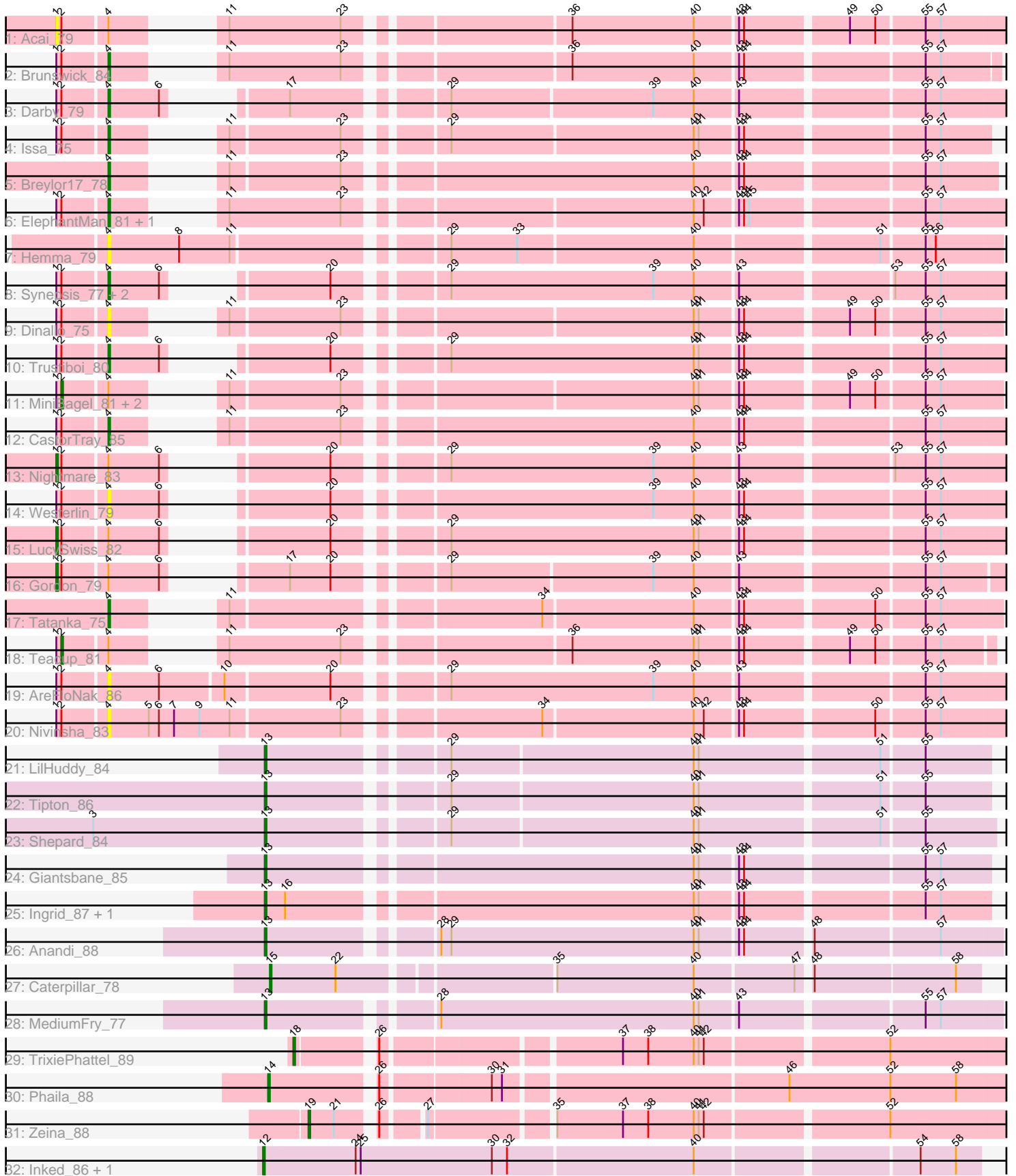


Pham 311796



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 311796 Report

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

Pham number 311796 has 39 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Acai_79
- Track 2 : Brunswick_84
- Track 3 : Darby_79
- Track 4 : Issa_75
- Track 5 : Breylor17_78
- Track 6 : ElephantMan_81, Niktson_81
- Track 7 : Hemma_79
- Track 8 : Synepsis_77, ScienceWizSam_83, DevitoJr_81
- Track 9 : Dinallo_75
- Track 10 : Trustiboi_80
- Track 11 : MiniBagel_81, CapnMurica_77, Tenno_80
- Track 12 : CastorTray_85
- Track 13 : Nightmare_83
- Track 14 : Westerlin_79
- Track 15 : LucySwiss_82
- Track 16 : Gordon_79
- Track 17 : Tatanka_75
- Track 18 : Teacup_81
- Track 19 : AreFloNak_86
- Track 20 : Nivinsha_83
- Track 21 : LilHuddy_84
- Track 22 : Tipton_86
- Track 23 : Shepard_84
- Track 24 : Giantsbane_85
- Track 25 : Ingrid_87, Loretta_83
- Track 26 : Anandi_88
- Track 27 : Caterpillar_78
- Track 28 : MediumFry_77
- Track 29 : TrixiePhattel_89
- Track 30 : Phaila_88
- Track 31 : Zeina_88
- Track 32 : Inked_86, Zippen_87

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

The start number called the most often in the published annotations is 4, it was called in 12 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AreFloNak_86, Breylor17_78, Brunswick_84, CastorTray_85, Darby_79, DevitoJr_81, Dinallo_75, ElephantMan_81, Hemma_79, Issa_75, Niktson_81, Nivinsha_83, ScienceWizSam_83, Synepsis_77, Tatanka_75, Trustiboi_80, Westerlin_79,

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

- Acai_79, CapnMurica_77, Gordon_79, LucySwiss_82, MiniBagel_81, Nightmare_83, Teacup_81, Tenno_80,

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

- Anandi_88, Caterpillar_78, Giantsbane_85, Ingrid_87, Inked_86, LilHuddy_84, Loretta_83, MediumFry_77, Phaila_88, Shepard_84, Tipton_86, TrixiePhattel_89, Zeina_88, Zippen_87,

Summary by start number:

Start 1:

- Found in 22 of 39 (56.4%) of genes in pham
- Manual Annotations of this start: 3 of 33
- Called 18.2% of time when present
- Phage (with cluster) where this start called: Acai_79 (AU1), Gordon_79 (AU1), LucySwiss_82 (AU1), Nightmare_83 (AU1),

Start 2:

- Found in 22 of 39 (56.4%) of genes in pham
- Manual Annotations of this start: 4 of 33
- Called 18.2% of time when present
- Phage (with cluster) where this start called: CapnMurica_77 (AU1), MiniBagel_81 (AU1), Teacup_81 (AU1), Tenno_80 (AU1),

Start 4:

- Found in 25 of 39 (64.1%) of genes in pham
- Manual Annotations of this start: 12 of 33
- Called 68.0% of time when present
- Phage (with cluster) where this start called: AreFloNak_86 (AU1), Breylor17_78 (AU1), Brunswick_84 (AU1), CastorTray_85 (AU1), Darby_79 (AU1), DevitoJr_81 (AU1), Dinallo_75 (AU1), ElephantMan_81 (AU1), Hemma_79 (AU1), Issa_75 (AU1), Niktson_81 (AU1), Nivinsha_83 (AU1), ScienceWizSam_83 (AU1), Synepsis_77 (AU1), Tatanka_75 (AU1), Trustiboi_80 (AU1), Westerlin_79 (AU1),

Start 12:

- Found in 2 of 39 (5.1%) of genes in pham
- Manual Annotations of this start: 2 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Inked_86 (AU7), Zippen_87 (AU7),

Start 13:

- Found in 8 of 39 (20.5%) of genes in pham

- Manual Annotations of this start: 8 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anandi_88 (AU4), Giantsbane_85 (AU2), Ingrid_87 (AU3), LilHuddy_84 (AU2), Loretta_83 (AU3), MediumFry_77 (AU4), Shepard_84 (AU2), Tipton_86 (AU2),

Start 14:

- 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: Phaila_88 (AU6),

Start 15:

- 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: Caterpillar_78 (AU4),

Start 18:

- 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: TrixiePhattel_89 (AU6),

Start 19:

- 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: Zeina_88 (AU6),

Summary by clusters:

There are 6 clusters represented in this pham: AU1, AU3, AU2, AU4, AU7, AU6,

Info for manual annotations of cluster AU1:

- Start number 1 was manually annotated 3 times for cluster AU1.
- Start number 2 was manually annotated 4 times for cluster AU1.
- Start number 4 was manually annotated 12 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 13 was manually annotated 4 times for cluster AU2.

Info for manual annotations of cluster AU3:

- Start number 13 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 13 was manually annotated 2 times for cluster AU4.
- Start number 15 was manually annotated 1 time for cluster AU4.

Info for manual annotations of cluster AU6:

- Start number 14 was manually annotated 1 time for cluster AU6.
- Start number 18 was manually annotated 1 time for cluster AU6.
- Start number 19 was manually annotated 1 time for cluster AU6.

Info for manual annotations of cluster AU7:

•Start number 12 was manually annotated 2 times for cluster AU7.

Gene Information:

Gene: Acai_79 Start: 51613, Stop: 52098, Start Num: 1

Candidate Starts for Acai_79:

(Start: 1 @51613 has 3 MA's), (Start: 2 @51616 has 4 MA's), (Start: 4 @51640 has 12 MA's), (11, 51670), (23, 51736), (36, 51853), (40, 51925), (43, 51949), (44, 51952), (49, 52009), (50, 52024), (55, 52051), (57, 52060),

Gene: Anandi_88 Start: 51837, Stop: 52244, Start Num: 13

Candidate Starts for Anandi_88:

(Start: 13 @51837 has 8 MA's), (28, 51924), (29, 51930), (40, 52074), (41, 52077), (43, 52098), (44, 52101), (48, 52137), (57, 52209),

Gene: AreFloNak_86 Start: 51686, Stop: 52186, Start Num: 4

Candidate Starts for AreFloNak_86:

(Start: 1 @51659 has 3 MA's), (Start: 2 @51662 has 4 MA's), (Start: 4 @51686 has 12 MA's), (6, 51716), (10, 51752), (20, 51812), (29, 51866), (39, 51986), (40, 52010), (43, 52034), (55, 52136), (57, 52145),

Gene: Breylor17_78 Start: 52170, Stop: 52622, Start Num: 4

Candidate Starts for Breylor17_78:

(Start: 4 @52170 has 12 MA's), (11, 52200), (23, 52263), (40, 52455), (43, 52479), (44, 52482), (55, 52581), (57, 52590),

Gene: Brunswick_84 Start: 52075, Stop: 52527, Start Num: 4

Candidate Starts for Brunswick_84:

(Start: 1 @52048 has 3 MA's), (Start: 2 @52051 has 4 MA's), (Start: 4 @52075 has 12 MA's), (11, 52105), (23, 52171), (36, 52288), (40, 52360), (43, 52384), (44, 52387), (55, 52486), (57, 52495),

Gene: CapnMurica_77 Start: 51886, Stop: 52365, Start Num: 2

Candidate Starts for CapnMurica_77:

(Start: 1 @51883 has 3 MA's), (Start: 2 @51886 has 4 MA's), (Start: 4 @51910 has 12 MA's), (11, 51940), (23, 52006), (40, 52195), (41, 52198), (43, 52219), (44, 52222), (49, 52279), (50, 52294), (55, 52321), (57, 52330),

Gene: CastorTray_85 Start: 52454, Stop: 52915, Start Num: 4

Candidate Starts for CastorTray_85:

(Start: 1 @52427 has 3 MA's), (Start: 2 @52430 has 4 MA's), (Start: 4 @52454 has 12 MA's), (11, 52484), (23, 52547), (40, 52739), (43, 52763), (44, 52766), (55, 52865), (57, 52874),

Gene: Caterpillar_78 Start: 50772, Stop: 51167, Start Num: 15

Candidate Starts for Caterpillar_78:

(Start: 15 @50772 has 1 MA's), (22, 50811), (35, 50928), (40, 51009), (47, 51066), (48, 51072), (58, 51153),

Gene: Darby_79 Start: 51500, Stop: 51955, Start Num: 4

Candidate Starts for Darby_79:

(Start: 1 @51473 has 3 MA's), (Start: 2 @51476 has 4 MA's), (Start: 4 @51500 has 12 MA's), (6, 51530), (17, 51563), (29, 51641), (39, 51758), (40, 51782), (43, 51806), (55, 51908), (57, 51917),

Gene: DevitoJr_81 Start: 51602, Stop: 52063, Start Num: 4

Candidate Starts for DevitoJr_81:

(Start: 1 @51575 has 3 MA's), (Start: 2 @51578 has 4 MA's), (Start: 4 @51602 has 12 MA's), (6, 51632), (20, 51689), (29, 51743), (39, 51863), (40, 51887), (43, 51911), (53, 51995), (55, 52013), (57, 52022),

Gene: Dinallo_75 Start: 52156, Stop: 52608, Start Num: 4

Candidate Starts for Dinallo_75:

(Start: 1 @52129 has 3 MA's), (Start: 2 @52132 has 4 MA's), (Start: 4 @52156 has 12 MA's), (11, 52186), (23, 52249), (40, 52438), (41, 52441), (43, 52462), (44, 52465), (49, 52522), (50, 52537), (55, 52564), (57, 52573),

Gene: ElephantMan_81 Start: 52225, Stop: 52683, Start Num: 4

Candidate Starts for ElephantMan_81:

(Start: 1 @52198 has 3 MA's), (Start: 2 @52201 has 4 MA's), (Start: 4 @52225 has 12 MA's), (11, 52255), (23, 52321), (40, 52510), (42, 52516), (43, 52534), (44, 52537), (45, 52540), (55, 52636), (57, 52645),

Gene: Giantsbane_85 Start: 50818, Stop: 51219, Start Num: 13

Candidate Starts for Giantsbane_85:

(Start: 13 @50818 has 8 MA's), (40, 51055), (41, 51058), (43, 51079), (44, 51082), (55, 51181), (57, 51190),

Gene: Gordon_79 Start: 52213, Stop: 52692, Start Num: 1

Candidate Starts for Gordon_79:

(Start: 1 @52213 has 3 MA's), (Start: 2 @52216 has 4 MA's), (Start: 4 @52240 has 12 MA's), (6, 52270), (17, 52303), (20, 52327), (29, 52381), (39, 52498), (40, 52522), (43, 52546), (55, 52648), (57, 52657),

Gene: Hemma_79 Start: 49456, Stop: 49950, Start Num: 4

Candidate Starts for Hemma_79:

(Start: 4 @49456 has 12 MA's), (8, 49498), (11, 49528), (29, 49639), (33, 49678), (40, 49780), (51, 49882), (55, 49906), (56, 49912),

Gene: Ingrid_87 Start: 51748, Stop: 52149, Start Num: 13

Candidate Starts for Ingrid_87:

(Start: 13 @51748 has 8 MA's), (16, 51760), (40, 51985), (41, 51988), (43, 52009), (44, 52012), (55, 52111), (57, 52120),

Gene: Inked_86 Start: 52300, Stop: 52710, Start Num: 12

Candidate Starts for Inked_86:

(Start: 12 @52300 has 2 MA's), (24, 52354), (25, 52357), (30, 52435), (32, 52444), (40, 52552), (54, 52675), (58, 52696),

Gene: Issa_75 Start: 50981, Stop: 51427, Start Num: 4

Candidate Starts for Issa_75:

(Start: 1 @50954 has 3 MA's), (Start: 2 @50957 has 4 MA's), (Start: 4 @50981 has 12 MA's), (11, 51011), (23, 51074), (29, 51122), (40, 51263), (41, 51266), (43, 51287), (44, 51290), (55, 51389), (57, 51398),

Gene: LilHuddy_84 Start: 51711, Stop: 52112, Start Num: 13
Candidate Starts for LilHuddy_84:
(Start: 13 @51711 has 8 MA's), (29, 51804), (40, 51945), (41, 51948), (51, 52050), (55, 52074),

Gene: Loretta_83 Start: 51748, Stop: 52149, Start Num: 13
Candidate Starts for Loretta_83:
(Start: 13 @51748 has 8 MA's), (16, 51760), (40, 51985), (41, 51988), (43, 52009), (44, 52012), (55, 52111), (57, 52120),

Gene: LucySwiss_82 Start: 51384, Stop: 51869, Start Num: 1
Candidate Starts for LucySwiss_82:
(Start: 1 @51384 has 3 MA's), (Start: 2 @51387 has 4 MA's), (Start: 4 @51411 has 12 MA's), (6, 51441), (20, 51498), (29, 51552), (40, 51696), (41, 51699), (43, 51720), (44, 51723), (55, 51822), (57, 51831),

Gene: MediumFry_77 Start: 51102, Stop: 51509, Start Num: 13
Candidate Starts for MediumFry_77:
(Start: 13 @51102 has 8 MA's), (28, 51189), (40, 51339), (41, 51342), (43, 51363), (55, 51465), (57, 51474),

Gene: MiniBagel_81 Start: 51890, Stop: 52366, Start Num: 2
Candidate Starts for MiniBagel_81:
(Start: 1 @51887 has 3 MA's), (Start: 2 @51890 has 4 MA's), (Start: 4 @51914 has 12 MA's), (11, 51944), (23, 52007), (40, 52196), (41, 52199), (43, 52220), (44, 52223), (49, 52280), (50, 52295), (55, 52322), (57, 52331),

Gene: Nightmare_83 Start: 52529, Stop: 53017, Start Num: 1
Candidate Starts for Nightmare_83:
(Start: 1 @52529 has 3 MA's), (Start: 2 @52532 has 4 MA's), (Start: 4 @52556 has 12 MA's), (6, 52586), (20, 52643), (29, 52697), (39, 52817), (40, 52841), (43, 52865), (53, 52949), (55, 52967), (57, 52976),

Gene: Niktson_81 Start: 52225, Stop: 52683, Start Num: 4
Candidate Starts for Niktson_81:
(Start: 1 @52198 has 3 MA's), (Start: 2 @52201 has 4 MA's), (Start: 4 @52225 has 12 MA's), (11, 52255), (23, 52321), (40, 52510), (42, 52516), (43, 52534), (44, 52537), (45, 52540), (55, 52636), (57, 52645),

Gene: Nivinsha_83 Start: 51687, Stop: 52187, Start Num: 4
Candidate Starts for Nivinsha_83:
(Start: 1 @51660 has 3 MA's), (Start: 2 @51663 has 4 MA's), (Start: 4 @51687 has 12 MA's), (5, 51711), (6, 51717), (7, 51726), (9, 51741), (11, 51759), (23, 51822), (34, 51924), (40, 52011), (42, 52017), (43, 52035), (44, 52038), (50, 52110), (55, 52137), (57, 52146),

Gene: Phaila_88 Start: 50639, Stop: 51052, Start Num: 14
Candidate Starts for Phaila_88:
(Start: 14 @50639 has 1 MA's), (26, 50696), (30, 50756), (31, 50762), (46, 50921), (52, 50981), (58, 51020),

Gene: ScienceWizSam_83 Start: 51775, Stop: 52236, Start Num: 4
Candidate Starts for ScienceWizSam_83:
(Start: 1 @51748 has 3 MA's), (Start: 2 @51751 has 4 MA's), (Start: 4 @51775 has 12 MA's), (6, 51805), (20, 51862), (29, 51916), (39, 52036), (40, 52060), (43, 52084), (53, 52168), (55, 52186), (57,

52195),

Gene: Shepard_84 Start: 51404, Stop: 51808, Start Num: 13

Candidate Starts for Shepard_84:

(3, 51302), (Start: 13 @51404 has 8 MA's), (29, 51497), (40, 51638), (41, 51641), (51, 51743), (55, 51767),

Gene: Synopsis_77 Start: 51613, Stop: 52074, Start Num: 4

Candidate Starts for Synopsis_77:

(Start: 1 @51586 has 3 MA's), (Start: 2 @51589 has 4 MA's), (Start: 4 @51613 has 12 MA's), (6, 51643), (20, 51700), (29, 51754), (39, 51874), (40, 51898), (43, 51922), (53, 52006), (55, 52024), (57, 52033),

Gene: Tatanka_75 Start: 51532, Stop: 51984, Start Num: 4

Candidate Starts for Tatanka_75:

(Start: 4 @51532 has 12 MA's), (11, 51562), (34, 51727), (40, 51814), (43, 51838), (44, 51841), (50, 51913), (55, 51940), (57, 51949),

Gene: Teacup_81 Start: 52032, Stop: 52505, Start Num: 2

Candidate Starts for Teacup_81:

(Start: 1 @52029 has 3 MA's), (Start: 2 @52032 has 4 MA's), (Start: 4 @52056 has 12 MA's), (11, 52086), (23, 52152), (36, 52269), (40, 52341), (41, 52344), (43, 52365), (44, 52368), (49, 52425), (50, 52440), (55, 52467), (57, 52476),

Gene: Tenno_80 Start: 51923, Stop: 52399, Start Num: 2

Candidate Starts for Tenno_80:

(Start: 1 @51920 has 3 MA's), (Start: 2 @51923 has 4 MA's), (Start: 4 @51947 has 12 MA's), (11, 51977), (23, 52040), (40, 52229), (41, 52232), (43, 52253), (44, 52256), (49, 52313), (50, 52328), (55, 52355), (57, 52364),

Gene: Tipton_86 Start: 52075, Stop: 52476, Start Num: 13

Candidate Starts for Tipton_86:

(Start: 13 @52075 has 8 MA's), (29, 52168), (40, 52309), (41, 52312), (51, 52414), (55, 52438),

Gene: TrixiePhattel_89 Start: 50519, Stop: 50926, Start Num: 18

Candidate Starts for TrixiePhattel_89:

(Start: 18 @50519 has 1 MA's), (26, 50558), (37, 50687), (38, 50702), (40, 50729), (41, 50732), (42, 50735), (52, 50837),

Gene: Trustiboi_80 Start: 51962, Stop: 52423, Start Num: 4

Candidate Starts for Trustiboi_80:

(Start: 1 @51935 has 3 MA's), (Start: 2 @51938 has 4 MA's), (Start: 4 @51962 has 12 MA's), (6, 51992), (20, 52049), (29, 52103), (40, 52247), (41, 52250), (43, 52271), (44, 52274), (55, 52373), (57, 52382),

Gene: Westerlin_79 Start: 52740, Stop: 53198, Start Num: 4

Candidate Starts for Westerlin_79:

(Start: 1 @52713 has 3 MA's), (Start: 2 @52716 has 4 MA's), (Start: 4 @52740 has 12 MA's), (6, 52770), (20, 52827), (39, 53001), (40, 53025), (43, 53049), (44, 53052), (55, 53151), (57, 53160),

Gene: Zeina_88 Start: 50312, Stop: 50710, Start Num: 19

Candidate Starts for Zeina_88:

(Start: 19 @50312 has 1 MA's), (21, 50327), (26, 50345), (27, 50366), (35, 50432), (37, 50471), (38, 50486), (40, 50513), (41, 50516), (42, 50519), (52, 50621),

Gene: Zippen_87 Start: 52342, Stop: 52752, Start Num: 12

Candidate Starts for Zippen_87:

(Start: 12 @52342 has 2 MA's), (24, 52396), (25, 52399), (30, 52477), (32, 52486), (40, 52594), (54, 52717), (58, 52738),