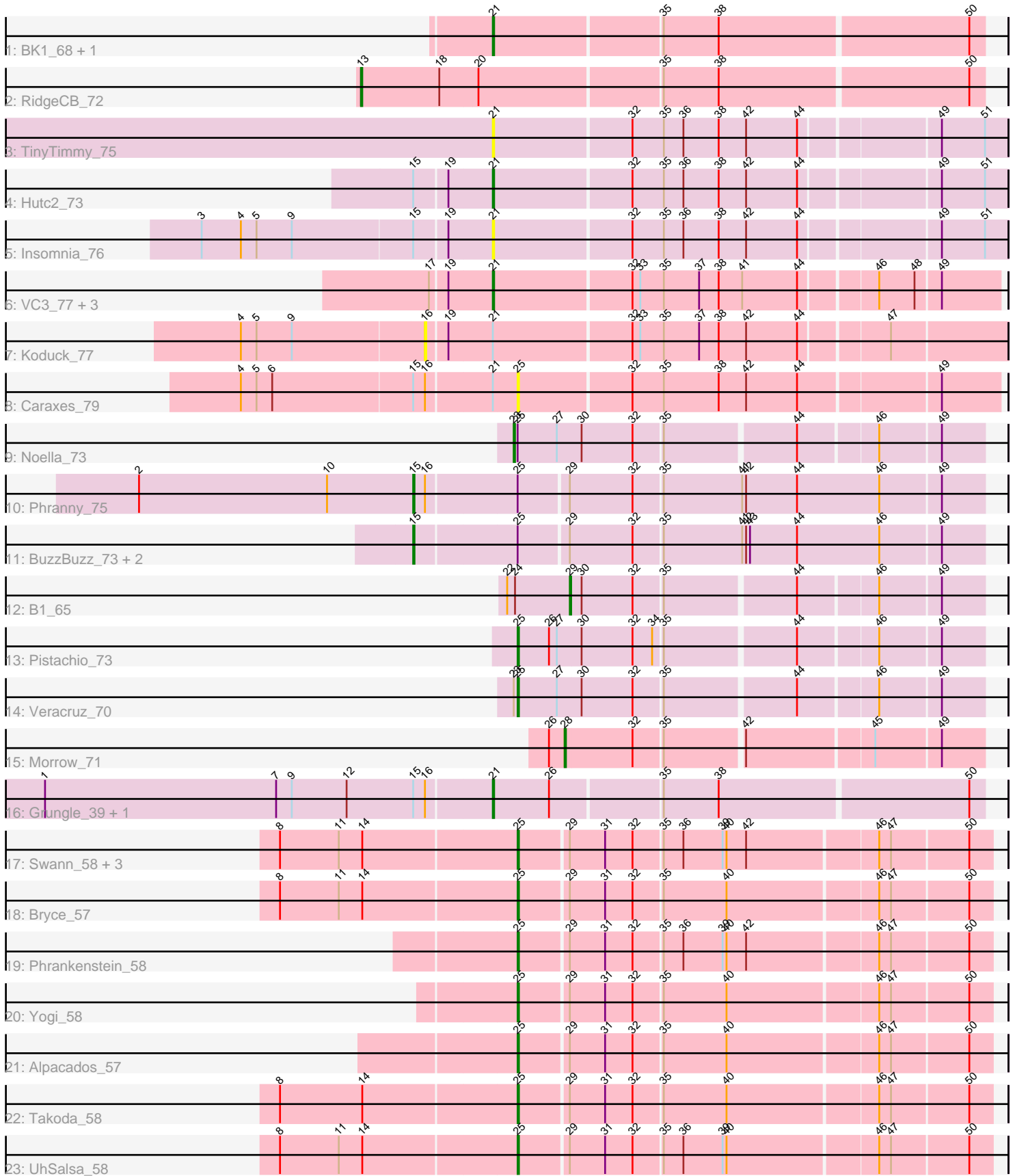


Pham 163801



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 163801 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163801 has 33 members, 5 are drafts.

Phages represented in each track:

- Track 1 : BK1_68, A6_68
- Track 2 : RidgeCB_72
- Track 3 : TinyTimmy_75
- Track 4 : Hutc2_73
- Track 5 : Insomnia_76
- Track 6 : VC3_77, AN9_78, C3_71, ANI8_78
- Track 7 : Koduck_77
- Track 8 : Caraxes_79
- Track 9 : Noella_73
- Track 10 : Phranny_75
- Track 11 : BuzzBuzz_73, Louie6_78, Bxz2_74
- Track 12 : B1_65
- Track 13 : Pistachio_73
- Track 14 : Veracruz_70
- Track 15 : Morrow_71
- Track 16 : Grungle_39, Halldule_42
- Track 17 : Swann_58, Bradshaw_58, Erik_58, Rasputin_58
- Track 18 : Bryce_57
- Track 19 : Phrankenstein_58
- Track 20 : Yogi_58
- Track 21 : Alpacados_57
- Track 22 : Takoda_58
- Track 23 : UhSalsa_58

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

The start number called the most often in the published annotations is 25, it was called in 12 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alpacados_57, Bradshaw_58, Bryce_57, Caraxes_79, Erik_58, Phrankenstein_58, Pistachio_73, Rasputin_58, Swann_58, Takoda_58, UhSalsa_58, Veracruz_70, Yogi_58,

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

- BuzzBuzz_73, Bxz2_74, Louie6_78, Noella_73, Phranny_75,

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

- A6_68, AN9_78, ANI8_78, B1_65, BK1_68, C3_71, Grungle_39, Halldule_42, Hutc2_73, Insomnia_76, Koduck_77, Morrow_71, RidgeCB_72, TinyTimmy_75, VC3_77,

Summary by start number:

Start 13:

- Found in 1 of 33 (3.0%) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RidgeCB_72 (A1),

Start 15:

- Found in 9 of 33 (27.3%) of genes in pham
- Manual Annotations of this start: 4 of 28
- Called 44.4% of time when present
- Phage (with cluster) where this start called: BuzzBuzz_73 (A3), Bxz2_74 (A3), Louie6_78 (A3), Phranny_75 (A3),

Start 16:

- Found in 5 of 33 (15.2%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Koduck_77 (A2),

Start 21:

- Found in 13 of 33 (39.4%) of genes in pham
- Manual Annotations of this start: 8 of 28
- Called 84.6% of time when present
- Phage (with cluster) where this start called: A6_68 (A1), AN9_78 (A2), ANI8_78 (A2), BK1_68 (A1), C3_71 (A2), Grungle_39 (C1), Halldule_42 (C1), Hutc2_73 (A11), Insomnia_76 (A11), TinyTimmy_75 (A11), VC3_77 (A2),

Start 23:

- Found in 2 of 33 (6.1%) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Noella_73 (A3),

Start 25:

- Found in 18 of 33 (54.5%) of genes in pham
- Manual Annotations of this start: 12 of 28
- Called 72.2% of time when present
- Phage (with cluster) where this start called: Alpacados_57 (CA), Bradshaw_58 (CA), Bryce_57 (CA), Caraxes_79 (A2), Erik_58 (CA), Phrankenstein_58 (CA), Pistachio_73 (A3), Rasputin_58 (CA), Swann_58 (CA), Takoda_58 (CA), UhSalsa_58 (CA), Veracruz_70 (A3), Yogi_58 (CA),

Start 28:

- Found in 1 of 33 (3.0%) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Morrow_71 (A4),

Start 29:

- Found in 15 of 33 (45.5%) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 6.7% of time when present
- Phage (with cluster) where this start called: B1_65 (A3),

Summary by clusters:

There are 7 clusters represented in this pham: A11, CA, A1, A3, A2, A4, C1,

Info for manual annotations of cluster A1:

- Start number 13 was manually annotated 1 time for cluster A1.
- Start number 21 was manually annotated 2 times for cluster A1.

Info for manual annotations of cluster A11:

- Start number 21 was manually annotated 1 time for cluster A11.

Info for manual annotations of cluster A2:

- Start number 21 was manually annotated 4 times for cluster A2.

Info for manual annotations of cluster A3:

- Start number 15 was manually annotated 4 times for cluster A3.
- Start number 23 was manually annotated 1 time for cluster A3.
- Start number 25 was manually annotated 2 times for cluster A3.
- Start number 29 was manually annotated 1 time for cluster A3.

Info for manual annotations of cluster A4:

- Start number 28 was manually annotated 1 time for cluster A4.

Info for manual annotations of cluster C1:

- Start number 21 was manually annotated 1 time for cluster C1.

Info for manual annotations of cluster CA:

- Start number 25 was manually annotated 10 times for cluster CA.

Gene Information:

Gene: A6_68 Start: 43794, Stop: 43432, Start Num: 21

Candidate Starts for A6_68:

(Start: 21 @43794 has 8 MA's), (35, 43671), (38, 43629), (50, 43443),

Gene: AN9_78 Start: 45224, Stop: 44853, Start Num: 21

Candidate Starts for AN9_78:

(17, 45269), (19, 45257), (Start: 21 @45224 has 8 MA's), (32, 45122), (33, 45116), (35, 45098), (37, 45071), (38, 45056), (41, 45038), (44, 44996), (46, 44942), (48, 44915), (49, 44897),

Gene: ANI8_78 Start: 45224, Stop: 44853, Start Num: 21

Candidate Starts for ANI8_78:

(17, 45269), (19, 45257), (Start: 21 @45224 has 8 MA's), (32, 45122), (33, 45116), (35, 45098), (37, 45071), (38, 45056), (41, 45038), (44, 44996), (46, 44942), (48, 44915), (49, 44897),

Gene: Alpacados_57 Start: 39918, Stop: 39571, Start Num: 25

Candidate Starts for Alpacados_57:

(Start: 25 @39918 has 12 MA's), (Start: 29 @39882 has 1 MA's), (31, 39855), (32, 39834), (35, 39813), (40, 39765), (46, 39654), (47, 39645), (50, 39588),

Gene: B1_65 Start: 42656, Stop: 42357, Start Num: 29

Candidate Starts for B1_65:

(22, 42704), (24, 42698), (Start: 29 @42656 has 1 MA's), (30, 42647), (32, 42608), (35, 42587), (44, 42491), (46, 42434), (49, 42389),

Gene: BK1_68 Start: 43794, Stop: 43432, Start Num: 21

Candidate Starts for BK1_68:

(Start: 21 @43794 has 8 MA's), (35, 43671), (38, 43629), (50, 43443),

Gene: Bradshaw_58 Start: 39958, Stop: 39611, Start Num: 25

Candidate Starts for Bradshaw_58:

(8, 40135), (11, 40090), (14, 40072), (Start: 25 @39958 has 12 MA's), (Start: 29 @39922 has 1 MA's), (31, 39895), (32, 39874), (35, 39853), (36, 39838), (39, 39808), (40, 39805), (42, 39790), (46, 39694), (47, 39685), (50, 39628),

Gene: Bryce_57 Start: 39703, Stop: 39356, Start Num: 25

Candidate Starts for Bryce_57:

(8, 39880), (11, 39835), (14, 39817), (Start: 25 @39703 has 12 MA's), (Start: 29 @39667 has 1 MA's), (31, 39640), (32, 39619), (35, 39598), (40, 39550), (46, 39439), (47, 39430), (50, 39373),

Gene: BuzzBuzz_73 Start: 44946, Stop: 44524, Start Num: 15

Candidate Starts for BuzzBuzz_73:

(Start: 15 @44946 has 4 MA's), (Start: 25 @44871 has 12 MA's), (Start: 29 @44835 has 1 MA's), (32, 44787), (35, 44766), (41, 44706), (42, 44703), (43, 44700), (44, 44664), (46, 44601), (49, 44556),

Gene: Bxz2_74 Start: 44953, Stop: 44531, Start Num: 15

Candidate Starts for Bxz2_74:

(Start: 15 @44953 has 4 MA's), (Start: 25 @44878 has 12 MA's), (Start: 29 @44842 has 1 MA's), (32, 44794), (35, 44773), (41, 44713), (42, 44710), (43, 44707), (44, 44671), (46, 44608), (49, 44563),

Gene: C3_71 Start: 45224, Stop: 44853, Start Num: 21

Candidate Starts for C3_71:

(17, 45269), (19, 45257), (Start: 21 @45224 has 8 MA's), (32, 45122), (33, 45116), (35, 45098), (37, 45071), (38, 45056), (41, 45038), (44, 44996), (46, 44942), (48, 44915), (49, 44897),

Gene: Caraxes_79 Start: 44850, Stop: 44494, Start Num: 25

Candidate Starts for Caraxes_79:

(4, 45054), (5, 45042), (6, 45030), (Start: 15 @44925 has 4 MA's), (16, 44916), (Start: 21 @44868 has 8 MA's), (Start: 25 @44850 has 12 MA's), (32, 44766), (35, 44742), (38, 44700), (42, 44679), (44, 44640), (49, 44538),

Gene: Erik_58 Start: 39881, Stop: 39534, Start Num: 25

Candidate Starts for Erik_58:

(8, 40058), (11, 40013), (14, 39995), (Start: 25 @39881 has 12 MA's), (Start: 29 @39845 has 1 MA's), (31, 39818), (32, 39797), (35, 39776), (36, 39761), (39, 39731), (40, 39728), (42, 39713), (46, 39617), (47, 39608), (50, 39551),

Gene: Grungle_39 Start: 13010, Stop: 13372, Start Num: 21

Candidate Starts for Grungle_39:

(1, 12671), (7, 12848), (9, 12860), (12, 12902), (Start: 15 @12953 has 4 MA's), (16, 12962), (Start: 21 @13010 has 8 MA's), (26, 13052), (35, 13133), (38, 13175), (50, 13361),

Gene: Halldule_42 Start: 13459, Stop: 13821, Start Num: 21

Candidate Starts for Halldule_42:

(1, 13120), (7, 13297), (9, 13309), (12, 13351), (Start: 15 @13402 has 4 MA's), (16, 13411), (Start: 21 @13459 has 8 MA's), (26, 13501), (35, 13582), (38, 13624), (50, 13810),

Gene: Hutc2_73 Start: 43599, Stop: 43222, Start Num: 21

Candidate Starts for Hutc2_73:

(Start: 15 @43656 has 4 MA's), (19, 43632), (Start: 21 @43599 has 8 MA's), (32, 43497), (35, 43473), (36, 43458), (38, 43431), (42, 43410), (44, 43371), (49, 43272), (51, 43239),

Gene: Insomnia_76 Start: 44891, Stop: 44514, Start Num: 21

Candidate Starts for Insomnia_76:

(3, 45107), (4, 45077), (5, 45065), (9, 45038), (Start: 15 @44948 has 4 MA's), (19, 44924), (Start: 21 @44891 has 8 MA's), (32, 44789), (35, 44765), (36, 44750), (38, 44723), (42, 44702), (44, 44663), (49, 44564), (51, 44531),

Gene: Koduck_77 Start: 44603, Stop: 44178, Start Num: 16

Candidate Starts for Koduck_77:

(4, 44741), (5, 44729), (9, 44702), (16, 44603), (19, 44588), (Start: 21 @44555 has 8 MA's), (32, 44453), (33, 44447), (35, 44429), (37, 44402), (38, 44387), (42, 44366), (44, 44327), (47, 44264),

Gene: Louie6_78 Start: 44948, Stop: 44526, Start Num: 15

Candidate Starts for Louie6_78:

(Start: 15 @44948 has 4 MA's), (Start: 25 @44873 has 12 MA's), (Start: 29 @44837 has 1 MA's), (32, 44789), (35, 44768), (41, 44708), (42, 44705), (43, 44702), (44, 44666), (46, 44603), (49, 44558),

Gene: Morrow_71 Start: 44003, Stop: 43701, Start Num: 28

Candidate Starts for Morrow_71:

(26, 44015), (Start: 28 @44003 has 1 MA's), (32, 43952), (35, 43931), (42, 43874), (45, 43781), (49, 43733),

Gene: Noella_73 Start: 44480, Stop: 44139, Start Num: 23

Candidate Starts for Noella_73:

(Start: 23 @44480 has 1 MA's), (Start: 25 @44477 has 12 MA's), (27, 44447), (30, 44429), (32, 44390), (35, 44369), (44, 44273), (46, 44216), (49, 44171),

Gene: Phrankenstein_58 Start: 39895, Stop: 39548, Start Num: 25

Candidate Starts for Phrankenstein_58:

(Start: 25 @39895 has 12 MA's), (Start: 29 @39859 has 1 MA's), (31, 39832), (32, 39811), (35, 39790), (36, 39775), (39, 39745), (40, 39742), (42, 39727), (46, 39631), (47, 39622), (50, 39565),

Gene: Phranny_75 Start: 43896, Stop: 43474, Start Num: 15

Candidate Starts for Phranny_75:

(2, 44106), (10, 43962), (Start: 15 @43896 has 4 MA's), (16, 43887), (Start: 25 @43821 has 12 MA's), (Start: 29 @43785 has 1 MA's), (32, 43737), (35, 43716), (41, 43656), (42, 43653), (44, 43614), (46, 43551), (49, 43506),

Gene: Pistachio_73 Start: 44065, Stop: 43727, Start Num: 25

Candidate Starts for Pistachio_73:

(Start: 25 @44065 has 12 MA's), (26, 44041), (27, 44035), (30, 44017), (32, 43978), (34, 43963), (35, 43957), (44, 43861), (46, 43804), (49, 43759),

Gene: Rasputin_58 Start: 39919, Stop: 39572, Start Num: 25

Candidate Starts for Rasputin_58:

(8, 40096), (11, 40051), (14, 40033), (Start: 25 @39919 has 12 MA's), (Start: 29 @39883 has 1 MA's), (31, 39856), (32, 39835), (35, 39814), (36, 39799), (39, 39769), (40, 39766), (42, 39751), (46, 39655), (47, 39646), (50, 39589),

Gene: RidgeCB_72 Start: 45253, Stop: 44792, Start Num: 13

Candidate Starts for RidgeCB_72:

(Start: 13 @45253 has 1 MA's), (18, 45193), (20, 45166), (35, 45031), (38, 44989), (50, 44803),

Gene: Swann_58 Start: 39947, Stop: 39600, Start Num: 25

Candidate Starts for Swann_58:

(8, 40124), (11, 40079), (14, 40061), (Start: 25 @39947 has 12 MA's), (Start: 29 @39911 has 1 MA's), (31, 39884), (32, 39863), (35, 39842), (36, 39827), (39, 39797), (40, 39794), (42, 39779), (46, 39683), (47, 39674), (50, 39617),

Gene: Takoda_58 Start: 40134, Stop: 39787, Start Num: 25

Candidate Starts for Takoda_58:

(8, 40311), (14, 40248), (Start: 25 @40134 has 12 MA's), (Start: 29 @40098 has 1 MA's), (31, 40071), (32, 40050), (35, 40029), (40, 39981), (46, 39870), (47, 39861), (50, 39804),

Gene: TinyTimmy_75 Start: 44421, Stop: 44044, Start Num: 21

Candidate Starts for TinyTimmy_75:

(Start: 21 @44421 has 8 MA's), (32, 44319), (35, 44295), (36, 44280), (38, 44253), (42, 44232), (44, 44193), (49, 44094), (51, 44061),

Gene: UhSalsa_58 Start: 39888, Stop: 39541, Start Num: 25

Candidate Starts for UhSalsa_58:

(8, 40065), (11, 40020), (14, 40002), (Start: 25 @39888 has 12 MA's), (Start: 29 @39852 has 1 MA's), (31, 39825), (32, 39804), (35, 39783), (36, 39768), (39, 39738), (40, 39735), (46, 39624), (47, 39615), (50, 39558),

Gene: VC3_77 Start: 45224, Stop: 44853, Start Num: 21

Candidate Starts for VC3_77:

(17, 45269), (19, 45257), (Start: 21 @45224 has 8 MA's), (32, 45122), (33, 45116), (35, 45098), (37, 45071), (38, 45056), (41, 45038), (44, 44996), (46, 44942), (48, 44915), (49, 44897),

Gene: Veracruz_70 Start: 44476, Stop: 44138, Start Num: 25

Candidate Starts for Veracruz_70:

(Start: 23 @44479 has 1 MA's), (Start: 25 @44476 has 12 MA's), (27, 44446), (30, 44428), (32, 44389), (35, 44368), (44, 44272), (46, 44215), (49, 44170),

Gene: Yogi_58 Start: 40300, Stop: 39953, Start Num: 25

Candidate Starts for Yogi_58:

(Start: 25 @40300 has 12 MA's), (Start: 29 @40264 has 1 MA's), (31, 40237), (32, 40216), (35, 40195), (40, 40147), (46, 40036), (47, 40027), (50, 39970),