



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 293145 Report

This analysis was run 04/18/26 on database version 643.

Pham number 293145 has 21 members, 2 are drafts.

Phages represented in each track:

- Track 1 : MoyaNatalis\_111, RosiePosie\_111, Kabreeze\_110, HumptyDumpty\_110, Scavito\_111, JayCookie\_111, PrincessTrina\_111, JaNo\_109, Mordred\_110, Chubster\_111
- Track 2 : DrYang\_104
- Track 3 : Chocolat\_110
- Track 4 : KBurrousTX\_106
- Track 5 : Chipper1996\_1110, Tophat\_110
- Track 6 : EdgarPoe\_110, Conboy\_110
- Track 7 : ArV1\_097
- Track 8 : Colucci\_113
- Track 9 : Linus\_111
- Track 10 : Lymara\_108

### ***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 16 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Chipper1996\_1110, Chocolat\_110, Chubster\_111, Conboy\_110, EdgarPoe\_110, HumptyDumpty\_110, JaNo\_109, JayCookie\_111, Kabreeze\_110, Linus\_111, Lymara\_108, Mordred\_110, MoyaNatalis\_111, PrincessTrina\_111, RosiePosie\_111, Scavito\_111, Tophat\_110,

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

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

- ArV1\_097, Colucci\_113, DrYang\_104, KBurrousTX\_106,

### **Summary by start number:**

Start 1:

- Found in 1 of 21 ( 4.8% ) of genes in pham

- Manual Annotations of this start: 1 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KBurrousTX\_106 (AR),

#### Start 3:

- Found in 17 of 21 ( 81.0% ) of genes in pham
- Manual Annotations of this start: 16 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chipper1996\_1110 (AR), Chocolat\_110 (AR), Chubster\_111 (AR), Conboy\_110 (AR), EdgarPoe\_110 (AR), HumptyDumpty\_110 (AR), JaNo\_109 (AR), JayCookie\_111 (AR), Kabreeze\_110 (AR), Linus\_111 (AR), Lymara\_108 (AR), Mordred\_110 (AR), MoyaNatalis\_111 (AR), PrincessTrina\_111 (AR), RosiePosie\_111 (AR), Scavito\_111 (AR), Tophat\_110 (AR),

#### Start 4:

- Found in 1 of 21 ( 4.8% ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DrYang\_104 (AR),

#### Start 7:

- Found in 2 of 21 ( 9.5% ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArV1\_097 (AR), Colucci\_113 (AR),

### Summary by clusters:

There is one cluster represented in this pham: AR

Info for manual annotations of cluster AR:

- Start number 1 was manually annotated 1 time for cluster AR.
- Start number 3 was manually annotated 16 times for cluster AR.
- Start number 4 was manually annotated 1 time for cluster AR.
- Start number 7 was manually annotated 1 time for cluster AR.

### **Gene Information:**

Gene: ArV1\_097 Start: 68853, Stop: 69434, Start Num: 7

Candidate Starts for ArV1\_097:

(Start: 7 @68853 has 1 MA's), (12, 68916), (15, 68964), (16, 68970), (17, 68982), (18, 68985), (21, 69030), (23, 69060), (24, 69081), (25, 69123), (26, 69135), (29, 69195), (34, 69252), (35, 69255), (38, 69300), (42, 69330), (45, 69369),

Gene: Chipper1996\_1110 Start: 69161, Stop: 69712, Start Num: 3

Candidate Starts for Chipper1996\_1110:

(Start: 3 @69161 has 16 MA's), (6, 69170), (9, 69206), (10, 69227), (15, 69254), (18, 69275), (21, 69320), (25, 69407), (27, 69452), (30, 69497), (31, 69503), (34, 69533), (35, 69536), (36, 69554), (37, 69572), (39, 69584), (41, 69602), (43, 69617), (44, 69647), (47, 69665), (49, 69680),

Gene: Chocolat\_110 Start: 68869, Stop: 69420, Start Num: 3

Candidate Starts for Chocolat\_110:

(Start: 3 @68869 has 16 MA's), (6, 68878), (9, 68914), (10, 68935), (15, 68962), (16, 68968), (21, 69028), (25, 69115), (27, 69160), (30, 69205), (31, 69211), (34, 69241), (35, 69244), (36, 69262), (37, 69280), (39, 69292), (41, 69310), (43, 69325), (44, 69355), (47, 69373), (49, 69388),

Gene: Chubster\_111 Start: 69329, Stop: 69880, Start Num: 3

Candidate Starts for Chubster\_111:

(Start: 3 @69329 has 16 MA's), (6, 69338), (9, 69374), (10, 69395), (15, 69422), (16, 69428), (21, 69488), (25, 69575), (27, 69620), (30, 69665), (31, 69671), (34, 69701), (35, 69704), (36, 69722), (37, 69740), (39, 69752), (41, 69770), (43, 69785), (44, 69815), (47, 69833), (49, 69848),

Gene: Colucci\_113 Start: 69755, Stop: 70312, Start Num: 7

Candidate Starts for Colucci\_113:

(Start: 7 @69755 has 1 MA's), (10, 69803), (12, 69812), (15, 69851), (18, 69872), (19, 69899), (25, 70004), (28, 70061), (29, 70082), (34, 70139), (35, 70142), (37, 70178), (40, 70202), (42, 70217), (46, 70259),

Gene: Conboy\_110 Start: 69167, Stop: 69718, Start Num: 3

Candidate Starts for Conboy\_110:

(Start: 3 @69167 has 16 MA's), (6, 69176), (9, 69212), (10, 69233), (15, 69260), (18, 69281), (21, 69326), (25, 69413), (27, 69458), (30, 69503), (31, 69509), (34, 69539), (35, 69542), (36, 69560), (37, 69578), (39, 69590), (41, 69608), (43, 69623), (44, 69653), (47, 69671), (49, 69686),

Gene: DrYang\_104 Start: 68128, Stop: 68676, Start Num: 4

Candidate Starts for DrYang\_104:

(Start: 4 @68128 has 1 MA's), (10, 68191), (11, 68197), (15, 68218), (25, 68371), (28, 68422), (33, 68488), (34, 68500), (35, 68503), (36, 68521), (37, 68539), (38, 68548), (43, 68584), (44, 68614), (47, 68632), (49, 68647),

Gene: EdgarPoe\_110 Start: 69247, Stop: 69798, Start Num: 3

Candidate Starts for EdgarPoe\_110:

(Start: 3 @69247 has 16 MA's), (6, 69256), (9, 69292), (10, 69313), (15, 69340), (18, 69361), (21, 69406), (25, 69493), (27, 69538), (30, 69583), (31, 69589), (34, 69619), (35, 69622), (36, 69640), (37, 69658), (39, 69670), (41, 69688), (43, 69703), (44, 69733), (47, 69751), (49, 69766),

Gene: HumptyDumpty\_110 Start: 69049, Stop: 69600, Start Num: 3

Candidate Starts for HumptyDumpty\_110:

(Start: 3 @69049 has 16 MA's), (6, 69058), (9, 69094), (10, 69115), (15, 69142), (16, 69148), (21, 69208), (25, 69295), (27, 69340), (30, 69385), (31, 69391), (34, 69421), (35, 69424), (36, 69442), (37, 69460), (39, 69472), (41, 69490), (43, 69505), (44, 69535), (47, 69553), (49, 69568),

Gene: JaNo\_109 Start: 69020, Stop: 69571, Start Num: 3

Candidate Starts for JaNo\_109:

(Start: 3 @69020 has 16 MA's), (6, 69029), (9, 69065), (10, 69086), (15, 69113), (16, 69119), (21, 69179), (25, 69266), (27, 69311), (30, 69356), (31, 69362), (34, 69392), (35, 69395), (36, 69413), (37, 69431), (39, 69443), (41, 69461), (43, 69476), (44, 69506), (47, 69524), (49, 69539),

Gene: JayCookie\_111 Start: 69433, Stop: 69984, Start Num: 3

Candidate Starts for JayCookie\_111:

(Start: 3 @69433 has 16 MA's), (6, 69442), (9, 69478), (10, 69499), (15, 69526), (16, 69532), (21, 69592), (25, 69679), (27, 69724), (30, 69769), (31, 69775), (34, 69805), (35, 69808), (36, 69826), (37, 69844), (39, 69856), (41, 69874), (43, 69889), (44, 69919), (47, 69937), (49, 69952),

Gene: KBurrousTX\_106 Start: 70044, Stop: 70625, Start Num: 1

Candidate Starts for KBurrousTX\_106:

(Start: 1 @70044 has 1 MA's), (2, 70053), (5, 70068), (10, 70125), (15, 70167), (20, 70227), (21, 70230), (25, 70317), (29, 70389), (33, 70434), (34, 70446), (35, 70449), (38, 70497), (43, 70533), (49, 70596),

Gene: Kabreeze\_110 Start: 69106, Stop: 69657, Start Num: 3

Candidate Starts for Kabreeze\_110:

(Start: 3 @69106 has 16 MA's), (6, 69115), (9, 69151), (10, 69172), (15, 69199), (16, 69205), (21, 69265), (25, 69352), (27, 69397), (30, 69442), (31, 69448), (34, 69478), (35, 69481), (36, 69499), (37, 69517), (39, 69529), (41, 69547), (43, 69562), (44, 69592), (47, 69610), (49, 69625),

Gene: Linus\_111 Start: 69555, Stop: 70148, Start Num: 3

Candidate Starts for Linus\_111:

(Start: 3 @69555 has 16 MA's), (6, 69564), (9, 69600), (10, 69621), (13, 69642), (14, 69663), (15, 69690), (16, 69696), (21, 69756), (25, 69843), (27, 69888), (30, 69933), (31, 69939), (34, 69969), (35, 69972), (36, 69990), (37, 70008), (39, 70020), (41, 70038), (43, 70053), (44, 70083), (47, 70101), (49, 70116),

Gene: Lymara\_108 Start: 67834, Stop: 68385, Start Num: 3

Candidate Starts for Lymara\_108:

(Start: 3 @67834 has 16 MA's), (6, 67843), (8, 67861), (9, 67879), (10, 67900), (15, 67927), (22, 68005), (25, 68080), (27, 68125), (30, 68170), (31, 68176), (32, 68188), (34, 68206), (35, 68209), (36, 68227), (37, 68245), (39, 68257), (41, 68275), (43, 68290), (44, 68320), (47, 68338), (48, 68344),

Gene: Mordred\_110 Start: 69145, Stop: 69696, Start Num: 3

Candidate Starts for Mordred\_110:

(Start: 3 @69145 has 16 MA's), (6, 69154), (9, 69190), (10, 69211), (15, 69238), (16, 69244), (21, 69304), (25, 69391), (27, 69436), (30, 69481), (31, 69487), (34, 69517), (35, 69520), (36, 69538), (37, 69556), (39, 69568), (41, 69586), (43, 69601), (44, 69631), (47, 69649), (49, 69664),

Gene: MoyaNatalis\_111 Start: 68879, Stop: 69430, Start Num: 3

Candidate Starts for MoyaNatalis\_111:

(Start: 3 @68879 has 16 MA's), (6, 68888), (9, 68924), (10, 68945), (15, 68972), (16, 68978), (21, 69038), (25, 69125), (27, 69170), (30, 69215), (31, 69221), (34, 69251), (35, 69254), (36, 69272), (37, 69290), (39, 69302), (41, 69320), (43, 69335), (44, 69365), (47, 69383), (49, 69398),

Gene: PrincessTrina\_111 Start: 69336, Stop: 69887, Start Num: 3

Candidate Starts for PrincessTrina\_111:

(Start: 3 @69336 has 16 MA's), (6, 69345), (9, 69381), (10, 69402), (15, 69429), (16, 69435), (21, 69495), (25, 69582), (27, 69627), (30, 69672), (31, 69678), (34, 69708), (35, 69711), (36, 69729), (37, 69747), (39, 69759), (41, 69777), (43, 69792), (44, 69822), (47, 69840), (49, 69855),

Gene: RosiePosie\_111 Start: 69467, Stop: 70018, Start Num: 3

Candidate Starts for RosiePosie\_111:

(Start: 3 @69467 has 16 MA's), (6, 69476), (9, 69512), (10, 69533), (15, 69560), (16, 69566), (21, 69626), (25, 69713), (27, 69758), (30, 69803), (31, 69809), (34, 69839), (35, 69842), (36, 69860), (37, 69878), (39, 69890), (41, 69908), (43, 69923), (44, 69953), (47, 69971), (49, 69986),

Gene: Scavito\_111 Start: 69194, Stop: 69745, Start Num: 3

Candidate Starts for Scavito\_111:

(Start: 3 @69194 has 16 MA's), (6, 69203), (9, 69239), (10, 69260), (15, 69287), (16, 69293), (21, 69353), (25, 69440), (27, 69485), (30, 69530), (31, 69536), (34, 69566), (35, 69569), (36, 69587), (37,

69605), (39, 69617), (41, 69635), (43, 69650), (44, 69680), (47, 69698), (49, 69713),

Gene: Tophat\_110 Start: 69162, Stop: 69713, Start Num: 3

Candidate Starts for Tophat\_110:

(Start: 3 @69162 has 16 MA's), (6, 69171), (9, 69207), (10, 69228), (15, 69255), (18, 69276), (21, 69321), (25, 69408), (27, 69453), (30, 69498), (31, 69504), (34, 69534), (35, 69537), (36, 69555), (37, 69573), (39, 69585), (41, 69603), (43, 69618), (44, 69648), (47, 69666), (49, 69681),