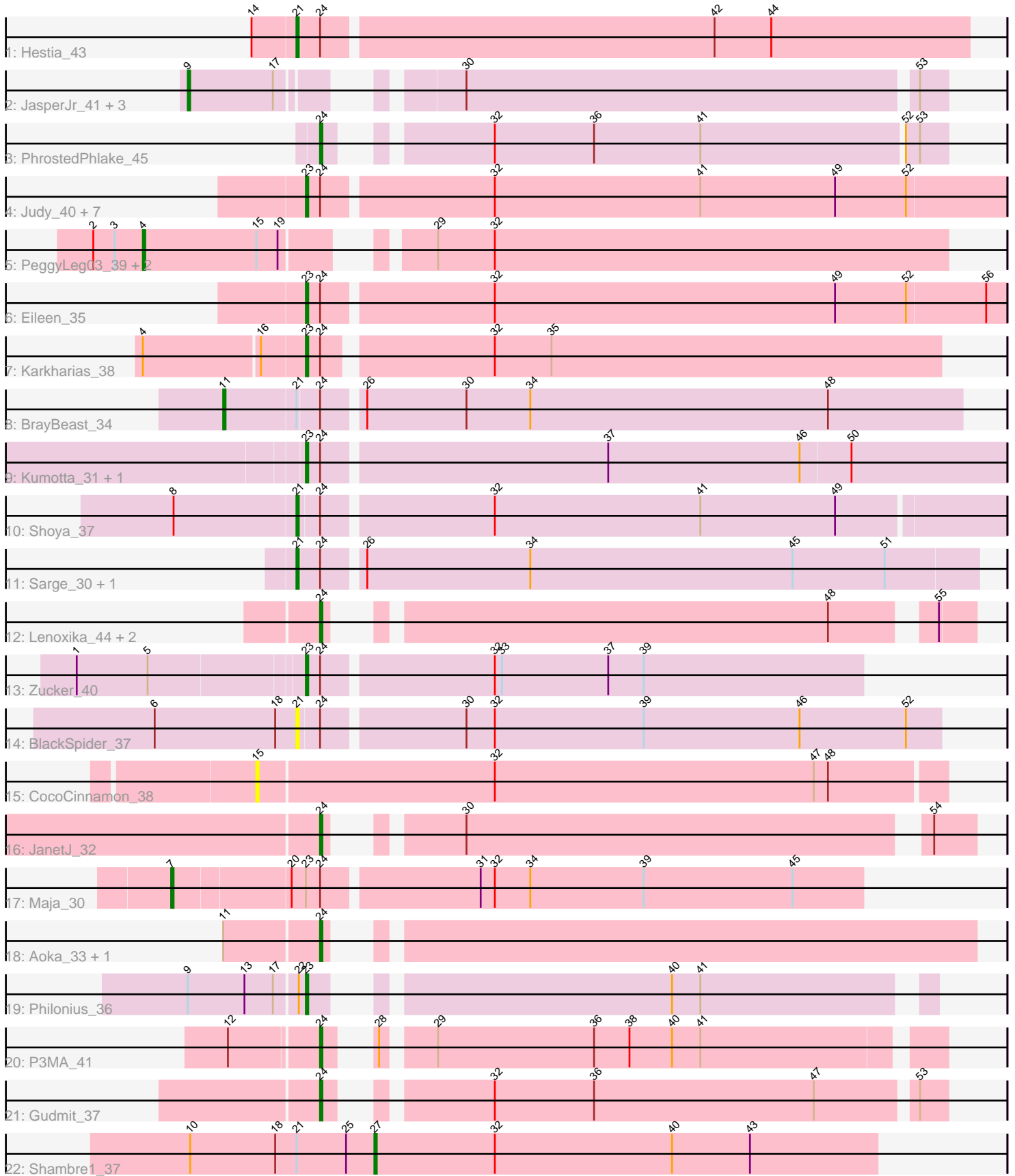


Pham 194165



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 194165 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194165 has 39 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Hestia_43
- Track 2 : JasperJr_41, Hitter_44, Walrus_42, Guacamole_41
- Track 3 : PhrostedPhlake_45
- Track 4 : Judy_40, Constance_39, KayMoney_39, ChuckDuck_40, GlobiWarming_39, RootBeer_30, Bridgette_39, Peas_36
- Track 5 : PeggyLeg03_39, Karkharias_39, Pucara_36
- Track 6 : Eileen_35
- Track 7 : Karkharias_38
- Track 8 : BrayBeast_34
- Track 9 : Kumotta_31, MargaretKali_31
- Track 10 : Shoya_37
- Track 11 : Sarge_30, Bauer_41
- Track 12 : Lenoxika_44, Ryan_44, Nandita_44
- Track 13 : Zucker_40
- Track 14 : BlackSpider_37
- Track 15 : CocoCinnamon_38
- Track 16 : JanetJ_32
- Track 17 : Maja_30
- Track 18 : Aoka_33, EvenBluerMoon_39
- Track 19 : Philonius_36
- Track 20 : P3MA_41
- Track 21 : Gudmit_37
- Track 22 : Shambre1_37

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

The start number called the most often in the published annotations is 23, it was called in 13 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bridgette_39, ChuckDuck_40, Constance_39, Eileen_35, GlobiWarming_39, Judy_40, Karkharias_38, KayMoney_39, Kumotta_31, MargaretKali_31, Peas_36, Philonius_36, RootBeer_30, Zucker_40,

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

- Maja_30,

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

- Aoka_33, Bauer_41, BlackSpider_37, BrayBeast_34, CocoCinnamon_38, EvenBluerMoon_39, Guacamole_41, Gudmit_37, Hestia_43, Hitter_44, JanetJ_32, JasperJr_41, Karkharias_39, Lenoxika_44, Nandita_44, P3MA_41, PeggyLeg03_39, PhrostedPhlake_45, Pucara_36, Ryan_44, Sarge_30, Shambre1_37, Shoya_37, Walrus_42,

Summary by start number:

Start 4:

- Found in 4 of 39 (10.3%) of genes in pham
- Manual Annotations of this start: 2 of 33
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Karkharias_39 (FA), PeggyLeg03_39 (FA), Pucara_36 (FA),

Start 7:

- Found in 1 of 39 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Maja_30 (FO),

Start 9:

- Found in 5 of 39 (12.8%) of genes in pham
- Manual Annotations of this start: 4 of 33
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Guacamole_41 (CV), Hitter_44 (CV), JasperJr_41 (CV), Walrus_42 (CV),

Start 11:

- Found in 3 of 39 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 33.3% of time when present
- Phage (with cluster) where this start called: BrayBeast_34 (FB),

Start 15:

- Found in 4 of 39 (10.3%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: CocoCinnamon_38 (FO),

Start 21:

- Found in 7 of 39 (17.9%) of genes in pham
- Manual Annotations of this start: 4 of 33
- Called 71.4% of time when present
- Phage (with cluster) where this start called: Bauer_41 (FN), BlackSpider_37 (FN), Hestia_43 (AY), Sarge_30 (FB), Shoya_37 (FB),

Start 23:

- Found in 15 of 39 (38.5%) of genes in pham

- Manual Annotations of this start: 13 of 33
- Called 93.3% of time when present
- Phage (with cluster) where this start called: Bridgette_39 (FA), ChuckDuck_40 (FA), Constance_39 (FA), Eileen_35 (FA), GlobiWarming_39 (FA), Judy_40 (FA), Karkharias_38 (FA), KayMoney_39 (FA), Kumotta_31 (FB), MargaretKali_31 (FB), Peas_36 (FA), Philonius_36 (N), RootBeer_30 (FA), Zucker_40 (FN),

Start 24:

- Found in 29 of 39 (74.4%) of genes in pham
- Manual Annotations of this start: 7 of 33
- Called 31.0% of time when present
- Phage (with cluster) where this start called: Aoka_33 (FO), EvenBluerMoon_39 (FO), Gudmit_37 (singleton), JanetJ_32 (FO), Lenoxika_44 (FF), Nandita_44 (FF), P3MA_41 (singleton), PhrostedPhlake_45 (CV), Ryan_44 (FF),

Start 27:

- Found in 1 of 39 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shambre1_37 (singleton),

Summary by clusters:

There are 9 clusters represented in this pham: singleton, N, FA, FB, FF, AY, CV, FN, FO,

Info for manual annotations of cluster AY:

- Start number 21 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster CV:

- Start number 9 was manually annotated 4 times for cluster CV.
- Start number 24 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster FA:

- Start number 4 was manually annotated 2 times for cluster FA.
- Start number 23 was manually annotated 9 times for cluster FA.

Info for manual annotations of cluster FB:

- Start number 11 was manually annotated 1 time for cluster FB.
- Start number 21 was manually annotated 2 times for cluster FB.
- Start number 23 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster FF:

- Start number 24 was manually annotated 2 times for cluster FF.

Info for manual annotations of cluster FN:

- Start number 21 was manually annotated 1 time for cluster FN.
- Start number 23 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster FO:

- Start number 7 was manually annotated 1 time for cluster FO.
- Start number 24 was manually annotated 2 times for cluster FO.

Info for manual annotations of cluster N:

•Start number 23 was manually annotated 1 time for cluster N.

Gene Information:

Gene: Aoka_33 Start: 26261, Stop: 26512, Start Num: 24

Candidate Starts for Aoka_33:

(Start: 11 @26222 has 1 MA's), (Start: 24 @26261 has 7 MA's),

Gene: Bauer_41 Start: 28925, Stop: 28644, Start Num: 21

Candidate Starts for Bauer_41:

(Start: 21 @28925 has 4 MA's), (Start: 24 @28916 has 7 MA's), (26, 28901), (34, 28832), (45, 28721), (51, 28682),

Gene: BlackSpider_37 Start: 28105, Stop: 27839, Start Num: 21

Candidate Starts for BlackSpider_37:

(6, 28165), (18, 28114), (Start: 21 @28105 has 4 MA's), (Start: 24 @28096 has 7 MA's), (30, 28039), (32, 28027), (39, 27964), (46, 27898), (52, 27853),

Gene: BrayBeast_34 Start: 25453, Stop: 25148, Start Num: 11

Candidate Starts for BrayBeast_34:

(Start: 11 @25453 has 1 MA's), (Start: 21 @25423 has 4 MA's), (Start: 24 @25414 has 7 MA's), (26, 25399), (30, 25357), (34, 25330), (48, 25204),

Gene: Bridgette_39 Start: 28174, Stop: 27884, Start Num: 23

Candidate Starts for Bridgette_39:

(Start: 23 @28174 has 13 MA's), (Start: 24 @28168 has 7 MA's), (32, 28099), (41, 28012), (49, 27955), (52, 27925),

Gene: ChuckDuck_40 Start: 27998, Stop: 27708, Start Num: 23

Candidate Starts for ChuckDuck_40:

(Start: 23 @27998 has 13 MA's), (Start: 24 @27992 has 7 MA's), (32, 27923), (41, 27836), (49, 27779), (52, 27749),

Gene: CocoCinnamon_38 Start: 26265, Stop: 26552, Start Num: 15

Candidate Starts for CocoCinnamon_38:

(15, 26265), (32, 26364), (47, 26499), (48, 26505),

Gene: Constance_39 Start: 28327, Stop: 28037, Start Num: 23

Candidate Starts for Constance_39:

(Start: 23 @28327 has 13 MA's), (Start: 24 @28321 has 7 MA's), (32, 28252), (41, 28165), (49, 28108), (52, 28078),

Gene: Eileen_35 Start: 26405, Stop: 26115, Start Num: 23

Candidate Starts for Eileen_35:

(Start: 23 @26405 has 13 MA's), (Start: 24 @26399 has 7 MA's), (32, 26330), (49, 26186), (52, 26156), (56, 26123),

Gene: EvenBluerMoon_39 Start: 26499, Stop: 26750, Start Num: 24

Candidate Starts for EvenBluerMoon_39:

(Start: 11 @26460 has 1 MA's), (Start: 24 @26499 has 7 MA's),

Gene: GlobiWarming_39 Start: 27581, Stop: 27291, Start Num: 23
Candidate Starts for GlobiWarming_39:
(Start: 23 @27581 has 13 MA's), (Start: 24 @27575 has 7 MA's), (32, 27506), (41, 27419), (49, 27362), (52, 27332),

Gene: Guacamole_41 Start: 33011, Stop: 33295, Start Num: 9
Candidate Starts for Guacamole_41:
(Start: 9 @33011 has 4 MA's), (17, 33047), (30, 33098), (53, 33284),

Gene: Gudmit_37 Start: 27130, Stop: 27366, Start Num: 24
Candidate Starts for Gudmit_37:
(Start: 24 @27130 has 7 MA's), (32, 27181), (36, 27223), (47, 27316), (53, 27355),

Gene: Hestia_43 Start: 28715, Stop: 28437, Start Num: 21
Candidate Starts for Hestia_43:
(14, 28733), (Start: 21 @28715 has 4 MA's), (Start: 24 @28706 has 7 MA's), (42, 28544), (44, 28520),

Gene: Hitter_44 Start: 32655, Stop: 32939, Start Num: 9
Candidate Starts for Hitter_44:
(Start: 9 @32655 has 4 MA's), (17, 32691), (30, 32742), (53, 32928),

Gene: JanetJ_32 Start: 26887, Stop: 27126, Start Num: 24
Candidate Starts for JanetJ_32:
(Start: 24 @26887 has 7 MA's), (30, 26923), (54, 27109),

Gene: JasperJr_41 Start: 33011, Stop: 33295, Start Num: 9
Candidate Starts for JasperJr_41:
(Start: 9 @33011 has 4 MA's), (17, 33047), (30, 33098), (53, 33284),

Gene: Judy_40 Start: 28493, Stop: 28203, Start Num: 23
Candidate Starts for Judy_40:
(Start: 23 @28493 has 13 MA's), (Start: 24 @28487 has 7 MA's), (32, 28418), (41, 28331), (49, 28274), (52, 28244),

Gene: Karkharias_39 Start: 28202, Stop: 28516, Start Num: 4
Candidate Starts for Karkharias_39:
(2, 28181), (3, 28190), (Start: 4 @28202 has 2 MA's), (15, 28250), (19, 28259), (29, 28301), (32, 28325),

Gene: Karkharias_38 Start: 28017, Stop: 27757, Start Num: 23
Candidate Starts for Karkharias_38:
(Start: 4 @28083 has 2 MA's), (16, 28035), (Start: 23 @28017 has 13 MA's), (Start: 24 @28011 has 7 MA's), (32, 27945), (35, 27921),

Gene: KayMoney_39 Start: 27670, Stop: 27380, Start Num: 23
Candidate Starts for KayMoney_39:
(Start: 23 @27670 has 13 MA's), (Start: 24 @27664 has 7 MA's), (32, 27595), (41, 27508), (49, 27451), (52, 27421),

Gene: Kumotta_31 Start: 25315, Stop: 25025, Start Num: 23
Candidate Starts for Kumotta_31:

(Start: 23 @25315 has 13 MA's), (Start: 24 @25309 has 7 MA's), (37, 25192), (46, 25111), (50, 25090),

Gene: Lenoxika_44 Start: 30350, Stop: 30589, Start Num: 24

Candidate Starts for Lenoxika_44:

(Start: 24 @30350 has 7 MA's), (48, 30539), (55, 30575),

Gene: Maja_30 Start: 25873, Stop: 25589, Start Num: 7

Candidate Starts for Maja_30:

(Start: 7 @25873 has 1 MA's), (20, 25825), (Start: 23 @25819 has 13 MA's), (Start: 24 @25813 has 7 MA's), (31, 25750), (32, 25744), (34, 25729), (39, 25681), (45, 25618),

Gene: MargaretKali_31 Start: 24950, Stop: 24660, Start Num: 23

Candidate Starts for MargaretKali_31:

(Start: 23 @24950 has 13 MA's), (Start: 24 @24944 has 7 MA's), (37, 24827), (46, 24746), (50, 24725),

Gene: Nandita_44 Start: 30213, Stop: 30452, Start Num: 24

Candidate Starts for Nandita_44:

(Start: 24 @30213 has 7 MA's), (48, 30402), (55, 30438),

Gene: P3MA_41 Start: 31122, Stop: 31355, Start Num: 24

Candidate Starts for P3MA_41:

(12, 31086), (Start: 24 @31122 has 7 MA's), (28, 31131), (29, 31149), (36, 31215), (38, 31230), (40, 31248), (41, 31260),

Gene: Peas_36 Start: 28552, Stop: 28262, Start Num: 23

Candidate Starts for Peas_36:

(Start: 23 @28552 has 13 MA's), (Start: 24 @28546 has 7 MA's), (32, 28477), (41, 28390), (49, 28333), (52, 28303),

Gene: PeggyLeg03_39 Start: 28437, Stop: 28751, Start Num: 4

Candidate Starts for PeggyLeg03_39:

(2, 28416), (3, 28425), (Start: 4 @28437 has 2 MA's), (15, 28485), (19, 28494), (29, 28536), (32, 28560),

Gene: Philonius_36 Start: 27911, Stop: 28141, Start Num: 23

Candidate Starts for Philonius_36:

(Start: 9 @27863 has 4 MA's), (13, 27887), (17, 27899), (22, 27908), (Start: 23 @27911 has 13 MA's), (40, 28040), (41, 28052),

Gene: PhrostedPhlake_45 Start: 32973, Stop: 33212, Start Num: 24

Candidate Starts for PhrostedPhlake_45:

(Start: 24 @32973 has 7 MA's), (32, 33024), (36, 33066), (41, 33111), (52, 33195), (53, 33201),

Gene: Pucara_36 Start: 28042, Stop: 28356, Start Num: 4

Candidate Starts for Pucara_36:

(2, 28021), (3, 28030), (Start: 4 @28042 has 2 MA's), (15, 28090), (19, 28099), (29, 28141), (32, 28165),

Gene: RootBeer_30 Start: 24454, Stop: 24164, Start Num: 23

Candidate Starts for RootBeer_30:

(Start: 23 @24454 has 13 MA's), (Start: 24 @24448 has 7 MA's), (32, 24379), (41, 24292), (49, 24235), (52, 24205),

Gene: Ryan_44 Start: 30762, Stop: 31001, Start Num: 24

Candidate Starts for Ryan_44:

(Start: 24 @30762 has 7 MA's), (48, 30951), (55, 30987),

Gene: Sarge_30 Start: 23262, Stop: 22981, Start Num: 21

Candidate Starts for Sarge_30:

(Start: 21 @23262 has 4 MA's), (Start: 24 @23253 has 7 MA's), (26, 23238), (34, 23169), (45, 23058), (51, 23019),

Gene: Shambre1_37 Start: 25536, Stop: 25748, Start Num: 27

Candidate Starts for Shambre1_37:

(10, 25458), (18, 25494), (Start: 21 @25503 has 4 MA's), (25, 25524), (Start: 27 @25536 has 1 MA's), (32, 25587), (40, 25662), (43, 25695),

Gene: Shoya_37 Start: 25648, Stop: 25358, Start Num: 21

Candidate Starts for Shoya_37:

(8, 25699), (Start: 21 @25648 has 4 MA's), (Start: 24 @25639 has 7 MA's), (32, 25570), (41, 25483), (49, 25426),

Gene: Walrus_42 Start: 32790, Stop: 33074, Start Num: 9

Candidate Starts for Walrus_42:

(Start: 9 @32790 has 4 MA's), (17, 32826), (30, 32877), (53, 33063),

Gene: Zucker_40 Start: 29401, Stop: 29171, Start Num: 23

Candidate Starts for Zucker_40:

(1, 29494), (5, 29464), (Start: 23 @29401 has 13 MA's), (Start: 24 @29395 has 7 MA's), (32, 29326), (33, 29323), (37, 29278), (39, 29263),