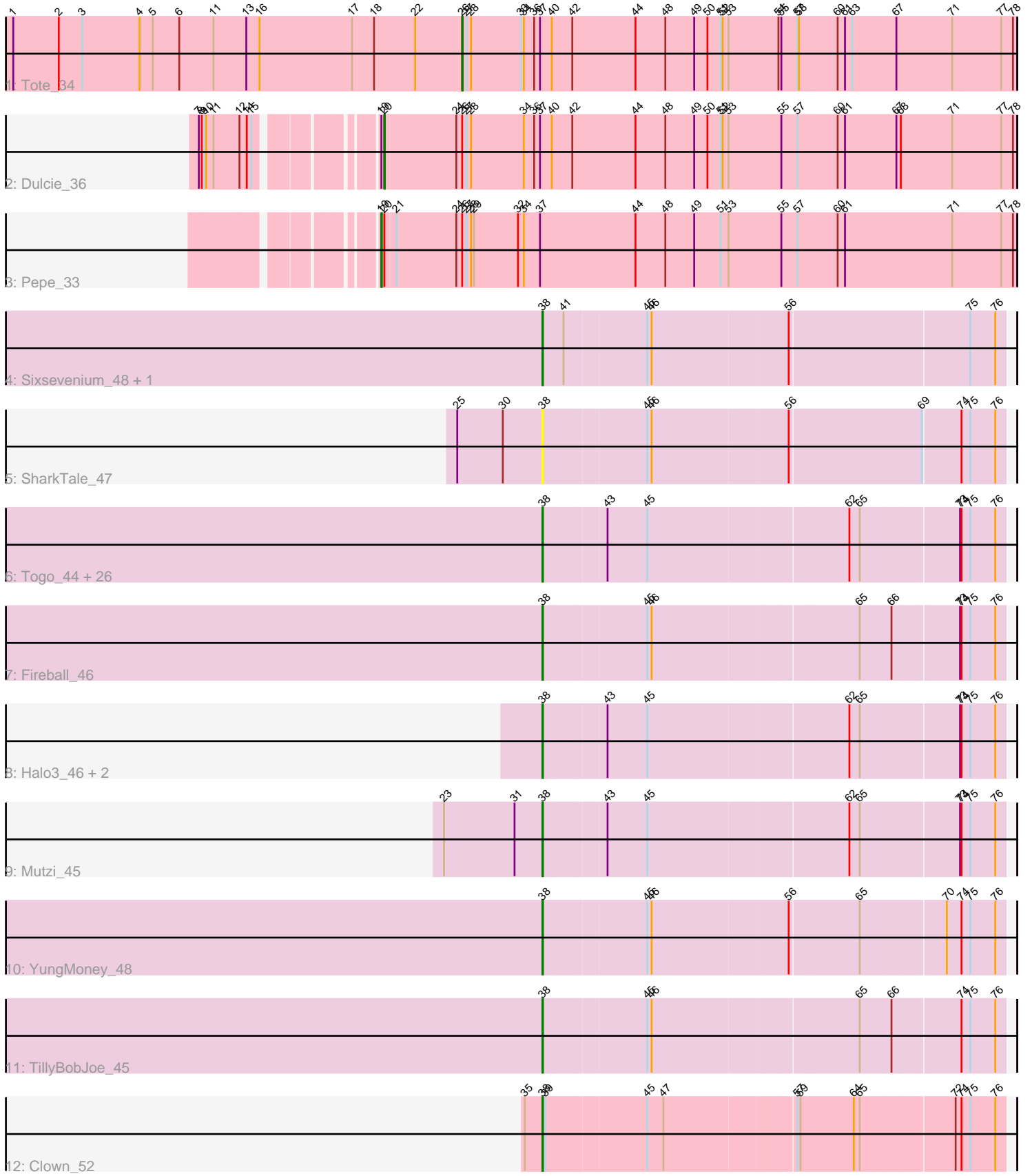


Pham 311779



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 311779 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311779 has 41 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Tote\_34
- Track 2 : Dulcie\_36
- Track 3 : Pepe\_33
- Track 4 : Sixsevenium\_48, Bakery\_50
- Track 5 : SharkTale\_47
- Track 6 : Togo\_44, RogerDodger\_48, Savbucketdawg\_45, Danyall\_47, Nubi\_45, Arri\_48, Twister6\_47, Barb\_47, Phlop\_44, PullumCavea\_44, Fugax\_48, CoveyB\_48, Wizard\_44, PinkCoffee\_47, Jambalaya\_45, Egi03\_45, VanDeWege\_48, Sendy\_46, Valary\_47, ClamChowder\_47, Gezellig\_44, Shinji\_45, KimmyK\_46, CherryCola\_48, Salvador\_44, SmokingBunny\_45, Evamon\_44
- Track 7 : Fireball\_46
- Track 8 : Halo3\_46, JohnPork\_47, Portcullis\_47
- Track 9 : Mutzi\_45
- Track 10 : YungMoney\_48
- Track 11 : TillyBobJoe\_45
- Track 12 : Clown\_52

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

The start number called the most often in the published annotations is 38, it was called in 33 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arri\_48, Bakery\_50, Barb\_47, CherryCola\_48, ClamChowder\_47, Clown\_52, CoveyB\_48, Danyall\_47, Egi03\_45, Evamon\_44, Fireball\_46, Fugax\_48, Gezellig\_44, Halo3\_46, Jambalaya\_45, JohnPork\_47, KimmyK\_46, Mutzi\_45, Nubi\_45, Phlop\_44, PinkCoffee\_47, Portcullis\_47, PullumCavea\_44, RogerDodger\_48, Salvador\_44, Savbucketdawg\_45, Sendy\_46, SharkTale\_47, Shinji\_45, Sixsevenium\_48, SmokingBunny\_45, TillyBobJoe\_45, Togo\_44, Twister6\_47, Valary\_47, VanDeWege\_48, Wizard\_44, YungMoney\_48,

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

-

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

- Dulcie\_36, Pepe\_33, Tote\_34,

### Summary by start number:

Start 19:

- Found in 2 of 41 ( 4.9% ) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Pepe\_33 (A1),

Start 20:

- Found in 2 of 41 ( 4.9% ) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Dulcie\_36 (A1),

Start 26:

- Found in 3 of 41 ( 7.3% ) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Tote\_34 (A1),

Start 38:

- Found in 38 of 41 ( 92.7% ) of genes in pham
- Manual Annotations of this start: 33 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arri\_48 (DC1), Bakery\_50 (DC1), Barb\_47 (DC1), CherryCola\_48 (DC1), ClamChowder\_47 (DC1), Clown\_52 (DC2), CoveyB\_48 (DC1), Danyall\_47 (DC1), Egi03\_45 (DC1), Evamon\_44 (DC1), Fireball\_46 (DC1), Fugax\_48 (DC1), Gezellig\_44 (DC1), Halo3\_46 (DC1), Jambalaya\_45 (DC1), JohnPork\_47 (DC1), KimmyK\_46 (DC1), Mutzi\_45 (DC1), Nubi\_45 (DC1), Phlop\_44 (DC1), PinkCoffee\_47 (DC1), Portcullis\_47 (DC1), PullumCavea\_44 (DC1), RogerDodger\_48 (DC1), Salvador\_44 (DC1), Savbucketdawg\_45 (DC1), Sendy\_46 (DC1), SharkTale\_47 (DC1), Shinji\_45 (DC1), Sixsevenium\_48 (DC1), SmokingBunny\_45 (DC1), TillyBobJoe\_45 (DC1), Togo\_44 (DC1), Twister6\_47 (DC1), Valary\_47 (DC1), VanDeWege\_48 (DC1), Wizard\_44 (DC1), YungMoney\_48 (DC1),

### Summary by clusters:

There are 3 clusters represented in this pham: A1, DC2, DC1,

Info for manual annotations of cluster A1:

- Start number 19 was manually annotated 1 time for cluster A1.
- Start number 20 was manually annotated 1 time for cluster A1.
- Start number 26 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster DC1:

- Start number 38 was manually annotated 32 times for cluster DC1.

Info for manual annotations of cluster DC2:

- Start number 38 was manually annotated 1 time for cluster DC2.

**Gene Information:**

Gene: Arri\_48 Start: 37164, Stop: 38060, Start Num: 38

Candidate Starts for Arri\_48:

(Start: 38 @37164 has 33 MA's), (43, 37287), (45, 37368), (62, 37761), (65, 37779), (73, 37971), (74, 37974), (75, 37992), (76, 38040),

Gene: Bakery\_50 Start: 38311, Stop: 39207, Start Num: 38

Candidate Starts for Bakery\_50:

(Start: 38 @38311 has 33 MA's), (41, 38353), (45, 38515), (46, 38524), (56, 38791), (75, 39139), (76, 39187),

Gene: Barb\_47 Start: 37283, Stop: 38179, Start Num: 38

Candidate Starts for Barb\_47:

(Start: 38 @37283 has 33 MA's), (43, 37406), (45, 37487), (62, 37880), (65, 37898), (73, 38090), (74, 38093), (75, 38111), (76, 38159),

Gene: CherryCola\_48 Start: 37937, Stop: 38833, Start Num: 38

Candidate Starts for CherryCola\_48:

(Start: 38 @37937 has 33 MA's), (43, 38060), (45, 38141), (62, 38534), (65, 38552), (73, 38744), (74, 38747), (75, 38765), (76, 38813),

Gene: ClamChowder\_47 Start: 37283, Stop: 38179, Start Num: 38

Candidate Starts for ClamChowder\_47:

(Start: 38 @37283 has 33 MA's), (43, 37406), (45, 37487), (62, 37880), (65, 37898), (73, 38090), (74, 38093), (75, 38111), (76, 38159),

Gene: Clown\_52 Start: 39867, Stop: 40763, Start Num: 38

Candidate Starts for Clown\_52:

(35, 39831), (Start: 38 @39867 has 33 MA's), (39, 39873), (45, 40071), (47, 40104), (57, 40359), (59, 40365), (64, 40473), (65, 40482), (72, 40665), (74, 40677), (75, 40695), (76, 40743),

Gene: CoveyB\_48 Start: 36982, Stop: 37878, Start Num: 38

Candidate Starts for CoveyB\_48:

(Start: 38 @36982 has 33 MA's), (43, 37105), (45, 37186), (62, 37579), (65, 37597), (73, 37789), (74, 37792), (75, 37810), (76, 37858),

Gene: Danyall\_47 Start: 36984, Stop: 37880, Start Num: 38

Candidate Starts for Danyall\_47:

(Start: 38 @36984 has 33 MA's), (43, 37107), (45, 37188), (62, 37581), (65, 37599), (73, 37791), (74, 37794), (75, 37812), (76, 37860),

Gene: Dulcie\_36 Start: 29273, Stop: 30550, Start Num: 20

Candidate Starts for Dulcie\_36:

(7, 28967), (8, 28973), (9, 28979), (10, 28982), (11, 28997), (12, 29048), (14, 29063), (15, 29072), (Start: 19 @29267 has 1 MA's), (Start: 20 @29273 has 1 MA's), (24, 29411), (Start: 26 @29423 has 1 MA's), (27, 29432), (28, 29441), (34, 29549), (36, 29570), (37, 29582), (40, 29606), (42, 29648), (44, 29777), (48, 29837), (49, 29894), (50, 29921), (51, 29948), (52, 29951), (53, 29963), (55, 30071), (57, 30104), (60, 30185), (61, 30200), (67, 30305), (68, 30314), (71, 30419), (77, 30518), (78, 30542),

Gene: Egi03\_45 Start: 36764, Stop: 37660, Start Num: 38  
Candidate Starts for Egi03\_45:  
(Start: 38 @36764 has 33 MA's), (43, 36887), (45, 36968), (62, 37361), (65, 37379), (73, 37571), (74, 37574), (75, 37592), (76, 37640),

Gene: Evamon\_44 Start: 37003, Stop: 37899, Start Num: 38  
Candidate Starts for Evamon\_44:  
(Start: 38 @37003 has 33 MA's), (43, 37126), (45, 37207), (62, 37600), (65, 37618), (73, 37810), (74, 37813), (75, 37831), (76, 37879),

Gene: Fireball\_46 Start: 37232, Stop: 38128, Start Num: 38  
Candidate Starts for Fireball\_46:  
(Start: 38 @37232 has 33 MA's), (45, 37436), (46, 37445), (65, 37847), (66, 37910), (73, 38039), (74, 38042), (75, 38060), (76, 38108),

Gene: Fugax\_48 Start: 37275, Stop: 38171, Start Num: 38  
Candidate Starts for Fugax\_48:  
(Start: 38 @37275 has 33 MA's), (43, 37398), (45, 37479), (62, 37872), (65, 37890), (73, 38082), (74, 38085), (75, 38103), (76, 38151),

Gene: Gezellig\_44 Start: 37135, Stop: 38031, Start Num: 38  
Candidate Starts for Gezellig\_44:  
(Start: 38 @37135 has 33 MA's), (43, 37258), (45, 37339), (62, 37732), (65, 37750), (73, 37942), (74, 37945), (75, 37963), (76, 38011),

Gene: Halo3\_46 Start: 37720, Stop: 38616, Start Num: 38  
Candidate Starts for Halo3\_46:  
(Start: 38 @37720 has 33 MA's), (43, 37843), (45, 37924), (62, 38317), (65, 38335), (73, 38527), (74, 38530), (75, 38548), (76, 38596),

Gene: Jambalaya\_45 Start: 36782, Stop: 37678, Start Num: 38  
Candidate Starts for Jambalaya\_45:  
(Start: 38 @36782 has 33 MA's), (43, 36905), (45, 36986), (62, 37379), (65, 37397), (73, 37589), (74, 37592), (75, 37610), (76, 37658),

Gene: JohnPork\_47 Start: 36795, Stop: 37691, Start Num: 38  
Candidate Starts for JohnPork\_47:  
(Start: 38 @36795 has 33 MA's), (43, 36918), (45, 36999), (62, 37392), (65, 37410), (73, 37602), (74, 37605), (75, 37623), (76, 37671),

Gene: KimmyK\_46 Start: 37717, Stop: 38613, Start Num: 38  
Candidate Starts for KimmyK\_46:  
(Start: 38 @37717 has 33 MA's), (43, 37840), (45, 37921), (62, 38314), (65, 38332), (73, 38524), (74, 38527), (75, 38545), (76, 38593),

Gene: Mutzi\_45 Start: 38129, Stop: 39025, Start Num: 38  
Candidate Starts for Mutzi\_45:  
(23, 37928), (31, 38072), (Start: 38 @38129 has 33 MA's), (43, 38252), (45, 38333), (62, 38726), (65, 38744), (73, 38936), (74, 38939), (75, 38957), (76, 39005),

Gene: Nubi\_45 Start: 37108, Stop: 38004, Start Num: 38  
Candidate Starts for Nubi\_45:

(Start: 38 @37108 has 33 MA's), (43, 37231), (45, 37312), (62, 37705), (65, 37723), (73, 37915), (74, 37918), (75, 37936), (76, 37984),

Gene: Pepe\_33 Start: 27246, Stop: 28529, Start Num: 19

Candidate Starts for Pepe\_33:

(Start: 19 @27246 has 1 MA's), (Start: 20 @27252 has 1 MA's), (21, 27273), (24, 27390), (Start: 26 @27402 has 1 MA's), (27, 27411), (28, 27420), (29, 27426), (32, 27516), (34, 27528), (37, 27561), (44, 27756), (48, 27816), (49, 27873), (51, 27927), (53, 27942), (55, 28050), (57, 28083), (60, 28164), (61, 28179), (71, 28398), (77, 28497), (78, 28521),

Gene: Phlop\_44 Start: 37189, Stop: 38085, Start Num: 38

Candidate Starts for Phlop\_44:

(Start: 38 @37189 has 33 MA's), (43, 37312), (45, 37393), (62, 37786), (65, 37804), (73, 37996), (74, 37999), (75, 38017), (76, 38065),

Gene: PinkCoffee\_47 Start: 37292, Stop: 38188, Start Num: 38

Candidate Starts for PinkCoffee\_47:

(Start: 38 @37292 has 33 MA's), (43, 37415), (45, 37496), (62, 37889), (65, 37907), (73, 38099), (74, 38102), (75, 38120), (76, 38168),

Gene: Portcullis\_47 Start: 36795, Stop: 37691, Start Num: 38

Candidate Starts for Portcullis\_47:

(Start: 38 @36795 has 33 MA's), (43, 36918), (45, 36999), (62, 37392), (65, 37410), (73, 37602), (74, 37605), (75, 37623), (76, 37671),

Gene: PullumCavea\_44 Start: 37189, Stop: 38085, Start Num: 38

Candidate Starts for PullumCavea\_44:

(Start: 38 @37189 has 33 MA's), (43, 37312), (45, 37393), (62, 37786), (65, 37804), (73, 37996), (74, 37999), (75, 38017), (76, 38065),

Gene: RogerDodger\_48 Start: 37332, Stop: 38228, Start Num: 38

Candidate Starts for RogerDodger\_48:

(Start: 38 @37332 has 33 MA's), (43, 37455), (45, 37536), (62, 37929), (65, 37947), (73, 38139), (74, 38142), (75, 38160), (76, 38208),

Gene: Salvador\_44 Start: 37001, Stop: 37897, Start Num: 38

Candidate Starts for Salvador\_44:

(Start: 38 @37001 has 33 MA's), (43, 37124), (45, 37205), (62, 37598), (65, 37616), (73, 37808), (74, 37811), (75, 37829), (76, 37877),

Gene: Savbucketdawg\_45 Start: 36782, Stop: 37678, Start Num: 38

Candidate Starts for Savbucketdawg\_45:

(Start: 38 @36782 has 33 MA's), (43, 36905), (45, 36986), (62, 37379), (65, 37397), (73, 37589), (74, 37592), (75, 37610), (76, 37658),

Gene: Sendy\_46 Start: 37309, Stop: 38205, Start Num: 38

Candidate Starts for Sendy\_46:

(Start: 38 @37309 has 33 MA's), (43, 37432), (45, 37513), (62, 37906), (65, 37924), (73, 38116), (74, 38119), (75, 38137), (76, 38185),

Gene: SharkTale\_47 Start: 38129, Stop: 39025, Start Num: 38

Candidate Starts for SharkTale\_47:

(25, 37955), (30, 38048), (Start: 38 @38129 has 33 MA's), (45, 38333), (46, 38342), (56, 38609), (69, 38864), (74, 38939), (75, 38957), (76, 39005),

Gene: Shinji\_45 Start: 36545, Stop: 37441, Start Num: 38

Candidate Starts for Shinji\_45:

(Start: 38 @36545 has 33 MA's), (43, 36668), (45, 36749), (62, 37142), (65, 37160), (73, 37352), (74, 37355), (75, 37373), (76, 37421),

Gene: Sixsevenium\_48 Start: 37540, Stop: 38436, Start Num: 38

Candidate Starts for Sixsevenium\_48:

(Start: 38 @37540 has 33 MA's), (41, 37582), (45, 37744), (46, 37753), (56, 38020), (75, 38368), (76, 38416),

Gene: SmokingBunny\_45 Start: 37094, Stop: 37990, Start Num: 38

Candidate Starts for SmokingBunny\_45:

(Start: 38 @37094 has 33 MA's), (43, 37217), (45, 37298), (62, 37691), (65, 37709), (73, 37901), (74, 37904), (75, 37922), (76, 37970),

Gene: TillyBobJoe\_45 Start: 36898, Stop: 37794, Start Num: 38

Candidate Starts for TillyBobJoe\_45:

(Start: 38 @36898 has 33 MA's), (45, 37102), (46, 37111), (65, 37513), (66, 37576), (74, 37708), (75, 37726), (76, 37774),

Gene: Togo\_44 Start: 37094, Stop: 37990, Start Num: 38

Candidate Starts for Togo\_44:

(Start: 38 @37094 has 33 MA's), (43, 37217), (45, 37298), (62, 37691), (65, 37709), (73, 37901), (74, 37904), (75, 37922), (76, 37970),

Gene: Tote\_34 Start: 27141, Stop: 28268, Start Num: 26

Candidate Starts for Tote\_34:

(1, 26229), (2, 26322), (3, 26370), (4, 26487), (5, 26514), (6, 26568), (11, 26634), (13, 26700), (16, 26727), (17, 26916), (18, 26961), (22, 27045), (Start: 26 @27141 has 1 MA's), (27, 27150), (28, 27159), (33, 27261), (34, 27267), (36, 27288), (37, 27300), (40, 27324), (42, 27366), (44, 27495), (48, 27555), (49, 27612), (50, 27639), (51, 27666), (52, 27669), (53, 27681), (54, 27783), (55, 27789), (57, 27822), (58, 27825), (60, 27903), (61, 27918), (63, 27933), (67, 28023), (71, 28137), (77, 28236), (78, 28260),

Gene: Twister6\_47 Start: 36895, Stop: 37791, Start Num: 38

Candidate Starts for Twister6\_47:

(Start: 38 @36895 has 33 MA's), (43, 37018), (45, 37099), (62, 37492), (65, 37510), (73, 37702), (74, 37705), (75, 37723), (76, 37771),

Gene: Valary\_47 Start: 37937, Stop: 38833, Start Num: 38

Candidate Starts for Valary\_47:

(Start: 38 @37937 has 33 MA's), (43, 38060), (45, 38141), (62, 38534), (65, 38552), (73, 38744), (74, 38747), (75, 38765), (76, 38813),

Gene: VanDeWege\_48 Start: 37229, Stop: 38125, Start Num: 38

Candidate Starts for VanDeWege\_48:

(Start: 38 @37229 has 33 MA's), (43, 37352), (45, 37433), (62, 37826), (65, 37844), (73, 38036), (74, 38039), (75, 38057), (76, 38105),

Gene: Wizard\_44 Start: 37135, Stop: 38031, Start Num: 38

Candidate Starts for Wizard\_44:

(Start: 38 @37135 has 33 MA's), (43, 37258), (45, 37339), (62, 37732), (65, 37750), (73, 37942), (74, 37945), (75, 37963), (76, 38011),

Gene: YungMoney\_48 Start: 39537, Stop: 40433, Start Num: 38

Candidate Starts for YungMoney\_48:

(Start: 38 @39537 has 33 MA's), (45, 39741), (46, 39750), (56, 40017), (65, 40152), (70, 40317), (74, 40347), (75, 40365), (76, 40413),