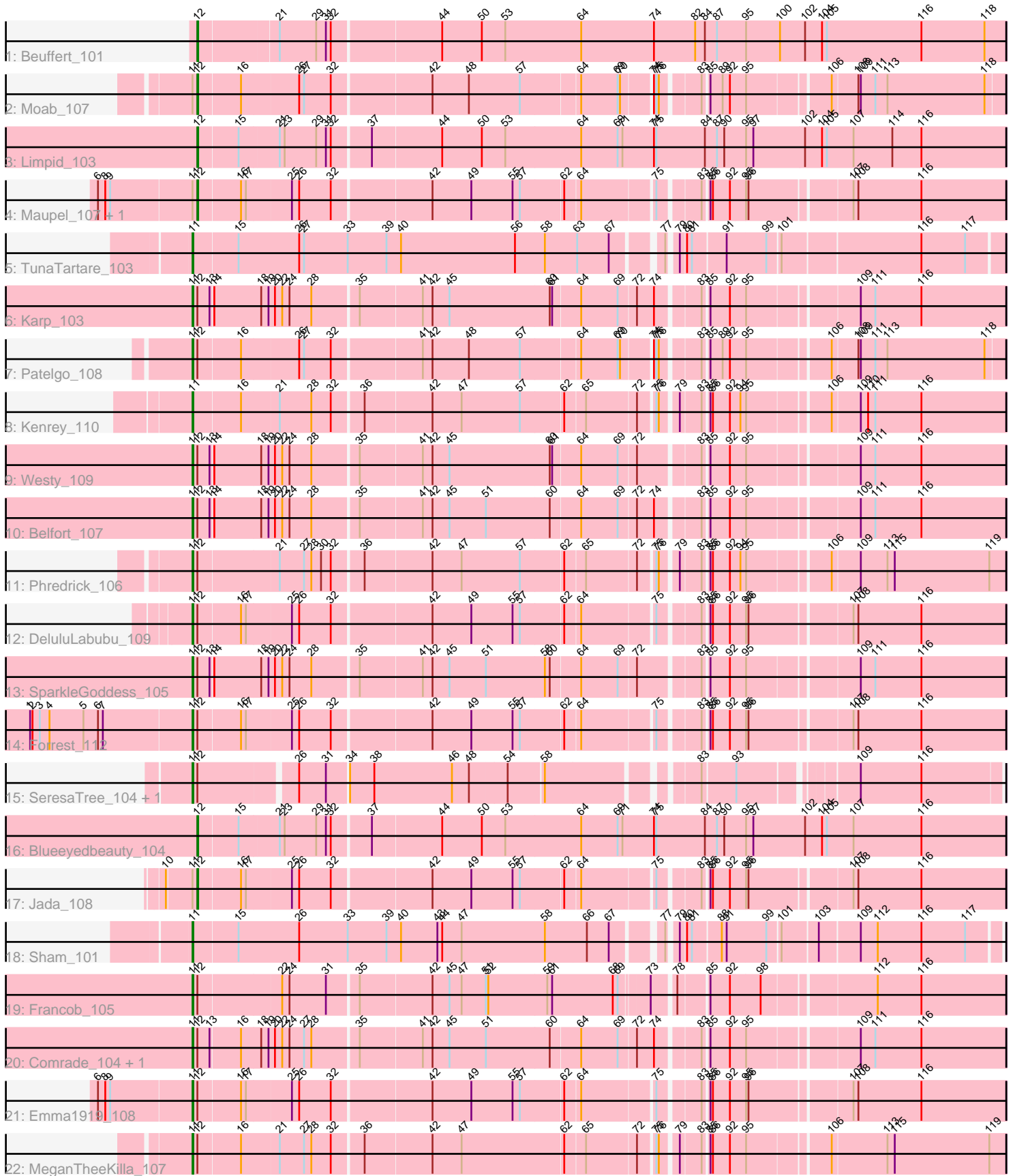


Pham 309149



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 309149 Report

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

Pham number 309149 has 25 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Beuffert\_101
- Track 2 : Moab\_107
- Track 3 : Limpid\_103
- Track 4 : Maupel\_107, Gilson\_107
- Track 5 : TunaTartare\_103
- Track 6 : Karp\_103
- Track 7 : Patelgo\_108
- Track 8 : Kenrey\_110
- Track 9 : Westy\_109
- Track 10 : Belfort\_107
- Track 11 : Phredrick\_106
- Track 12 : DeluluLabubu\_109
- Track 13 : SparkleGoddess\_105
- Track 14 : Forrest\_112
- Track 15 : SeresaTree\_104, Faust\_104
- Track 16 : Blueeyedbeauty\_104
- Track 17 : Jada\_108
- Track 18 : Sham\_101
- Track 19 : Francob\_105
- Track 20 : Comrade\_104, Stigma\_104
- Track 21 : Emma1919\_108
- Track 22 : MeganTheeKilla\_107

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

The start number called the most often in the published annotations is 11, it was called in 17 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Belfort\_107, Comrade\_104, DeluluLabubu\_109, Emma1919\_108, Faust\_104, Forrest\_112, Francob\_105, Karp\_103, Kenrey\_110, MeganTheeKilla\_107, Patelgo\_108, Phredrick\_106, SeresaTree\_104, Sham\_101, SparkleGoddess\_105, Stigma\_104, TunaTartare\_103, Westy\_109,

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

- Gilson\_107, Jada\_108, Maupel\_107, Moab\_107,

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

- Beuffert\_101, Blueeyedbeauty\_104, Limpid\_103,

### Summary by start number:

Start 11:

- Found in 22 of 25 ( 88.0% ) of genes in pham
- Manual Annotations of this start: 17 of 23
- Called 81.8% of time when present
- Phage (with cluster) where this start called: Belfort\_107 (BK1), Comrade\_104 (BK1), DeluluLabubu\_109 (BK1), Emma1919\_108 (BK1), Faust\_104 (BK1), Forrest\_112 (BK1), Francob\_105 (BK1), Karp\_103 (BK1), Kenrey\_110 (BK1), MeganTheeKilla\_107 (BK1), Patelgo\_108 (BK1), Phredrick\_106 (BK1), SeresaTree\_104 (BK1), Sham\_101 (BK1), SparkleGoddess\_105 (BK1), Stigma\_104 (BK1), TunaTartare\_103 (BK1), Westy\_109 (BK1),

Start 12:

- Found in 22 of 25 ( 88.0% ) of genes in pham
- Manual Annotations of this start: 6 of 23
- Called 31.8% of time when present
- Phage (with cluster) where this start called: Beuffert\_101 (BK1), Blueeyedbeauty\_104 (BK1), Gilson\_107 (BK1), Jada\_108 (BK1), Limpid\_103 (BK1), Maupel\_107 (BK1), Moab\_107 (BK1),

### Summary by clusters:

There is one cluster represented in this pham: BK1

Info for manual annotations of cluster BK1:

- Start number 11 was manually annotated 17 times for cluster BK1.
- Start number 12 was manually annotated 6 times for cluster BK1.

### Gene Information:

Gene: Belfort\_107 Start: 71768, Stop: 72718, Start Num: 11

Candidate Starts for Belfort\_107:

(Start: 11 @71768 has 17 MA's), (Start: 12 @71774 has 6 MA's), (13, 71789), (14, 71792), (18, 71849), (19, 71858), (20, 71864), (22, 71873), (24, 71882), (28, 71909), (35, 71963), (41, 72038), (42, 72050), (45, 72071), (51, 72116), (60, 72194), (64, 72230), (69, 72275), (72, 72296), (74, 72317), (83, 72365), (85, 72371), (92, 72395), (95, 72413), (109, 72539), (111, 72557), (116, 72614),

Gene: Beuffert\_101 Start: 70571, Stop: 71548, Start Num: 12

Candidate Starts for Beuffert\_101:

(Start: 12 @70571 has 6 MA's), (21, 70664), (29, 70709), (31, 70721), (32, 70727), (44, 70856), (50, 70904), (53, 70931), (64, 71024), (74, 71114), (82, 71165), (84, 71177), (87, 71192), (95, 71228), (100, 71270), (102, 71300), (104, 71321), (105, 71327), (116, 71444), (118, 71522),

Gene: Blueeyedbeauty\_104 Start: 69717, Stop: 70697, Start Num: 12

Candidate Starts for Blueeyedbeauty\_104:

(Start: 12 @69717 has 6 MA's), (15, 69765), (21, 69813), (23, 69819), (29, 69858), (31, 69870), (32, 69876), (37, 69921), (44, 70005), (50, 70053), (53, 70080), (64, 70173), (69, 70218), (71, 70224), (74, 70263), (75, 70266), (84, 70326), (87, 70341), (90, 70350), (95, 70377), (97, 70386), (102, 70449), (104, 70470), (105, 70476), (107, 70509), (116, 70593),

Gene: Comrade\_104 Start: 71085, Stop: 72035, Start Num: 11

Candidate Starts for Comrade\_104:

(Start: 11 @71085 has 17 MA's), (Start: 12 @71091 has 6 MA's), (13, 71106), (16, 71142), (18, 71166), (19, 71175), (20, 71181), (22, 71190), (24, 71199), (27, 71217), (28, 71226), (35, 71280), (41, 71355), (42, 71367), (45, 71388), (51, 71433), (60, 71511), (64, 71547), (69, 71592), (72, 71613), (74, 71634), (83, 71682), (85, 71688), (92, 71712), (95, 71730), (109, 71856), (111, 71874), (116, 71931),

Gene: DeluluLabubu\_109 Start: 71209, Stop: 72153, Start Num: 11

Candidate Starts for DeluluLabubu\_109:

(Start: 11 @71209 has 17 MA's), (Start: 12 @71215 has 6 MA's), (16, 71266), (17, 71272), (25, 71326), (26, 71335), (32, 71374), (42, 71491), (49, 71539), (55, 71590), (57, 71599), (62, 71650), (64, 71668), (75, 71752), (83, 71797), (85, 71803), (86, 71806), (92, 71827), (95, 71845), (96, 71848), (107, 71965), (108, 71971), (116, 72049),

Gene: Emma1919\_108 Start: 70540, Stop: 71484, Start Num: 11

Candidate Starts for Emma1919\_108:

(6, 70426), (8, 70435), (9, 70441), (Start: 11 @70540 has 17 MA's), (Start: 12 @70546 has 6 MA's), (16, 70597), (17, 70603), (25, 70657), (26, 70666), (32, 70705), (42, 70822), (49, 70870), (55, 70921), (57, 70930), (62, 70981), (64, 70999), (75, 71083), (83, 71128), (85, 71134), (86, 71137), (92, 71158), (95, 71176), (96, 71179), (107, 71296), (108, 71302), (116, 71380),

Gene: Faust\_104 Start: 71189, Stop: 72097, Start Num: 11

Candidate Starts for Faust\_104:

(Start: 11 @71189 has 17 MA's), (Start: 12 @71195 has 6 MA's), (26, 71309), (31, 71342), (34, 71366), (38, 71396), (46, 71492), (48, 71513), (54, 71558), (58, 71600), (83, 71762), (93, 71801), (109, 71927), (116, 72002),

Gene: Forrest\_112 Start: 72853, Stop: 73797, Start Num: 11

Candidate Starts for Forrest\_112:

(1, 72655), (2, 72658), (3, 72667), (4, 72679), (5, 72721), (6, 72739), (7, 72745), (Start: 11 @72853 has 17 MA's), (Start: 12 @72859 has 6 MA's), (16, 72910), (17, 72916), (25, 72970), (26, 72979), (32, 73018), (42, 73135), (49, 73183), (55, 73234), (57, 73243), (62, 73294), (64, 73312), (75, 73396), (83, 73441), (85, 73447), (86, 73450), (92, 73471), (95, 73489), (96, 73492), (107, 73609), (108, 73615), (116, 73693),

Gene: Francob\_105 Start: 70701, Stop: 71648, Start Num: 11

Candidate Starts for Francob\_105:

(Start: 11 @70701 has 17 MA's), (Start: 12 @70707 has 6 MA's), (22, 70806), (24, 70815), (31, 70860), (35, 70896), (42, 70983), (45, 71004), (47, 71019), (51, 71049), (52, 71052), (59, 71124), (61, 71130), (68, 71205), (69, 71211), (73, 71244), (78, 71268), (85, 71301), (92, 71325), (98, 71361), (112, 71490), (116, 71544),

Gene: Gilson\_107 Start: 70508, Stop: 71446, Start Num: 12

Candidate Starts for Gilson\_107:

(6, 70388), (8, 70397), (9, 70403), (Start: 11 @70502 has 17 MA's), (Start: 12 @70508 has 6 MA's), (16, 70559), (17, 70565), (25, 70619), (26, 70628), (32, 70667), (42, 70784), (49, 70832), (55, 70883), (57, 70892), (62, 70943), (64, 70961), (75, 71045), (83, 71090), (85, 71096), (86, 71099), (92, 71120),

(95, 71138), (96, 71141), (107, 71258), (108, 71264), (116, 71342),

Gene: Jada\_108 Start: 71789, Stop: 72727, Start Num: 12

Candidate Starts for Jada\_108:

(10, 71753), (Start: 11 @71783 has 17 MA's), (Start: 12 @71789 has 6 MA's), (16, 71840), (17, 71846), (25, 71900), (26, 71909), (32, 71948), (42, 72065), (49, 72113), (55, 72164), (57, 72173), (62, 72224), (64, 72242), (75, 72326), (83, 72371), (85, 72377), (86, 72380), (92, 72401), (95, 72419), (96, 72422), (107, 72539), (108, 72545), (116, 72623),

Gene: Karp\_103 Start: 71056, Stop: 72006, Start Num: 11

Candidate Starts for Karp\_103:

(Start: 11 @71056 has 17 MA's), (Start: 12 @71062 has 6 MA's), (13, 71077), (14, 71080), (18, 71137), (19, 71146), (20, 71152), (22, 71161), (24, 71170), (28, 71197), (35, 71251), (41, 71326), (42, 71338), (45, 71359), (60, 71482), (61, 71485), (64, 71518), (69, 71563), (72, 71584), (74, 71605), (83, 71653), (85, 71659), (92, 71683), (95, 71701), (109, 71827), (111, 71845), (116, 71902),

Gene: Kenrey\_110 Start: 71545, Stop: 72486, Start Num: 11

Candidate Starts for Kenrey\_110:

(Start: 11 @71545 has 17 MA's), (16, 71602), (21, 71647), (28, 71686), (32, 71710), (36, 71746), (42, 71827), (47, 71863), (57, 71935), (62, 71986), (65, 72010), (72, 72070), (75, 72088), (76, 72091), (79, 72109), (83, 72133), (85, 72139), (86, 72142), (92, 72163), (94, 72175), (95, 72181), (106, 72274), (109, 72307), (110, 72316), (111, 72325), (116, 72382),

Gene: Limpid\_103 Start: 71042, Stop: 72022, Start Num: 12

Candidate Starts for Limpid\_103:

(Start: 12 @71042 has 6 MA's), (15, 71090), (21, 71138), (23, 71144), (29, 71183), (31, 71195), (32, 71201), (37, 71246), (44, 71330), (50, 71378), (53, 71405), (64, 71498), (69, 71543), (71, 71549), (74, 71588), (75, 71591), (84, 71651), (87, 71666), (90, 71675), (95, 71702), (97, 71711), (102, 71774), (104, 71795), (105, 71801), (107, 71834), (114, 71882), (116, 71918),

Gene: Maupel\_107 Start: 70508, Stop: 71446, Start Num: 12

Candidate Starts for Maupel\_107:

(6, 70388), (8, 70397), (9, 70403), (Start: 11 @70502 has 17 MA's), (Start: 12 @70508 has 6 MA's), (16, 70559), (17, 70565), (25, 70619), (26, 70628), (32, 70667), (42, 70784), (49, 70832), (55, 70883), (57, 70892), (62, 70943), (64, 70961), (75, 71045), (83, 71090), (85, 71096), (86, 71099), (92, 71120), (95, 71138), (96, 71141), (107, 71258), (108, 71264), (116, 71342),

Gene: MeganTheeKilla\_107 Start: 70711, Stop: 71652, Start Num: 11

Candidate Starts for MeganTheeKilla\_107:

(Start: 11 @70711 has 17 MA's), (Start: 12 @70717 has 6 MA's), (16, 70768), (21, 70813), (27, 70843), (28, 70852), (32, 70876), (36, 70912), (42, 70993), (47, 71029), (62, 71152), (65, 71176), (72, 71236), (75, 71254), (76, 71257), (79, 71275), (83, 71299), (85, 71305), (86, 71308), (92, 71329), (95, 71347), (106, 71440), (113, 71506), (115, 71515), (119, 71632),

Gene: Moab\_107 Start: 73023, Stop: 73955, Start Num: 12

Candidate Starts for Moab\_107:

(Start: 11 @73017 has 17 MA's), (Start: 12 @73023 has 6 MA's), (16, 73074), (26, 73143), (27, 73149), (32, 73182), (42, 73299), (48, 73344), (57, 73407), (64, 73476), (69, 73521), (70, 73524), (74, 73557), (75, 73560), (76, 73563), (83, 73605), (85, 73611), (89, 73626), (92, 73635), (95, 73653), (106, 73746), (108, 73776), (109, 73779), (111, 73797), (113, 73812), (118, 73932),

Gene: Patelgo\_108 Start: 72877, Stop: 73815, Start Num: 11

Candidate Starts for Patelgo\_108:

(Start: 11 @72877 has 17 MA's), (Start: 12 @72883 has 6 MA's), (16, 72934), (26, 73003), (27, 73009), (32, 73042), (41, 73147), (42, 73159), (48, 73204), (57, 73267), (64, 73336), (69, 73381), (70, 73384), (74, 73417), (75, 73420), (76, 73423), (83, 73465), (85, 73471), (89, 73486), (92, 73495), (95, 73513), (106, 73606), (108, 73636), (109, 73639), (111, 73657), (113, 73672), (118, 73792),

Gene: Phredrick\_106 Start: 69831, Stop: 70772, Start Num: 11

Candidate Starts for Phredrick\_106:

(Start: 11 @69831 has 17 MA's), (Start: 12 @69837 has 6 MA's), (21, 69933), (27, 69963), (28, 69972), (30, 69984), (32, 69996), (36, 70032), (42, 70113), (47, 70149), (57, 70221), (62, 70272), (65, 70296), (72, 70356), (75, 70374), (76, 70377), (79, 70395), (83, 70419), (85, 70425), (86, 70428), (92, 70449), (94, 70461), (95, 70467), (106, 70560), (109, 70593), (113, 70626), (115, 70635), (119, 70752),

Gene: SeresaTree\_104 Start: 70571, Stop: 71479, Start Num: 11

Candidate Starts for SeresaTree\_104:

(Start: 11 @70571 has 17 MA's), (Start: 12 @70577 has 6 MA's), (26, 70691), (31, 70724), (34, 70748), (38, 70778), (46, 70874), (48, 70895), (54, 70940), (58, 70982), (83, 71144), (93, 71183), (109, 71309), (116, 71384),

Gene: Sham\_101 Start: 70777, Stop: 71718, Start Num: 11

Candidate Starts for Sham\_101:

(Start: 11 @70777 has 17 MA's), (15, 70831), (26, 70906), (33, 70966), (39, 71014), (40, 71032), (43, 71077), (44, 71083), (47, 71107), (58, 71209), (66, 71260), (67, 71287), (77, 71338), (79, 71347), (80, 71353), (81, 71359), (88, 71392), (91, 71398), (99, 71446), (101, 71461), (103, 71503), (109, 71551), (112, 71572), (116, 71626), (117, 71680),

Gene: SparkleGoddess\_105 Start: 71385, Stop: 72335, Start Num: 11

Candidate Starts for SparkleGoddess\_105:

(Start: 11 @71385 has 17 MA's), (Start: 12 @71391 has 6 MA's), (13, 71406), (14, 71409), (18, 71466), (19, 71475), (20, 71481), (22, 71490), (24, 71499), (28, 71526), (35, 71580), (41, 71655), (42, 71667), (45, 71688), (51, 71733), (58, 71805), (60, 71811), (64, 71847), (69, 71892), (72, 71913), (83, 71982), (85, 71988), (92, 72012), (95, 72030), (109, 72156), (111, 72174), (116, 72231),

Gene: Stigma\_104 Start: 71393, Stop: 72343, Start Num: 11

Candidate Starts for Stigma\_104:

(Start: 11 @71393 has 17 MA's), (Start: 12 @71399 has 6 MA's), (13, 71414), (16, 71450), (18, 71474), (19, 71483), (20, 71489), (22, 71498), (24, 71507), (27, 71525), (28, 71534), (35, 71588), (41, 71663), (42, 71675), (45, 71696), (51, 71741), (60, 71819), (64, 71855), (69, 71900), (72, 71921), (74, 71942), (83, 71990), (85, 71996), (92, 72020), (95, 72038), (109, 72164), (111, 72182), (116, 72239),

Gene: TunaTartare\_103 Start: 71940, Stop: 72887, Start Num: 11

Candidate Starts for TunaTartare\_103:

(Start: 11 @71940 has 17 MA's), (15, 71994), (26, 72069), (27, 72075), (33, 72129), (39, 72177), (40, 72195), (56, 72336), (58, 72372), (63, 72411), (67, 72450), (77, 72501), (79, 72510), (80, 72516), (81, 72522), (91, 72561), (99, 72609), (101, 72624), (116, 72789), (117, 72843),

Gene: Westy\_109 Start: 72420, Stop: 73370, Start Num: 11

Candidate Starts for Westy\_109:

(Start: 11 @72420 has 17 MA's), (Start: 12 @72426 has 6 MA's), (13, 72441), (14, 72444), (18, 72501), (19, 72510), (20, 72516), (22, 72525), (24, 72534), (28, 72561), (35, 72615), (41, 72690), (42, 72702), (45, 72723), (60, 72846), (61, 72849), (64, 72882), (69, 72927), (72, 72948), (83, 73017), (85, 73023), (92, 73047), (95, 73065), (109, 73191), (111, 73209), (116, 73266),