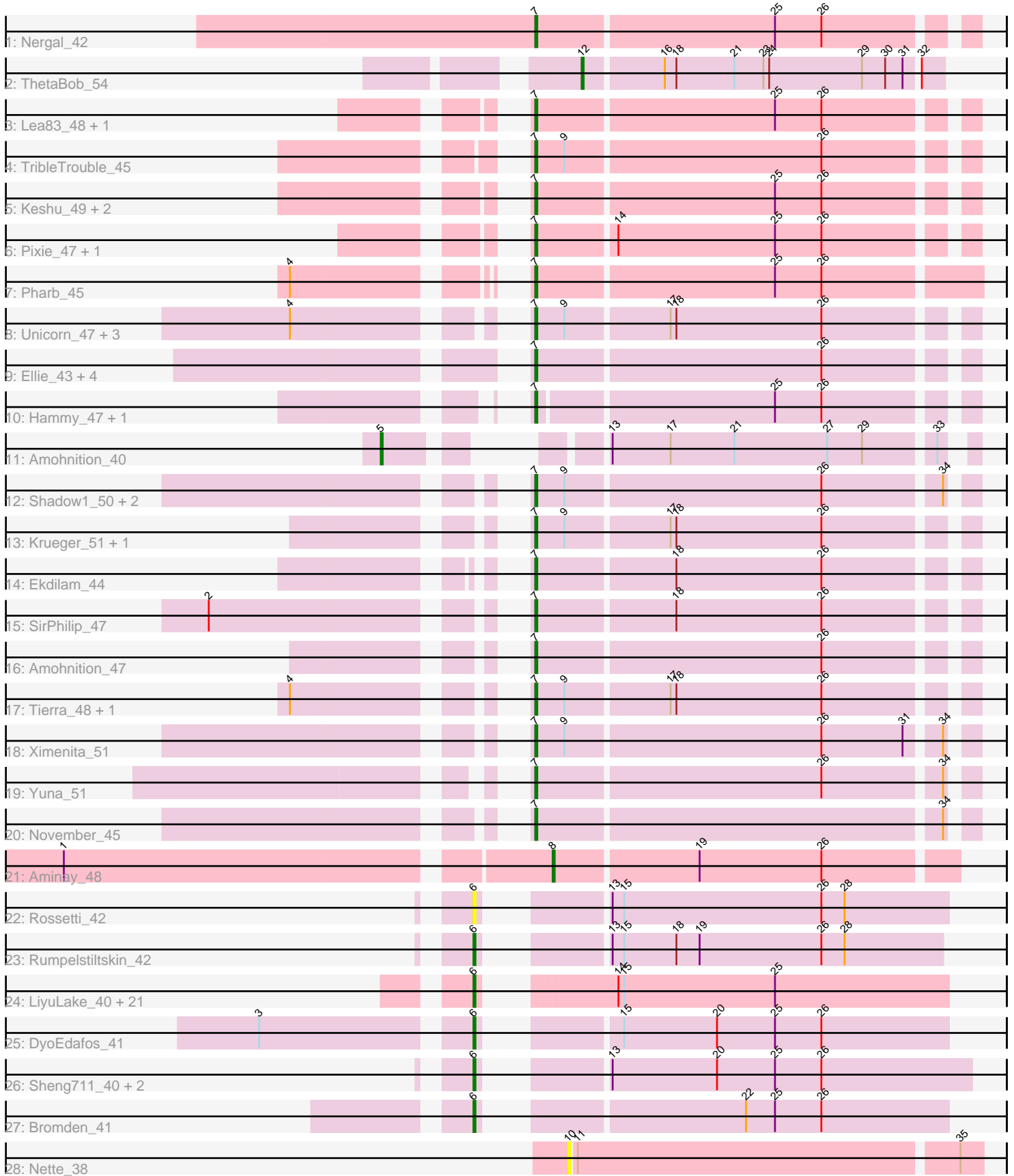


Pham 294715



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 294715 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294715 has 67 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Nergal\_42
- Track 2 : ThetaBob\_54
- Track 3 : Lea83\_48, ShedlockHolmes\_48
- Track 4 : TribbleTrouble\_45
- Track 5 : Keshu\_49, MacnCheese\_49, Hurricane\_48
- Track 6 : Pixie\_47, TBond007\_47
- Track 7 : Pharb\_45
- Track 8 : Unicorn\_47, Bryler\_48, PhelpsODU\_47, Cain\_48
- Track 9 : Ellie\_43, Amgine\_45, Applecrisp\_44, Fefferhead\_45, Lavahound\_46
- Track 10 : Hammy\_47, DarthP\_47
- Track 11 : Amohnition\_40
- Track 12 : Shadow1\_50, Syra333\_50, Sunflower1121\_51
- Track 13 : Krueger\_51, Tigress9\_51
- Track 14 : Ekdilam\_44
- Track 15 : SirPhilip\_47
- Track 16 : Amohnition\_47
- Track 17 : Tierra\_48, Phrank\_48
- Track 18 : Ximenita\_51
- Track 19 : Yuna\_51
- Track 20 : November\_45
- Track 21 : Aminay\_48
- Track 22 : Rossetti\_42
- Track 23 : Rumpelstiltskin\_42
- Track 24 : LiyuLake\_40, MiniLon\_40, Lolly9\_40, TriFive\_40, MiniMac\_40, DuncansLeg\_40, KirDoubleO7\_38, BourbonZero\_39, Lumos\_40, Bellis\_40, Kingsolomon\_40, MsGreen\_40, Finnry\_40, Ellson\_40, Nicholas\_40, Jobypre\_40, Jubie\_40, Moostard\_40, Samty\_40, Clautastrophe\_40, Snenia\_40, Red305\_40
- Track 25 : DyoEdafos\_41
- Track 26 : Sheng711\_40, Douge\_39, Chaser\_39
- Track 27 : Bromden\_41
- Track 28 : Nette\_38

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

The start number called the most often in the published annotations is 7, it was called in 32 of the 57 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amgine\_45, Amohnition\_47, Applecrisp\_44, Bryler\_48, Cain\_48, DarthP\_47, Ekdilam\_44, Ellie\_43, Fefferhead\_45, Hammy\_47, Hurricane\_48, Keshu\_49, Krueger\_51, Lavahound\_46, Lea83\_48, MacnCheese\_49, Nergal\_42, November\_45, Pharb\_45, PhelpsODU\_47, Phrank\_48, Pixie\_47, Shadow1\_50, ShedlockHolmes\_48, SirPhilip\_47, Sunflower1121\_51, Syra333\_50, TBond007\_47, Tierra\_48, Tigress9\_51, TripleTrouble\_45, Unicorn\_47, Ximenita\_51, Yuna\_51,

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

- 

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

- Aminay\_48, Amohnition\_40, Bellis\_40, BourbonZero\_39, Bromden\_41, Chaser\_39, Clautastrophe\_40, Douge\_39, DuncansLeg\_40, DyoEdafos\_41, Ellson\_40, Finnry\_40, Jobypre\_40, Jubie\_40, Kingsolomon\_40, KirDoubleO7\_38, LiyuLake\_40, Lolly9\_40, Lumos\_40, MiniLon\_40, MiniMac\_40, Moostard\_40, MsGreen\_40, Nette\_38, Nicholas\_40, Red305\_40, Rossetti\_42, Rumpelstiltskin\_42, Samty\_40, Sheng711\_40, Snenia\_40, ThetaBob\_54, TriFive\_40,

### Summary by start number:

Start 5:

- Found in 1 of 67 ( 1.5% ) of genes in pham
- Manual Annotations of this start: 1 of 57
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amohnition\_40 (K6),

Start 6:

- Found in 29 of 67 ( 43.3% ) of genes in pham
- Manual Annotations of this start: 22 of 57
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bellis\_40 (L3), BourbonZero\_39 (L3), Bromden\_41 (L4), Chaser\_39 (L4), Clautastrophe\_40 (L3), Douge\_39 (L4), DuncansLeg\_40 (L3), DyoEdafos\_41 (L4), Ellson\_40 (L3), Finnry\_40 (L3), Jobypre\_40 (L3), Jubie\_40 (L3), Kingsolomon\_40 (L3), KirDoubleO7\_38 (L3), LiyuLake\_40 (L3), Lolly9\_40 (L3), Lumos\_40 (L3), MiniLon\_40 (L3), MiniMac\_40 (L3), Moostard\_40 (L3), MsGreen\_40 (L3), Nicholas\_40 (L3), Red305\_40 (L3), Rossetti\_42 (L2), Rumpelstiltskin\_42 (L2), Samty\_40 (L3), Sheng711\_40 (L4), Snenia\_40 (L3), TriFive\_40 (L3),

Start 7:

- Found in 34 of 67 ( 50.7% ) of genes in pham
- Manual Annotations of this start: 32 of 57
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amgine\_45 (K6), Amohnition\_47 (K6), Applecrisp\_44 (K6), Bryler\_48 (K6), Cain\_48 (K6), DarthP\_47 (K6), Ekdilam\_44 (K6), Ellie\_43 (K6), Fefferhead\_45 (K6), Hammy\_47 (K6), Hurricane\_48 (K3), Keshu\_49 (K3), Krueger\_51 (K6), Lavahound\_46 (K6), Lea83\_48 (K3), MacnCheese\_49 (K3), Nergal\_42 (AG), November\_45 (K6), Pharb\_45 (K3), PhelpsODU\_47 (K6), Phrank\_48 (K6), Pixie\_47 (K3), Shadow1\_50 (K6), ShedlockHolmes\_48 (K3),

SirPhilip\_47 (K6), Sunflower1121\_51 (K6), Syra333\_50 (K6), TBond007\_47 (K3),  
Tierra\_48 (K6), Tigress9\_51 (K6), TribbleTrouble\_45 (K3), Unicorn\_47 (K6),  
Ximenita\_51 (K6), Yuna\_51 (K6),

Start 8:

- Found in 1 of 67 ( 1.5% ) of genes in pham
- Manual Annotations of this start: 1 of 57
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aminay\_48 (K7),

Start 10:

- Found in 1 of 67 ( 1.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nette\_38 (T),

Start 12:

- Found in 1 of 67 ( 1.5% ) of genes in pham
- Manual Annotations of this start: 1 of 57
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ThetaBob\_54 (F4),

### **Summary by clusters:**

There are 9 clusters represented in this pham: F4, AG, T, K3, L4, L2, L3, K7, K6,

Info for manual annotations of cluster AG:

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

Info for manual annotations of cluster F4:

- Start number 12 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster K3:

- Start number 7 was manually annotated 9 times for cluster K3.

Info for manual annotations of cluster K6:

- Start number 5 was manually annotated 1 time for cluster K6.
- Start number 7 was manually annotated 22 times for cluster K6.

Info for manual annotations of cluster K7:

- Start number 8 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster L2:

- Start number 6 was manually annotated 1 time for cluster L2.

Info for manual annotations of cluster L3:

- Start number 6 was manually annotated 17 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 6 was manually annotated 4 times for cluster L4.

**Gene Information:**

Gene: Amgine\_45 Start: 36475, Stop: 36687, Start Num: 7

Candidate Starts for Amgine\_45:

(Start: 7 @36475 has 32 MA's), (26, 36619),

Gene: Aminay\_48 Start: 36910, Stop: 37110, Start Num: 8

Candidate Starts for Aminay\_48:

(1, 36673), (Start: 8 @36910 has 1 MA's), (19, 36982), (26, 37045),

Gene: Amohnition\_40 Start: 32428, Stop: 32189, Start Num: 5

Candidate Starts for Amohnition\_40:

(Start: 5 @32428 has 1 MA's), (13, 32362), (17, 32332), (21, 32299), (27, 32251), (29, 32233), (33, 32200),

Gene: Amohnition\_47 Start: 36488, Stop: 36700, Start Num: 7

Candidate Starts for Amohnition\_47:

(Start: 7 @36488 has 32 MA's), (26, 36632),

Gene: Applecrisp\_44 Start: 35971, Stop: 36183, Start Num: 7

Candidate Starts for Applecrisp\_44:

(Start: 7 @35971 has 32 MA's), (26, 36115),

Gene: Bellis\_40 Start: 34953, Stop: 35168, Start Num: 6

Candidate Starts for Bellis\_40:

(Start: 6 @34953 has 22 MA's), (14, 34998), (15, 35001), (25, 35079),

Gene: BourbonZero\_39 Start: 34932, Stop: 35150, Start Num: 6

Candidate Starts for BourbonZero\_39:

(Start: 6 @34932 has 22 MA's), (14, 34980), (15, 34983), (25, 35061),

Gene: Bromden\_41 Start: 34169, Stop: 34384, Start Num: 6

Candidate Starts for Bromden\_41:

(Start: 6 @34169 has 22 MA's), (22, 34280), (25, 34295), (26, 34319),

Gene: Bryler\_48 Start: 35349, Stop: 35561, Start Num: 7

Candidate Starts for Bryler\_48:

(4, 35259), (Start: 7 @35349 has 32 MA's), (9, 35364), (17, 35415), (18, 35418), (26, 35493),

Gene: Cain\_48 Start: 35337, Stop: 35549, Start Num: 7

Candidate Starts for Cain\_48:

(4, 35247), (Start: 7 @35337 has 32 MA's), (9, 35352), (17, 35403), (18, 35406), (26, 35481),

Gene: Chaser\_39 Start: 33432, Stop: 33659, Start Num: 6

Candidate Starts for Chaser\_39:

(Start: 6 @33432 has 22 MA's), (13, 33474), (20, 33528), (25, 33558), (26, 33582),

Gene: Clautastrophe\_40 Start: 34951, Stop: 35166, Start Num: 6

Candidate Starts for Clautastrophe\_40:

(Start: 6 @34951 has 22 MA's), (14, 34996), (15, 34999), (25, 35077),

Gene: DarthP\_47 Start: 36375, Stop: 36584, Start Num: 7

Candidate Starts for DarthP\_47:

(Start: 7 @36375 has 32 MA's), (25, 36492), (26, 36516),

Gene: Douge\_39 Start: 33370, Stop: 33597, Start Num: 6

Candidate Starts for Douge\_39:

(Start: 6 @33370 has 22 MA's), (13, 33412), (20, 33466), (25, 33496), (26, 33520),

Gene: DuncansLeg\_40 Start: 34969, Stop: 35187, Start Num: 6

Candidate Starts for DuncansLeg\_40:

(Start: 6 @34969 has 22 MA's), (14, 35017), (15, 35020), (25, 35098),

Gene: DyoEdafos\_41 Start: 33704, Stop: 33919, Start Num: 6

Candidate Starts for DyoEdafos\_41:

(3, 33605), (Start: 6 @33704 has 22 MA's), (15, 33752), (20, 33800), (25, 33830), (26, 33854),

Gene: Ekdilam\_44 Start: 35937, Stop: 36149, Start Num: 7

Candidate Starts for Ekdilam\_44:

(Start: 7 @35937 has 32 MA's), (18, 36006), (26, 36081),

Gene: Ellie\_43 Start: 35663, Stop: 35875, Start Num: 7

Candidate Starts for Ellie\_43:

(Start: 7 @35663 has 32 MA's), (26, 35807),

Gene: Ellson\_40 Start: 34945, Stop: 35163, Start Num: 6

Candidate Starts for Ellson\_40:

(Start: 6 @34945 has 22 MA's), (14, 34993), (15, 34996), (25, 35074),

Gene: Fefferhead\_45 Start: 35614, Stop: 35826, Start Num: 7

Candidate Starts for Fefferhead\_45:

(Start: 7 @35614 has 32 MA's), (26, 35758),

Gene: Finnry\_40 Start: 34954, Stop: 35169, Start Num: 6

Candidate Starts for Finnry\_40:

(Start: 6 @34954 has 22 MA's), (14, 34999), (15, 35002), (25, 35080),

Gene: Hammy\_47 Start: 36363, Stop: 36572, Start Num: 7

Candidate Starts for Hammy\_47:

(Start: 7 @36363 has 32 MA's), (25, 36480), (26, 36504),

Gene: Hurricane\_48 Start: 36096, Stop: 36308, Start Num: 7

Candidate Starts for Hurricane\_48:

(Start: 7 @36096 has 32 MA's), (25, 36216), (26, 36240),

Gene: Jobypre\_40 Start: 34951, Stop: 35166, Start Num: 6

Candidate Starts for Jobypre\_40:

(Start: 6 @34951 has 22 MA's), (14, 34996), (15, 34999), (25, 35077),

Gene: Jubie\_40 Start: 34952, Stop: 35167, Start Num: 6

Candidate Starts for Jubie\_40:

(Start: 6 @34952 has 22 MA's), (14, 34997), (15, 35000), (25, 35078),

Gene: Keshu\_49 Start: 36154, Stop: 36366, Start Num: 7

Candidate Starts for Keshu\_49:

(Start: 7 @36154 has 32 MA's), (25, 36274), (26, 36298),

Gene: Kingsolomon\_40 Start: 34951, Stop: 35166, Start Num: 6  
Candidate Starts for Kingsolomon\_40:  
(Start: 6 @34951 has 22 MA's), (14, 34996), (15, 34999), (25, 35077),

Gene: KirDoubleO7\_38 Start: 34973, Stop: 35191, Start Num: 6  
Candidate Starts for KirDoubleO7\_38:  
(Start: 6 @34973 has 22 MA's), (14, 35021), (15, 35024), (25, 35102),

Gene: Krueger\_51 Start: 36343, Stop: 36555, Start Num: 7  
Candidate Starts for Krueger\_51:  
(Start: 7 @36343 has 32 MA's), (9, 36358), (17, 36409), (18, 36412), (26, 36487),

Gene: Lavahound\_46 Start: 36596, Stop: 36808, Start Num: 7  
Candidate Starts for Lavahound\_46:  
(Start: 7 @36596 has 32 MA's), (26, 36740),

Gene: Lea83\_48 Start: 36128, Stop: 36340, Start Num: 7  
Candidate Starts for Lea83\_48:  
(Start: 7 @36128 has 32 MA's), (25, 36248), (26, 36272),

Gene: LiyuLake\_40 Start: 34935, Stop: 35153, Start Num: 6  
Candidate Starts for LiyuLake\_40:  
(Start: 6 @34935 has 22 MA's), (14, 34983), (15, 34986), (25, 35064),

Gene: Lolly9\_40 Start: 34759, Stop: 34977, Start Num: 6  
Candidate Starts for Lolly9\_40:  
(Start: 6 @34759 has 22 MA's), (14, 34807), (15, 34810), (25, 34888),

Gene: Lumos\_40 Start: 34948, Stop: 35163, Start Num: 6  
Candidate Starts for Lumos\_40:  
(Start: 6 @34948 has 22 MA's), (14, 34993), (15, 34996), (25, 35074),

Gene: MacnCheese\_49 Start: 37043, Stop: 37276, Start Num: 7  
Candidate Starts for MacnCheese\_49:  
(Start: 7 @37043 has 32 MA's), (25, 37163), (26, 37187),

Gene: MiniLon\_40 Start: 34760, Stop: 34978, Start Num: 6  
Candidate Starts for MiniLon\_40:  
(Start: 6 @34760 has 22 MA's), (14, 34808), (15, 34811), (25, 34889),

Gene: MiniMac\_40 Start: 34757, Stop: 34975, Start Num: 6  
Candidate Starts for MiniMac\_40:  
(Start: 6 @34757 has 22 MA's), (14, 34805), (15, 34808), (25, 34886),

Gene: Moostard\_40 Start: 34953, Stop: 35168, Start Num: 6  
Candidate Starts for Moostard\_40:  
(Start: 6 @34953 has 22 MA's), (14, 34998), (15, 35001), (25, 35079),

Gene: MsGreen\_40 Start: 34951, Stop: 35166, Start Num: 6  
Candidate Starts for MsGreen\_40:  
(Start: 6 @34951 has 22 MA's), (14, 34996), (15, 34999), (25, 35077),

Gene: Nergal\_42 Start: 34081, Stop: 34293, Start Num: 7

Candidate Starts for Nergal\_42:

(Start: 7 @34081 has 32 MA's), (25, 34201), (26, 34225),

Gene: Nette\_38 Start: 29858, Stop: 30064, Start Num: 10

Candidate Starts for Nette\_38:

(10, 29858), (11, 29861), (35, 30053),

Gene: Nicholas\_40 Start: 34951, Stop: 35166, Start Num: 6

Candidate Starts for Nicholas\_40:

(Start: 6 @34951 has 22 MA's), (14, 34996), (15, 34999), (25, 35077),

Gene: November\_45 Start: 36096, Stop: 36308, Start Num: 7

Candidate Starts for November\_45:

(Start: 7 @36096 has 32 MA's), (34, 36297),

Gene: Pharb\_45 Start: 34846, Stop: 35067, Start Num: 7

Candidate Starts for Pharb\_45:

(4, 34756), (Start: 7 @34846 has 32 MA's), (25, 34966), (26, 34990),

Gene: PhelpsODU\_47 Start: 35370, Stop: 35582, Start Num: 7

Candidate Starts for PhelpsODU\_47:

(4, 35280), (Start: 7 @35370 has 32 MA's), (9, 35385), (17, 35436), (18, 35439), (26, 35514),

Gene: Phrank\_48 Start: 35327, Stop: 35539, Start Num: 7

Candidate Starts for Phrank\_48:

(4, 35237), (Start: 7 @35327 has 32 MA's), (9, 35342), (17, 35393), (18, 35396), (26, 35471),

Gene: Pixie\_47 Start: 35607, Stop: 35819, Start Num: 7

Candidate Starts for Pixie\_47:

(Start: 7 @35607 has 32 MA's), (14, 35646), (25, 35727), (26, 35751),

Gene: Red305\_40 Start: 34951, Stop: 35166, Start Num: 6

Candidate Starts for Red305\_40:

(Start: 6 @34951 has 22 MA's), (14, 34996), (15, 34999), (25, 35077),

Gene: Rossetti\_42 Start: 34961, Stop: 35176, Start Num: 6

Candidate Starts for Rossetti\_42:

(Start: 6 @34961 has 22 MA's), (13, 35003), (15, 35009), (26, 35111), (28, 35123),

Gene: Rumpelstiltskin\_42 Start: 34961, Stop: 35173, Start Num: 6

Candidate Starts for Rumpelstiltskin\_42:

(Start: 6 @34961 has 22 MA's), (13, 35003), (15, 35009), (18, 35036), (19, 35048), (26, 35111), (28, 35123),

Gene: Samty\_40 Start: 34952, Stop: 35167, Start Num: 6

Candidate Starts for Samty\_40:

(Start: 6 @34952 has 22 MA's), (14, 34997), (15, 35000), (25, 35078),

Gene: Shadow1\_50 Start: 36488, Stop: 36700, Start Num: 7

Candidate Starts for Shadow1\_50:

(Start: 7 @36488 has 32 MA's), (9, 36503), (26, 36632), (34, 36689),

Gene: ShedlockHolmes\_48 Start: 36132, Stop: 36344, Start Num: 7  
Candidate Starts for ShedlockHolmes\_48:  
(Start: 7 @36132 has 32 MA's), (25, 36252), (26, 36276),

Gene: Sheng711\_40 Start: 33476, Stop: 33703, Start Num: 6  
Candidate Starts for Sheng711\_40:  
(Start: 6 @33476 has 22 MA's), (13, 33518), (20, 33572), (25, 33602), (26, 33626),

Gene: SirPhilip\_47 Start: 36707, Stop: 36919, Start Num: 7  
Candidate Starts for SirPhilip\_47:  
(2, 36575), (Start: 7 @36707 has 32 MA's), (18, 36776), (26, 36851),

Gene: Snenia\_40 Start: 34952, Stop: 35167, Start Num: 6  
Candidate Starts for Snenia\_40:  
(Start: 6 @34952 has 22 MA's), (14, 34997), (15, 35000), (25, 35078),

Gene: Sunflower1121\_51 Start: 36589, Stop: 36801, Start Num: 7  
Candidate Starts for Sunflower1121\_51:  
(Start: 7 @36589 has 32 MA's), (9, 36604), (26, 36733), (34, 36790),

Gene: Syra333\_50 Start: 36256, Stop: 36468, Start Num: 7  
Candidate Starts for Syra333\_50:  
(Start: 7 @36256 has 32 MA's), (9, 36271), (26, 36400), (34, 36457),

Gene: TBond007\_47 Start: 35606, Stop: 35818, Start Num: 7  
Candidate Starts for TBond007\_47:  
(Start: 7 @35606 has 32 MA's), (14, 35645), (25, 35726), (26, 35750),

Gene: ThetaBob\_54 Start: 36886, Stop: 37065, Start Num: 12  
Candidate Starts for ThetaBob\_54:  
(Start: 12 @36886 has 1 MA's), (16, 36925), (18, 36931), (21, 36961), (23, 36976), (24, 36979), (29, 37027), (30, 37039), (31, 37048), (32, 37054),

Gene: Tierra\_48 Start: 36138, Stop: 36350, Start Num: 7  
Candidate Starts for Tierra\_48:  
(4, 36048), (Start: 7 @36138 has 32 MA's), (9, 36153), (17, 36204), (18, 36207), (26, 36282),

Gene: Tigress9\_51 Start: 36343, Stop: 36555, Start Num: 7  
Candidate Starts for Tigress9\_51:  
(Start: 7 @36343 has 32 MA's), (9, 36358), (17, 36409), (18, 36412), (26, 36487),

Gene: TriFive\_40 Start: 34951, Stop: 35166, Start Num: 6  
Candidate Starts for TriFive\_40:  
(Start: 6 @34951 has 22 MA's), (14, 34996), (15, 34999), (25, 35077),

Gene: TribbleTrouble\_45 Start: 35497, Stop: 35709, Start Num: 7  
Candidate Starts for TribbleTrouble\_45:  
(Start: 7 @35497 has 32 MA's), (9, 35512), (26, 35641),

Gene: Unicorn\_47 Start: 35370, Stop: 35582, Start Num: 7  
Candidate Starts for Unicorn\_47:  
(4, 35280), (Start: 7 @35370 has 32 MA's), (9, 35385), (17, 35436), (18, 35439), (26, 35514),

Gene: Ximenita\_51 Start: 36442, Stop: 36654, Start Num: 7

Candidate Starts for Ximenita\_51:

(Start: 7 @36442 has 32 MA's), (9, 36457), (26, 36586), (31, 36628), (34, 36643),

Gene: Yuna\_51 Start: 37201, Stop: 37413, Start Num: 7

Candidate Starts for Yuna\_51:

(Start: 7 @37201 has 32 MA's), (26, 37345), (34, 37402),