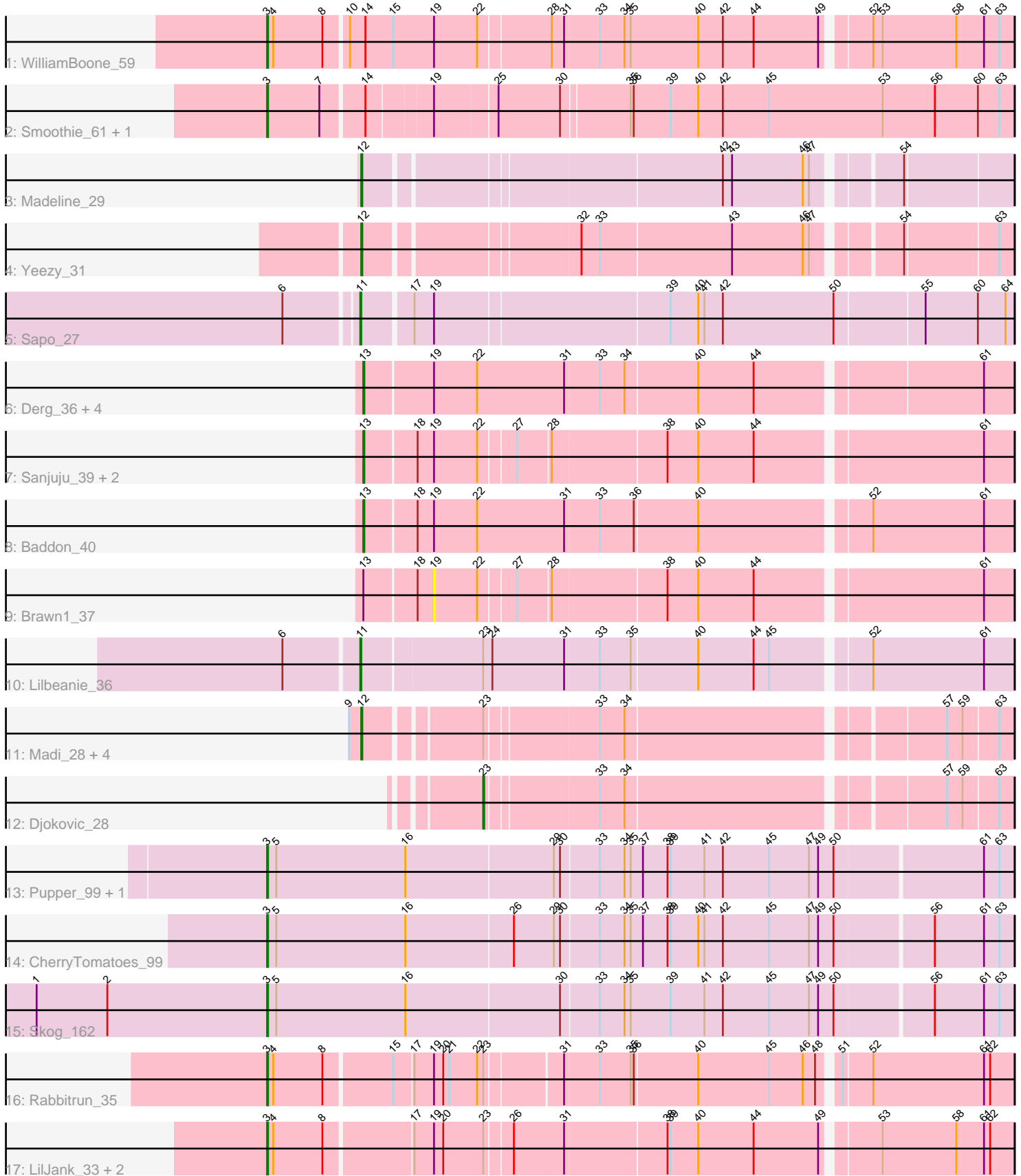


Pham 296801



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 296801 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296801 has 31 members, 3 are drafts.

Phages represented in each track:

- Track 1 : WilliamBoone_59
- Track 2 : Smoothie_61, Lozinak_60
- Track 3 : Madeline_29
- Track 4 : Yeezy_31
- Track 5 : Sapo_27
- Track 6 : Derg_36, Stichling_38, Tangerine_40, Kroos_41, Flatwoods_41
- Track 7 : Sanjuju_39, Fitzgerald_39, Jabberwocky_39
- Track 8 : Baddon_40
- Track 9 : Brawn1_37
- Track 10 : Lilbeanie_36
- Track 11 : Madi_28, BiteSize_28, Beyoncage_28, Terapin_29, Sienna_28
- Track 12 : Djokovic_28
- Track 13 : Pupper_99, SCentae_98
- Track 14 : CherryTomatoes_99
- Track 15 : Skog_162
- Track 16 : Rabbitrun_35
- Track 17 : LilJank_33, Trax_33, Neville_33

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

The start number called the most often in the published annotations is 3, it was called in 10 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- CherryTomatoes_99, LilJank_33, Lozinak_60, Neville_33, Pupper_99, Rabbitrun_35, SCentae_98, Skog_162, Smoothie_61, Trax_33, WilliamBoone_59,

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

-

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

- Baddon_40, Beyoncage_28, BiteSize_28, Brawn1_37, Derg_36, Djokovic_28, Fitzgerald_39, Flatwoods_41, Jabberwocky_39, Kroos_41, Lilbeanie_36, Madeline_29, Madi_28, Sanjuju_39, Sapo_27, Sienna_28, Stichling_38,

Tangerine_40, Terapin_29, Yeezy_31,

Summary by start number:

Start 3:

- Found in 11 of 31 (35.5%) of genes in pham
- Manual Annotations of this start: 10 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CherryTomatoes_99 (DO), LilJank_33 (DU2), Lozinak_60 (CQ1), Neville_33 (DU2), Pupper_99 (DO), Rabbitrun_35 (DU2), SCentae_98 (DO), Skog_162 (DO), Smoothie_61 (CQ1), Trax_33 (DU2), WilliamBoone_59 (CQ1),

Start 11:

- Found in 2 of 31 (6.5%) of genes in pham
- Manual Annotations of this start: 2 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lilbeanie_36 (DE5), Sapo_27 (DA),

Start 12:

- Found in 7 of 31 (22.6%) of genes in pham
- Manual Annotations of this start: 7 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beyoncage_28 (DG1), BiteSize_28 (DG1), Madeline_29 (CZ1), Madi_28 (DG1), Sienna_28 (DG1), Terapin_29 (DG1), Yeezy_31 (CZ3),

Start 13:

- Found in 10 of 31 (32.3%) of genes in pham
- Manual Annotations of this start: 8 of 28
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Baddon_40 (DE1), Derg_36 (DE1), Fitzgerald_39 (DE1), Flatwoods_41 (DE1), Jabberwocky_39 (DE1), Kroos_41 (DE1), Sanjuju_39 (DE1), Stichling_38 (DE1), Tangerine_40 (DE1),

Start 19:

- Found in 18 of 31 (58.1%) of genes in pham
- No Manual Annotations of this start.
- Called 5.6% of time when present
- Phage (with cluster) where this start called: Brawn1_37 (DE1),

Start 23:

- Found in 11 of 31 (35.5%) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Djokovic_28 (DG1),

Summary by clusters:

There are 9 clusters represented in this pham: DO, DE1, CZ1, DE5, DA, DG1, CZ3, DU2, CQ1,

Info for manual annotations of cluster CQ1:

- Start number 3 was manually annotated 3 times for cluster CQ1.

Info for manual annotations of cluster CZ1:

- Start number 12 was manually annotated 1 time for cluster CZ1.

Info for manual annotations of cluster CZ3:

- Start number 12 was manually annotated 1 time for cluster CZ3.

Info for manual annotations of cluster DA:

- Start number 11 was manually annotated 1 time for cluster DA.

Info for manual annotations of cluster DE1:

- Start number 13 was manually annotated 8 times for cluster DE1.

Info for manual annotations of cluster DE5:

- Start number 11 was manually annotated 1 time for cluster DE5.

Info for manual annotations of cluster DG1:

- Start number 12 was manually annotated 5 times for cluster DG1.
- Start number 23 was manually annotated 1 time for cluster DG1.

Info for manual annotations of cluster DO:

- Start number 3 was manually annotated 4 times for cluster DO.

Info for manual annotations of cluster DU2:

- Start number 3 was manually annotated 3 times for cluster DU2.

Gene Information:

Gene: Baddon_40 Start: 36537, Stop: 37145, Start Num: 13

Candidate Starts for Baddon_40:

(Start: 13 @36537 has 8 MA's), (18, 36585), (19, 36600), (22, 36642), (31, 36726), (33, 36759), (36, 36792), (40, 36852), (52, 37008), (61, 37116),

Gene: Beyoncage_28 Start: 25375, Stop: 25953, Start Num: 12

Candidate Starts for Beyoncage_28:

(9, 25363), (Start: 12 @25375 has 7 MA's), (Start: 23 @25477 has 1 MA's), (33, 25579), (34, 25603), (57, 25891), (59, 25906), (63, 25939),

Gene: BiteSize_28 Start: 25375, Stop: 25953, Start Num: 12

Candidate Starts for BiteSize_28:

(9, 25363), (Start: 12 @25375 has 7 MA's), (Start: 23 @25477 has 1 MA's), (33, 25579), (34, 25603), (57, 25891), (59, 25906), (63, 25939),

Gene: Brawn1_37 Start: 35319, Stop: 35855, Start Num: 19

Candidate Starts for Brawn1_37:

(Start: 13 @35256 has 8 MA's), (18, 35304), (19, 35319), (22, 35361), (27, 35394), (28, 35424), (38, 35532), (40, 35562), (44, 35616), (61, 35826),

Gene: CherryTomatoes_99 Start: 56131, Stop: 56844, Start Num: 3

Candidate Starts for CherryTomatoes_99:

(Start: 3 @56131 has 10 MA's), (5, 56140), (16, 56266), (26, 56368), (29, 56407), (30, 56413), (33, 56449), (34, 56473), (35, 56479), (37, 56491), (38, 56515), (39, 56518), (40, 56545), (41, 56551), (42, 56569), (45, 56614), (47, 56653), (49, 56662), (50, 56677), (56, 56767), (61, 56815), (63, 56830),

Gene: Derg_36 Start: 35289, Stop: 35894, Start Num: 13

Candidate Starts for Derg_36:

(Start: 13 @35289 has 8 MA's), (19, 35352), (22, 35394), (31, 35478), (33, 35511), (34, 35535), (40, 35604), (44, 35658), (61, 35865),

Gene: Djokovic_28 Start: 25476, Stop: 25952, Start Num: 23

Candidate Starts for Djokovic_28:

(Start: 23 @25476 has 1 MA's), (33, 25578), (34, 25602), (57, 25890), (59, 25905), (63, 25938),

Gene: Fitzgerald_39 Start: 36588, Stop: 37187, Start Num: 13

Candidate Starts for Fitzgerald_39:

(Start: 13 @36588 has 8 MA's), (18, 36636), (19, 36651), (22, 36693), (27, 36726), (28, 36756), (38, 36864), (40, 36894), (44, 36948), (61, 37158),

Gene: Flatwoods_41 Start: 35641, Stop: 36246, Start Num: 13

Candidate Starts for Flatwoods_41:

(Start: 13 @35641 has 8 MA's), (19, 35704), (22, 35746), (31, 35830), (33, 35863), (34, 35887), (40, 35956), (44, 36010), (61, 36217),

Gene: Jabberwocky_39 Start: 36992, Stop: 37591, Start Num: 13

Candidate Starts for Jabberwocky_39:

(Start: 13 @36992 has 8 MA's), (18, 37040), (19, 37055), (22, 37097), (27, 37130), (28, 37160), (38, 37268), (40, 37298), (44, 37352), (61, 37562),

Gene: Kroos_41 Start: 36197, Stop: 36802, Start Num: 13

Candidate Starts for Kroos_41:

(Start: 13 @36197 has 8 MA's), (19, 36260), (22, 36302), (31, 36386), (33, 36419), (34, 36443), (40, 36512), (44, 36566), (61, 36773),

Gene: LilJank_33 Start: 29125, Stop: 29817, Start Num: 3

Candidate Starts for LilJank_33:

(Start: 3 @29125 has 10 MA's), (4, 29131), (8, 29179), (17, 29260), (19, 29278), (20, 29287), (Start: 23 @29326 has 1 MA's), (26, 29350), (31, 29398), (38, 29494), (39, 29497), (40, 29524), (44, 29578), (49, 29641), (53, 29689), (58, 29761), (61, 29788), (62, 29794),

Gene: Lilbeanie_36 Start: 30442, Stop: 31050, Start Num: 11

Candidate Starts for Lilbeanie_36:

(6, 30373), (Start: 11 @30442 has 2 MA's), (Start: 23 @30553 has 1 MA's), (24, 30562), (31, 30631), (33, 30664), (35, 30694), (40, 30757), (44, 30811), (45, 30826), (52, 30913), (61, 31021),

Gene: Lozinak_60 Start: 40445, Stop: 41149, Start Num: 3

Candidate Starts for Lozinak_60:

(Start: 3 @40445 has 10 MA's), (7, 40496), (14, 40535), (19, 40595), (25, 40652), (30, 40712), (35, 40775), (36, 40778), (39, 40814), (40, 40841), (42, 40865), (45, 40910), (53, 41021), (56, 41072), (60, 41114), (63, 41135),

Gene: Madeline_29 Start: 27349, Stop: 27930, Start Num: 12

Candidate Starts for Madeline_29:

(Start: 12 @27349 has 7 MA's), (42, 27673), (43, 27682), (46, 27751), (47, 27757), (54, 27829),

Gene: Madi_28 Start: 25375, Stop: 25953, Start Num: 12

Candidate Starts for Madi_28:

(9, 25363), (Start: 12 @25375 has 7 MA's), (Start: 23 @25477 has 1 MA's), (33, 25579), (34, 25603), (57, 25891), (59, 25906), (63, 25939),

Gene: Neville_33 Start: 28765, Stop: 29457, Start Num: 3

Candidate Starts for Neville_33:

(Start: 3 @28765 has 10 MA's), (4, 28771), (8, 28819), (17, 28900), (19, 28918), (20, 28927), (Start: 23 @28966 has 1 MA's), (26, 28990), (31, 29038), (38, 29134), (39, 29137), (40, 29164), (44, 29218), (49, 29281), (53, 29329), (58, 29401), (61, 29428), (62, 29434),

Gene: Pupper_99 Start: 56252, Stop: 56965, Start Num: 3

Candidate Starts for Pupper_99:

(Start: 3 @56252 has 10 MA's), (5, 56261), (16, 56387), (29, 56528), (30, 56534), (33, 56570), (34, 56594), (35, 56600), (37, 56612), (38, 56636), (39, 56639), (41, 56672), (42, 56690), (45, 56735), (47, 56774), (49, 56783), (50, 56798), (61, 56936), (63, 56951),

Gene: Rabbitrun_35 Start: 29229, Stop: 29918, Start Num: 3

Candidate Starts for Rabbitrun_35:

(Start: 3 @29229 has 10 MA's), (4, 29235), (8, 29283), (15, 29346), (17, 29364), (19, 29382), (20, 29391), (21, 29397), (22, 29424), (Start: 23 @29430 has 1 MA's), (31, 29499), (33, 29532), (35, 29562), (36, 29565), (40, 29625), (45, 29694), (46, 29727), (48, 29739), (51, 29754), (52, 29781), (61, 29889), (62, 29895),

Gene: SCentae_98 Start: 56398, Stop: 57111, Start Num: 3

Candidate Starts for SCentae_98:

(Start: 3 @56398 has 10 MA's), (5, 56407), (16, 56533), (29, 56674), (30, 56680), (33, 56716), (34, 56740), (35, 56746), (37, 56758), (38, 56782), (39, 56785), (41, 56818), (42, 56836), (45, 56881), (47, 56920), (49, 56929), (50, 56944), (61, 57082), (63, 57097),

Gene: Sanjuju_39 Start: 36721, Stop: 37320, Start Num: 13

Candidate Starts for Sanjuju_39:

(Start: 13 @36721 has 8 MA's), (18, 36769), (19, 36784), (22, 36826), (27, 36859), (28, 36889), (38, 36997), (40, 37027), (44, 37081), (61, 37291),

Gene: Sapo_27 Start: 24286, Stop: 24900, Start Num: 11

Candidate Starts for Sapo_27:

(6, 24220), (Start: 11 @24286 has 2 MA's), (17, 24331), (19, 24349), (39, 24571), (40, 24598), (41, 24604), (42, 24622), (50, 24730), (55, 24814), (60, 24865), (64, 24892),

Gene: Sienna_28 Start: 25375, Stop: 25953, Start Num: 12

Candidate Starts for Sienna_28:

(9, 25363), (Start: 12 @25375 has 7 MA's), (Start: 23 @25477 has 1 MA's), (33, 25579), (34, 25603), (57, 25891), (59, 25906), (63, 25939),

Gene: Skog_162 Start: 86948, Stop: 87661, Start Num: 3

Candidate Starts for Skog_162:

(1, 86723), (2, 86792), (Start: 3 @86948 has 10 MA's), (5, 86957), (16, 87083), (30, 87230), (33, 87266), (34, 87290), (35, 87296), (39, 87335), (41, 87368), (42, 87386), (45, 87431), (47, 87470), (49, 87479), (50, 87494), (56, 87584), (61, 87632), (63, 87647),

Gene: Smoothie_61 Start: 40445, Stop: 41149, Start Num: 3

Candidate Starts for Smoothie_61:

(Start: 3 @40445 has 10 MA's), (7, 40496), (14, 40535), (19, 40595), (25, 40652), (30, 40712), (35, 40775), (36, 40778), (39, 40814), (40, 40841), (42, 40865), (45, 40910), (53, 41021), (56, 41072), (60, 41114), (63, 41135),

Gene: Stichling_38 Start: 34979, Stop: 35584, Start Num: 13

Candidate Starts for Stichling_38:

(Start: 13 @34979 has 8 MA's), (19, 35042), (22, 35084), (31, 35168), (33, 35201), (34, 35225), (40, 35294), (44, 35348), (61, 35555),

Gene: Tangerine_40 Start: 35329, Stop: 35934, Start Num: 13

Candidate Starts for Tangerine_40:

(Start: 13 @35329 has 8 MA's), (19, 35392), (22, 35434), (31, 35518), (33, 35551), (34, 35575), (40, 35644), (44, 35698), (61, 35905),

Gene: Terapin_29 Start: 25376, Stop: 25954, Start Num: 12

Candidate Starts for Terapin_29:

(9, 25364), (Start: 12 @25376 has 7 MA's), (Start: 23 @25478 has 1 MA's), (33, 25580), (34, 25604), (57, 25892), (59, 25907), (63, 25940),

Gene: Trax_33 Start: 29071, Stop: 29763, Start Num: 3

Candidate Starts for Trax_33:

(Start: 3 @29071 has 10 MA's), (4, 29077), (8, 29125), (17, 29206), (19, 29224), (20, 29233), (Start: 23 @29272 has 1 MA's), (26, 29296), (31, 29344), (38, 29440), (39, 29443), (40, 29470), (44, 29524), (49, 29587), (53, 29635), (58, 29707), (61, 29734), (62, 29740),

Gene: WilliamBoone_59 Start: 39116, Stop: 39814, Start Num: 3

Candidate Starts for WilliamBoone_59:

(Start: 3 @39116 has 10 MA's), (4, 39122), (8, 39170), (10, 39191), (14, 39206), (15, 39233), (19, 39272), (22, 39314), (28, 39380), (31, 39392), (33, 39425), (34, 39449), (35, 39455), (40, 39521), (42, 39545), (44, 39575), (49, 39638), (52, 39677), (53, 39686), (58, 39758), (61, 39785), (63, 39800),

Gene: Yeezy_31 Start: 26274, Stop: 26855, Start Num: 12

Candidate Starts for Yeezy_31:

(Start: 12 @26274 has 7 MA's), (32, 26463), (33, 26481), (43, 26607), (46, 26676), (47, 26682), (54, 26754), (63, 26841),