Underpass\_92 (L2), Zakai\_101 (L2),

Start 12:

- Found in 2 of 52 ( 3.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: FarmResident\_103 (L4), Quby\_102 (L4),

Start 14:

- Found in 11 of 52 ( 21.2% ) of genes in pham
- Manual Annotations of this start: 11 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acquire49\_96 (L1), AvadaKedavra\_96 (L1), Calm\_98 (L1), Enceladus\_93 (L1), Halena\_94 (L1), JoeDirt\_98 (L1), MAckerman\_95 (L1), Rose5\_98 (L1), Tyson\_98 (L1), Wyatt2\_97 (L1), Zaria\_97 (L1),

Start 16:

- Found in 22 of 52 ( 42.3% ) of genes in pham
- Manual Annotations of this start: 14 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aegeus\_109 (L5), Baudelaire\_109 (L5), Bellis\_98 (L3), BourbonZero\_99 (L3), BrainDrainer\_103 (L4), Bromden\_102 (L4), Clautastrophe\_96 (L3), Douge\_102 (L4), Douzhi\_102 (L4), DuncansLeg\_99 (L3), Ellson\_97 (L3), Finnry\_98 (L3), Jubie\_97 (L3), KirDoubleO7\_96 (L3), Krypton555\_100 (L3), LiyuLake\_97 (L3), MsGreen\_98 (L3), PYPDinur\_102 (L4), Samty\_97 (L3), Sheng711\_103 (L4), Silverleaf\_95 (L1), UPIE\_95 (L1),

### Summary by clusters:

There are 5 clusters represented in this pham: L4, L5, L2, L3, L1,

Info for manual annotations of cluster L1:

- Start number 14 was manually annotated 11 times for cluster L1.
- Start number 16 was manually annotated 2 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 10 was manually annotated 14 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 16 was manually annotated 8 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 16 was manually annotated 2 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 16 was manually annotated 2 times for cluster L5.

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

Gene: Acquire49\_96 Start: 59453, Stop: 59626, Start Num: 14

Candidate Starts for Acquire49\_96:

(1, 59339), (6, 59393), (7, 59408), (11, 59444), (Start: 14 @59453 has 11 MA's), (19, 59507), (24, 59615),

Gene: Aegeus\_109 Start: 63189, Stop: 63410, Start Num: 16

Candidate Starts for Aegeus\_109:

(3, 63087), (8, 63156), (11, 63174), (13, 63180), (Start: 16 @63189 has 14 MA's), (17, 63204), (22, 63333), (23, 63354),

Gene: Archie\_97 Start: 61162, Stop: 61338, Start Num: 10

Candidate Starts for Archie\_97:

(Start: 10 @61162 has 14 MA's), (18, 61195),

Gene: AvadaKedavra\_96 Start: 59565, Stop: 59738, Start Num: 14

Candidate Starts for AvadaKedavra\_96:

(1, 59451), (6, 59505), (7, 59520), (9, 59550), (11, 59556), (Start: 14 @59565 has 11 MA's), (19, 59619), (24, 59727),

Gene: Baoshan\_101 Start: 61947, Stop: 62117, Start Num: 10

Candidate Starts for Baoshan\_101:

(2, 61857), (3, 61872), (5, 61887), (6, 61908), (Start: 10 @61947 has 14 MA's), (18, 61980),

Gene: Baudelaire\_109 Start: 63189, Stop: 63410, Start Num: 16

Candidate Starts for Baudelaire\_109:

(3, 63087), (8, 63156), (11, 63174), (13, 63180), (Start: 16 @63189 has 14 MA's), (17, 63204), (22, 63333), (23, 63354),

Gene: Bazzle\_97 Start: 61718, Stop: 61894, Start Num: 10

Candidate Starts for Bazzle\_97:

(Start: 10 @61718 has 14 MA's), (18, 61751),

Gene: Bellis\_98 Start: 61495, Stop: 61671, Start Num: 16

Candidate Starts for Bellis\_98:

(6, 61435), (Start: 16 @61495 has 14 MA's), (20, 61594),

Gene: BobsGarage\_99 Start: 61936, Stop: 62106, Start Num: 10

Candidate Starts for BobsGarage\_99:

(Start: 10 @61936 has 14 MA's), (18, 61969),

Gene: BourbonZero\_99 Start: 61668, Stop: 61850, Start Num: 16

Candidate Starts for BourbonZero\_99:

(Start: 16 @61668 has 14 MA's), (18, 61701),

Gene: BrainDrainer\_103 Start: 61982, Stop: 62167, Start Num: 16

Candidate Starts for BrainDrainer\_103:

(Start: 16 @61982 has 14 MA's), (18, 62015), (21, 62111),

Gene: Bromden\_102 Start: 62718, Stop: 62903, Start Num: 16

Candidate Starts for Bromden\_102:

(Start: 16 @62718 has 14 MA's), (18, 62751), (21, 62847),

Gene: Calm\_98 Start: 59832, Stop: 60005, Start Num: 14

Candidate Starts for Calm\_98:

(1, 59718), (6, 59772), (7, 59787), (11, 59823), (Start: 14 @59832 has 11 MA's), (19, 59886), (24, 59994),

Gene: Clautastrophe\_96 Start: 61490, Stop: 61666, Start Num: 16

Candidate Starts for Clautastrophe\_96:

(6, 61430), (Start: 16 @61490 has 14 MA's), (20, 61589),

Gene: Crossroads\_101 Start: 61823, Stop: 61993, Start Num: 10

Candidate Starts for Crossroads\_101:

(2, 61733), (5, 61763), (Start: 10 @61823 has 14 MA's), (18, 61856),

Gene: DanBing\_100 Start: 61639, Stop: 61809, Start Num: 10

Candidate Starts for DanBing\_100:

(2, 61549), (3, 61564), (5, 61579), (6, 61600), (Start: 10 @61639 has 14 MA's), (18, 61672),

Gene: Douge\_102 Start: 61402, Stop: 61587, Start Num: 16

Candidate Starts for Douge\_102:

(Start: 16 @61402 has 14 MA's), (18, 61435), (21, 61531),

Gene: Douzhi\_102 Start: 61671, Stop: 61856, Start Num: 16

Candidate Starts for Douzhi\_102:

(Start: 16 @61671 has 14 MA's), (18, 61704), (21, 61800),

Gene: DuncansLeg\_99 Start: 61656, Stop: 61838, Start Num: 16

Candidate Starts for DuncansLeg\_99:

(Start: 16 @61656 has 14 MA's), (18, 61689),

Gene: Ellson\_97 Start: 61971, Stop: 62153, Start Num: 16

Candidate Starts for Ellson\_97:

(Start: 16 @61971 has 14 MA's), (18, 62004),

Gene: Enceladus\_93 Start: 59494, Stop: 59661, Start Num: 14

Candidate Starts for Enceladus\_93:

(1, 59380), (6, 59434), (7, 59449), (11, 59485), (Start: 14 @59494 has 11 MA's), (19, 59548),

Gene: FarmResident\_103 Start: 61588, Stop: 61764, Start Num: 12

Candidate Starts for FarmResident\_103:

(12, 61588), (18, 61621),

Gene: Finemlucis\_101 Start: 62639, Stop: 62809, Start Num: 10

Candidate Starts for Finemlucis\_101:

(Start: 10 @62639 has 14 MA's), (18, 62672),

Gene: Finnry\_98 Start: 61843, Stop: 62019, Start Num: 16

Candidate Starts for Finnry\_98:

(6, 61783), (Start: 16 @61843 has 14 MA's), (20, 61942),

Gene: Gabriela\_100 Start: 60925, Stop: 61095, Start Num: 10

Candidate Starts for Gabriela\_100:

(Start: 10 @60925 has 14 MA's), (18, 60958),

Gene: Halena\_94 Start: 58748, Stop: 58921, Start Num: 14

Candidate Starts for Halena\_94:

(1, 58634), (6, 58688), (7, 58703), (11, 58739), (Start: 14 @58748 has 11 MA's), (19, 58802), (24, 58910),

Gene: Itos\_100 Start: 60485, Stop: 60655, Start Num: 10

Candidate Starts for Itos\_100:

(Start: 10 @60485 has 14 MA's), (18, 60518),

Gene: JoeDirt\_98 Start: 60423, Stop: 60590, Start Num: 14

Candidate Starts for JoeDirt\_98:

(1, 60309), (6, 60363), (7, 60378), (11, 60414), (Start: 14 @60423 has 11 MA's), (19, 60477),

Gene: Jubie\_97 Start: 61625, Stop: 61801, Start Num: 16

Candidate Starts for Jubie\_97:

(6, 61565), (Start: 16 @61625 has 14 MA's), (20, 61724),

Gene: Kahlid\_99 Start: 61290, Stop: 61460, Start Num: 10

Candidate Starts for Kahlid\_99:

(Start: 10 @61290 has 14 MA's), (18, 61323),

Gene: KirDoubleO7\_96 Start: 61658, Stop: 61840, Start Num: 16

Candidate Starts for KirDoubleO7\_96:

(Start: 16 @61658 has 14 MA's), (18, 61691),

Gene: Krypton555\_100 Start: 61911, Stop: 62087, Start Num: 16

Candidate Starts for Krypton555\_100:

(Start: 16 @61911 has 14 MA's),

Gene: LilDestine\_98 Start: 61249, Stop: 61419, Start Num: 10

Candidate Starts for LilDestine\_98:

(Start: 10 @61249 has 14 MA's), (18, 61282),

Gene: LiyuLake\_97 Start: 61731, Stop: 61913, Start Num: 16

Candidate Starts for LiyuLake\_97:  
(Start: 16 @61731 has 14 MA's), (18, 61764),

Gene: MAckerman\_95 Start: 58741, Stop: 58914, Start Num: 14  
Candidate Starts for MAckerman\_95:  
(1, 58627), (6, 58681), (7, 58696), (11, 58732), (Start: 14 @58741 has 11 MA's), (19, 58795), (24, 58903),

Gene: MsGreen\_98 Start: 61489, Stop: 61665, Start Num: 16  
Candidate Starts for MsGreen\_98:  
(6, 61429), (Start: 16 @61489 has 14 MA's), (20, 61588),

Gene: Nicholasp3\_100 Start: 61372, Stop: 61542, Start Num: 10  
Candidate Starts for Nicholasp3\_100:  
(Start: 10 @61372 has 14 MA's), (18, 61405),

Gene: PYPDinur\_102 Start: 62234, Stop: 62419, Start Num: 16  
Candidate Starts for PYPDinur\_102:  
(Start: 16 @62234 has 14 MA's), (18, 62267), (21, 62363),

Gene: Quby\_102 Start: 61563, Stop: 61739, Start Num: 12  
Candidate Starts for Quby\_102:  
(12, 61563), (18, 61596),

Gene: Rose5\_98 Start: 60265, Stop: 60432, Start Num: 14  
Candidate Starts for Rose5\_98:  
(1, 60151), (6, 60205), (7, 60220), (11, 60256), (Start: 14 @60265 has 11 MA's), (19, 60319),

Gene: Rossetti\_101 Start: 61909, Stop: 62079, Start Num: 10  
Candidate Starts for Rossetti\_101:  
(2, 61819), (3, 61834), (4, 61837), (5, 61849), (Start: 10 @61909 has 14 MA's), (18, 61942),

Gene: Rumpelstiltskin\_96 Start: 61165, Stop: 61335, Start Num: 10  
Candidate Starts for Rumpelstiltskin\_96:  
(Start: 10 @61165 has 14 MA's), (18, 61198),

Gene: Samty\_97 Start: 61587, Stop: 61763, Start Num: 16  
Candidate Starts for Samty\_97:  
(6, 61527), (Start: 16 @61587 has 14 MA's), (20, 61686),

Gene: Sheng711\_103 Start: 61758, Stop: 61943, Start Num: 16  
Candidate Starts for Sheng711\_103:  
(Start: 16 @61758 has 14 MA's), (18, 61791), (21, 61887),

Gene: Silverleaf\_95 Start: 59405, Stop: 59572, Start Num: 16  
Candidate Starts for Silverleaf\_95:  
(1, 59279), (6, 59333), (7, 59348), (11, 59384), (15, 59396), (Start: 16 @59405 has 14 MA's), (19, 59459),

Gene: SoJulia\_102 Start: 63096, Stop: 63266, Start Num: 10  
Candidate Starts for SoJulia\_102:  
(Start: 10 @63096 has 14 MA's), (18, 63129),

Gene: Tyson\_98 Start: 60158, Stop: 60331, Start Num: 14

Candidate Starts for Tyson\_98:

(1, 60044), (6, 60098), (7, 60113), (11, 60149), (Start: 14 @60158 has 11 MA's), (19, 60212), (24, 60320),

Gene: UPIE\_95 Start: 59398, Stop: 59571, Start Num: 16

Candidate Starts for UPIE\_95:

(1, 59272), (7, 59341), (11, 59377), (15, 59389), (Start: 16 @59398 has 14 MA's), (19, 59452), (24, 59560),

Gene: Underpass\_92 Start: 56408, Stop: 56578, Start Num: 10

Candidate Starts for Underpass\_92:

(Start: 10 @56408 has 14 MA's), (18, 56441),

Gene: Wyatt2\_97 Start: 59821, Stop: 59994, Start Num: 14

Candidate Starts for Wyatt2\_97:

(1, 59707), (6, 59761), (7, 59776), (11, 59812), (Start: 14 @59821 has 11 MA's), (19, 59875), (24, 59983),

Gene: Zakai\_101 Start: 61981, Stop: 62151, Start Num: 10

Candidate Starts for Zakai\_101:

(Start: 10 @61981 has 14 MA's), (18, 62014),

Gene: Zaria\_97 Start: 59297, Stop: 59470, Start Num: 14

Candidate Starts for Zaria\_97:

(1, 59183), (6, 59237), (7, 59252), (11, 59288), (Start: 14 @59297 has 11 MA's), (19, 59351), (24, 59459),