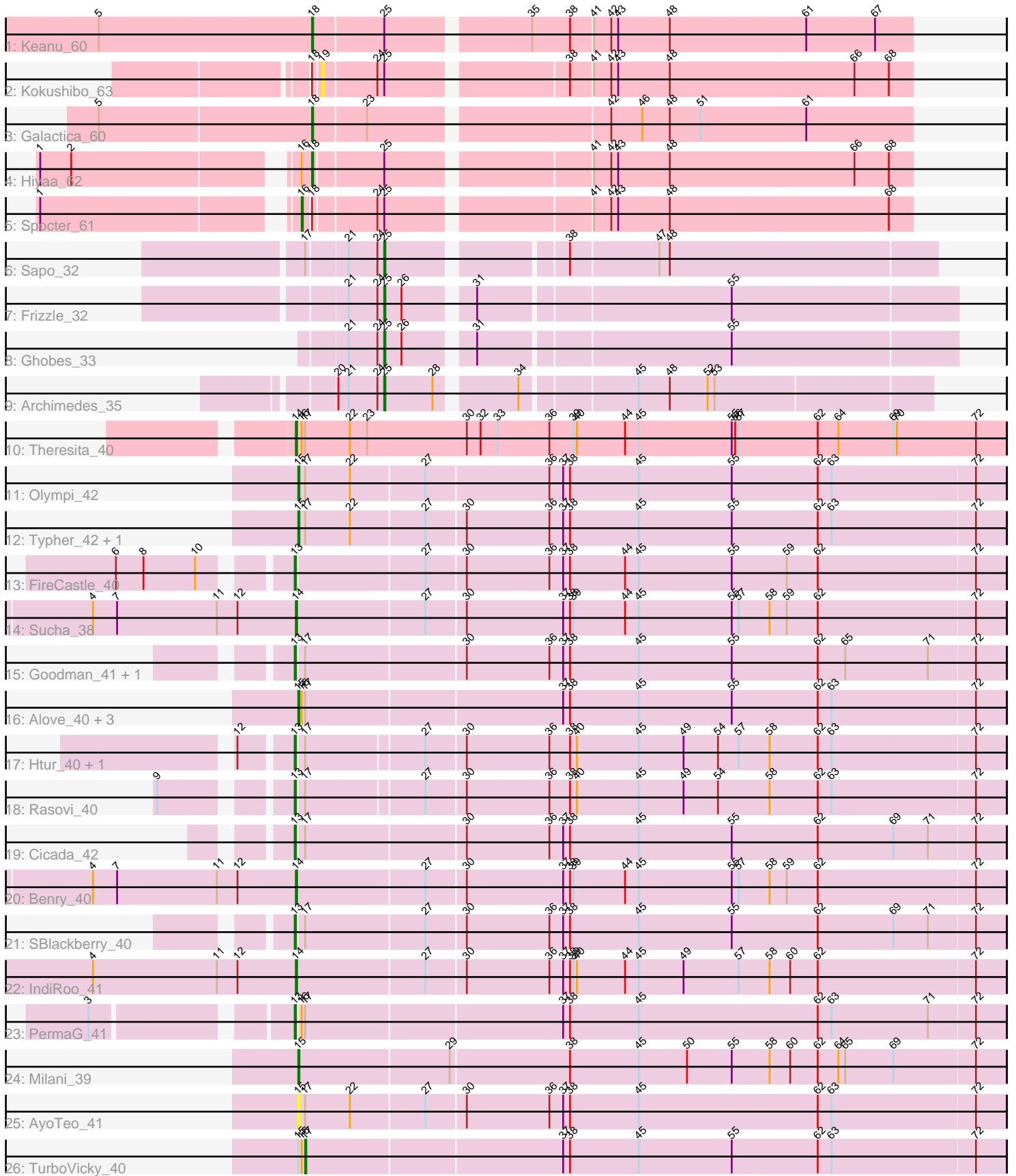


Pham 294950



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 294950 Report

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

Pham number 294950 has 32 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Keanu_60
- Track 2 : Kokushibo_63
- Track 3 : Galactica_60
- Track 4 : Hiya_62
- Track 5 : Spocter_61
- Track 6 : Sapo_32
- Track 7 : Frizzle_32
- Track 8 : Ghobes_33
- Track 9 : Archimedes_35
- Track 10 : Theresita_40
- Track 11 : Olympi_42
- Track 12 : Typher_42, Labella_42
- Track 13 : FireCastle_40
- Track 14 : Sucha_38
- Track 15 : Goodman_41, Johann_41
- Track 16 : Alove_40, Zanella_40, Rootkit7_40, Jera_41
- Track 17 : Htur_40, Linayshia_40
- Track 18 : Rasovi_40
- Track 19 : Cicada_42
- Track 20 : Benry_40
- Track 21 : SBlackberry_40
- Track 22 : IndiRoo_41
- Track 23 : PermaG_41
- Track 24 : Milani_39
- Track 25 : AyoTeo_41
- Track 26 : TurboVicky_40

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

The start number called the most often in the published annotations is 13, it was called in 9 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Cicada_42, FireCastle_40, Goodman_41, Htur_40, Johann_41, Linayshia_40, PermaG_41, Rasovi_40, SBlackberry_40,

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

-

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

- Alove_40, Archimedes_35, AyoTeo_41, Benry_40, Frizzle_32, Galactica_60, Ghobes_33, Hiyaa_62, IndiRoo_41, Jera_41, Keanu_60, Kokushibo_63, Labella_42, Milani_39, Olympi_42, Rootkit7_40, Sapo_32, Spocter_61, Sucha_38, Theresita_40, TurboVicky_40, Typher_42, Zanella_40,

Summary by start number:

Start 13:

- Found in 9 of 32 (28.1%) of genes in pham
- Manual Annotations of this start: 9 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cicada_42 (EJ), FireCastle_40 (EJ), Goodman_41 (EJ), Htur_40 (EJ), Johann_41 (EJ), Linayshia_40 (EJ), PermaG_41 (EJ), Rasovi_40 (EJ), SBlackberry_40 (EJ),

Start 14:

- Found in 4 of 32 (12.5%) of genes in pham
- Manual Annotations of this start: 4 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Benry_40 (EJ), IndiRoo_41 (EJ), Sucha_38 (EJ), Theresita_40 (EA7),

Start 15:

- Found in 10 of 32 (31.2%) of genes in pham
- Manual Annotations of this start: 5 of 27
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Alove_40 (EJ), AyoTeo_41 (EJ), Jera_41 (EJ), Labella_42 (EJ), Milani_39 (EJ), Olympi_42 (EJ), Rootkit7_40 (EJ), Typher_42 (EJ), Zanella_40 (EJ),

Start 16:

- Found in 9 of 32 (28.1%) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Spocter_61 (BQ),

Start 17:

- Found in 19 of 32 (59.4%) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 5.3% of time when present
- Phage (with cluster) where this start called: TurboVicky_40 (EJ),

Start 18:

- Found in 5 of 32 (15.6%) of genes in pham
- Manual Annotations of this start: 3 of 27
- Called 60.0% of time when present

- Phage (with cluster) where this start called: Galactica_60 (BQ), Hiyaa_62 (BQ), Keanu_60 (BQ),

Start 19:

- Found in 1 of 32 (3.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kokushibo_63 (BQ),

Start 25:

- Found in 8 of 32 (25.0%) of genes in pham
- Manual Annotations of this start: 4 of 27
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Archimedes_35 (DA), Frizzle_32 (DA), Ghobes_33 (DA), Sapo_32 (DA),

Summary by clusters:

There are 4 clusters represented in this pham: DA, BQ, EA7, EJ,

Info for manual annotations of cluster BQ:

- Start number 16 was manually annotated 1 time for cluster BQ.
- Start number 18 was manually annotated 3 times for cluster BQ.

Info for manual annotations of cluster DA:

- Start number 25 was manually annotated 4 times for cluster DA.

Info for manual annotations of cluster EA7:

- Start number 14 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster EJ:

- Start number 13 was manually annotated 9 times for cluster EJ.
- Start number 14 was manually annotated 3 times for cluster EJ.
- Start number 15 was manually annotated 5 times for cluster EJ.
- Start number 17 was manually annotated 1 time for cluster EJ.

Gene Information:

Gene: Alove_40 Start: 26528, Stop: 27136, Start Num: 15

Candidate Starts for Alove_40:

(Start: 15 @26528 has 5 MA's), (Start: 16 @26531 has 1 MA's), (Start: 17 @26534 has 1 MA's), (37, 26753), (38, 26759), (45, 26819), (55, 26900), (62, 26975), (63, 26987), (72, 27110),

Gene: Archimedes_35 Start: 31428, Stop: 30985, Start Num: 25

Candidate Starts for Archimedes_35:

(20, 31467), (21, 31458), (24, 31434), (Start: 25 @31428 has 4 MA's), (28, 31386), (34, 31326), (45, 31233), (48, 31206), (52, 31173), (53, 31167),

Gene: AyoTeo_41 Start: 26653, Stop: 27261, Start Num: 15

Candidate Starts for AyoTeo_41:

(Start: 15 @26653 has 5 MA's), (Start: 17 @26659 has 1 MA's), (22, 26698), (27, 26761), (30, 26794), (36, 26866), (37, 26878), (38, 26884), (45, 26944), (62, 27100), (63, 27112), (72, 27235),

Gene: Benry_40 Start: 25022, Stop: 25630, Start Num: 14

Candidate Starts for Benry_40:

(4, 24845), (7, 24866), (11, 24953), (12, 24971), (Start: 14 @25022 has 4 MA's), (27, 25130), (30, 25163), (37, 25247), (38, 25253), (39, 25256), (44, 25301), (45, 25313), (55, 25394), (57, 25400), (58, 25427), (59, 25442), (62, 25469), (72, 25604),

Gene: Cicada_42 Start: 26852, Stop: 27460, Start Num: 13

Candidate Starts for Cicada_42:

(Start: 13 @26852 has 9 MA's), (Start: 17 @26858 has 1 MA's), (30, 26993), (36, 27065), (37, 27077), (38, 27083), (45, 27143), (55, 27224), (62, 27299), (69, 27365), (71, 27395), (72, 27434),

Gene: FireCastle_40 Start: 26550, Stop: 27158, Start Num: 13

Candidate Starts for FireCastle_40:

(6, 26418), (8, 26442), (10, 26487), (Start: 13 @26550 has 9 MA's), (27, 26658), (30, 26691), (36, 26763), (37, 26775), (38, 26781), (44, 26829), (45, 26841), (55, 26922), (59, 26970), (62, 26997), (72, 27132),

Gene: Frizzle_32 Start: 30551, Stop: 30084, Start Num: 25

Candidate Starts for Frizzle_32:

(21, 30581), (24, 30557), (Start: 25 @30551 has 4 MA's), (26, 30536), (31, 30485), (55, 30275),

Gene: Galactica_60 Start: 45960, Stop: 46460, Start Num: 18

Candidate Starts for Galactica_60:

(5, 45777), (Start: 18 @45960 has 3 MA's), (23, 46005), (42, 46200), (46, 46227), (48, 46251), (51, 46278), (61, 46368),

Gene: Ghobes_33 Start: 30552, Stop: 30085, Start Num: 25

Candidate Starts for Ghobes_33:

(21, 30582), (24, 30558), (Start: 25 @30552 has 4 MA's), (26, 30537), (31, 30486), (55, 30276),

Gene: Goodman_41 Start: 26757, Stop: 27365, Start Num: 13

Candidate Starts for Goodman_41:

(Start: 13 @26757 has 9 MA's), (Start: 17 @26763 has 1 MA's), (30, 26898), (36, 26970), (37, 26982), (38, 26988), (45, 27048), (55, 27129), (62, 27204), (65, 27228), (71, 27300), (72, 27339),

Gene: Hiyaa_62 Start: 47242, Stop: 47736, Start Num: 18

Candidate Starts for Hiyaa_62:

(1, 47035), (2, 47062), (Start: 16 @47236 has 1 MA's), (Start: 18 @47242 has 3 MA's), (Start: 25 @47299 has 4 MA's), (41, 47461), (42, 47476), (43, 47482), (48, 47527), (66, 47686), (68, 47716),

Gene: Htur_40 Start: 26856, Stop: 27461, Start Num: 13

Candidate Starts for Htur_40:

(12, 26814), (Start: 13 @26856 has 9 MA's), (Start: 17 @26862 has 1 MA's), (27, 26961), (30, 26994), (36, 27066), (38, 27084), (40, 27090), (45, 27144), (49, 27183), (54, 27213), (57, 27231), (58, 27258), (62, 27300), (63, 27312), (72, 27435),

Gene: IndiRoo_41 Start: 25292, Stop: 25900, Start Num: 14

Candidate Starts for IndiRoo_41:

(4, 25115), (11, 25223), (12, 25241), (Start: 14 @25292 has 4 MA's), (27, 25400), (30, 25433), (36, 25505), (37, 25517), (38, 25523), (39, 25526), (40, 25529), (44, 25571), (45, 25583), (49, 25622), (57,

25670), (58, 25697), (60, 25715), (62, 25739), (72, 25874),

Gene: Jera_41 Start: 25784, Stop: 26392, Start Num: 15

Candidate Starts for Jera_41:

(Start: 15 @25784 has 5 MA's), (Start: 16 @25787 has 1 MA's), (Start: 17 @25790 has 1 MA's), (37, 26009), (38, 26015), (45, 26075), (55, 26156), (62, 26231), (63, 26243), (72, 26366),

Gene: Johann_41 Start: 26757, Stop: 27365, Start Num: 13

Candidate Starts for Johann_41:

(Start: 13 @26757 has 9 MA's), (Start: 17 @26763 has 1 MA's), (30, 26898), (36, 26970), (37, 26982), (38, 26988), (45, 27048), (55, 27129), (62, 27204), (65, 27228), (71, 27300), (72, 27339),

Gene: Keanu_60 Start: 46991, Stop: 47491, Start Num: 18

Candidate Starts for Keanu_60:

(5, 46808), (Start: 18 @46991 has 3 MA's), (Start: 25 @47051 has 4 MA's), (35, 47165), (38, 47198), (41, 47216), (42, 47231), (43, 47237), (48, 47282), (61, 47399), (67, 47459),

Gene: Kokushibo_63 Start: 47323, Stop: 47811, Start Num: 19

Candidate Starts for Kokushibo_63:

(Start: 18 @47317 has 3 MA's), (19, 47323), (24, 47368), (Start: 25 @47374 has 4 MA's), (38, 47518), (41, 47536), (42, 47551), (43, 47557), (48, 47602), (66, 47761), (68, 47791),

Gene: Labella_42 Start: 26650, Stop: 27258, Start Num: 15

Candidate Starts for Labella_42:

(Start: 15 @26650 has 5 MA's), (Start: 17 @26656 has 1 MA's), (22, 26695), (27, 26758), (30, 26791), (36, 26863), (37, 26875), (38, 26881), (45, 26941), (55, 27022), (62, 27097), (63, 27109), (72, 27232),

Gene: Linayshia_40 Start: 26824, Stop: 27429, Start Num: 13

Candidate Starts for Linayshia_40:

(12, 26782), (Start: 13 @26824 has 9 MA's), (Start: 17 @26830 has 1 MA's), (27, 26929), (30, 26962), (36, 27034), (38, 27052), (40, 27058), (45, 27112), (49, 27151), (54, 27181), (57, 27199), (58, 27226), (62, 27268), (63, 27280), (72, 27403),

Gene: Milani_39 Start: 25369, Stop: 25977, Start Num: 15

Candidate Starts for Milani_39:

(Start: 15 @25369 has 5 MA's), (29, 25498), (38, 25600), (45, 25660), (50, 25702), (55, 25741), (58, 25774), (60, 25792), (62, 25816), (64, 25834), (65, 25840), (69, 25882), (72, 25951),

Gene: Olympi_42 Start: 26627, Stop: 27235, Start Num: 15

Candidate Starts for Olympi_42:

(Start: 15 @26627 has 5 MA's), (Start: 17 @26633 has 1 MA's), (22, 26672), (27, 26735), (36, 26840), (37, 26852), (38, 26858), (45, 26918), (55, 26999), (62, 27074), (63, 27086), (72, 27209),

Gene: PermaG_41 Start: 26661, Stop: 27269, Start Num: 13

Candidate Starts for PermaG_41:

(3, 26508), (Start: 13 @26661 has 9 MA's), (Start: 16 @26664 has 1 MA's), (Start: 17 @26667 has 1 MA's), (37, 26886), (38, 26892), (45, 26952), (62, 27108), (63, 27120), (71, 27204), (72, 27243),

Gene: Rasovi_40 Start: 26856, Stop: 27461, Start Num: 13

Candidate Starts for Rasovi_40:

(9, 26760), (Start: 13 @26856 has 9 MA's), (Start: 17 @26862 has 1 MA's), (27, 26961), (30, 26994), (36, 27066), (38, 27084), (40, 27090), (45, 27144), (49, 27183), (54, 27213), (58, 27258), (62, 27300), (63, 27312), (72, 27435),

Gene: Rootkit7_40 Start: 26528, Stop: 27136, Start Num: 15

Candidate Starts for Rootkit7_40:

(Start: 15 @26528 has 5 MA's), (Start: 16 @26531 has 1 MA's), (Start: 17 @26534 has 1 MA's), (37, 26753), (38, 26759), (45, 26819), (55, 26900), (62, 26975), (63, 26987), (72, 27110),

Gene: SBlackberry_40 Start: 26630, Stop: 27238, Start Num: 13

Candidate Starts for SBlackberry_40:

(Start: 13 @26630 has 9 MA's), (Start: 17 @26636 has 1 MA's), (27, 26738), (30, 26771), (36, 26843), (37, 26855), (38, 26861), (45, 26921), (55, 27002), (62, 27077), (69, 27143), (71, 27173), (72, 27212),

Gene: Sapo_32 Start: 30573, Stop: 30124, Start Num: 25

Candidate Starts for Sapo_32:

(Start: 17 @30636 has 1 MA's), (21, 30603), (24, 30579), (Start: 25 @30573 has 4 MA's), (38, 30435), (47, 30360), (48, 30351),

Gene: Spocter_61 Start: 47277, Stop: 47777, Start Num: 16

Candidate Starts for Spocter_61:

(1, 47076), (Start: 16 @47277 has 1 MA's), (Start: 18 @47283 has 3 MA's), (24, 47334), (Start: 25 @47340 has 4 MA's), (41, 47502), (42, 47517), (43, 47523), (48, 47568), (68, 47757),

Gene: Sucha_38 Start: 24242, Stop: 24850, Start Num: 14

Candidate Starts for Sucha_38:

(4, 24065), (7, 24086), (11, 24173), (12, 24191), (Start: 14 @24242 has 4 MA's), (27, 24350), (30, 24383), (37, 24467), (38, 24473), (39, 24476), (44, 24521), (45, 24533), (55, 24614), (57, 24620), (58, 24647), (59, 24662), (62, 24689), (72, 24824),

Gene: Theresita_40 Start: 25288, Stop: 25905, Start Num: 14

Candidate Starts for Theresita_40:

(Start: 14 @25288 has 4 MA's), (Start: 16 @25291 has 1 MA's), (Start: 17 @25294 has 1 MA's), (22, 25333), (23, 25348), (30, 25435), (32, 25447), (33, 25462), (36, 25507), (39, 25528), (40, 25531), (44, 25573), (45, 25585), (55, 25666), (56, 25669), (57, 25672), (62, 25741), (64, 25759), (69, 25807), (70, 25810), (72, 25879),

Gene: TurboVicky_40 Start: 26538, Stop: 27140, Start Num: 17

Candidate Starts for TurboVicky_40:

(Start: 15 @26532 has 5 MA's), (Start: 16 @26535 has 1 MA's), (Start: 17 @26538 has 1 MA's), (37, 26757), (38, 26763), (45, 26823), (55, 26904), (62, 26979), (63, 26991), (72, 27114),

Gene: Typher_42 Start: 26650, Stop: 27258, Start Num: 15

Candidate Starts for Typher_42:

(Start: 15 @26650 has 5 MA's), (Start: 17 @26656 has 1 MA's), (22, 26695), (27, 26758), (30, 26791), (36, 26863), (37, 26875), (38, 26881), (45, 26941), (55, 27022), (62, 27097), (63, 27109), (72, 27232),

Gene: Zanella_40 Start: 26530, Stop: 27138, Start Num: 15

Candidate Starts for Zanella_40:

(Start: 15 @26530 has 5 MA's), (Start: 16 @26533 has 1 MA's), (Start: 17 @26536 has 1 MA's), (37, 26755), (38, 26761), (45, 26821), (55, 26902), (62, 26977), (63, 26989), (72, 27112),