

# Pham 309098



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 309098 Report

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

Pham number 309098 has 27 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Miskis\_109, Geeche\_113, Dusty\_112
- Track 2 : Cucurbita\_115, Engineer\_115, ClubL\_115, Smoothie\_115, Lozinak\_114, PhinkBoden\_114, Bachita\_116
- Track 3 : Aphelion\_114
- Track 4 : Culver\_115
- Track 5 : Norvs\_115
- Track 6 : Abscondus\_114
- Track 7 : Pepperoni\_53
- Track 8 : Denise\_58
- Track 9 : Valary\_9, CherryCola\_9
- Track 10 : VanDeWege\_9
- Track 11 : Halo3\_9
- Track 12 : RogerDodger\_9
- Track 13 : Kewpiedoll\_10
- Track 14 : MortyNRick\_72
- Track 15 : Budski\_82
- Track 16 : LitninMcQueen\_80
- Track 17 : Pupper\_232
- Track 18 : SCentae\_232

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

The start number called the most often in the published annotations is 20, it was called in 11 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aphelion\_114, Bachita\_116, ClubL\_115, Cucurbita\_115, Dusty\_112, Engineer\_115, Geeche\_113, Lozinak\_114, Miskis\_109, Norvs\_115, PhinkBoden\_114, Smoothie\_115,

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:

- Abscondus\_114, Budski\_82, CherryCola\_9, Culver\_115, Denise\_58, Halo3\_9, Kewpiedoll\_10, LitninMcQueen\_80, MortyNRick\_72, Pepperoni\_53, Pupper\_232, RogerDodger\_9, SCentae\_232, Valary\_9, VanDeWege\_9,

### Summary by start number:

#### Start 12:

- Found in 1 of 27 ( 3.7% ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Budski\_82 (DN),

#### Start 15:

- Found in 2 of 27 ( 7.4% ) of genes in pham
- Manual Annotations of this start: 2 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus\_114 (CQ1), Culver\_115 (CQ1),

#### Start 18:

- Found in 3 of 27 ( 11.1% ) of genes in pham
- Manual Annotations of this start: 3 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Denise\_58 (CZ5), Kewpiedoll\_10 (DE1), MortyNRick\_72 (DN),

#### Start 19:

- Found in 7 of 27 ( 25.9% ) of genes in pham
- Manual Annotations of this start: 7 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CherryCola\_9 (DC1), Halo3\_9 (DC1), LitninMcQueen\_80 (DN1), Pepperoni\_53 (CZ), RogerDodger\_9 (DC1), Valary\_9 (DC1), VanDeWege\_9 (DC1),

#### Start 20:

- Found in 12 of 27 ( 44.4% ) of genes in pham
- Manual Annotations of this start: 11 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aphelion\_114 (CQ1), Bachita\_116 (CQ1), ClubL\_115 (CQ1), Cucurbita\_115 (CQ1), Dusty\_112 (CQ1), Engineer\_115 (CQ1), Geeche\_113 (CQ1), Lozinak\_114 (CQ1), Miskis\_109 (CQ1), Norvs\_115 (CQ1), PhinkBoden\_114 (CQ1), Smoothie\_115 (CQ1),

#### Start 21:

- Found in 2 of 27 ( 7.4% ) of genes in pham
- Manual Annotations of this start: 2 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pupper\_232 (DO), SCentae\_232 (DO),

### Summary by clusters:

There are 8 clusters represented in this pham: DN, DO, DE1, CZ5, CZ, DN1, CQ1, DC1,

Info for manual annotations of cluster CQ1:

- Start number 15 was manually annotated 2 times for cluster CQ1.
- Start number 20 was manually annotated 11 times for cluster CQ1.

Info for manual annotations of cluster CZ:

- Start number 19 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ5:

- Start number 18 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster DC1:

- Start number 19 was manually annotated 5 times for cluster DC1.

Info for manual annotations of cluster DE1:

- Start number 18 was manually annotated 1 time for cluster DE1.

Info for manual annotations of cluster DN:

- Start number 12 was manually annotated 1 time for cluster DN.
- Start number 18 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 19 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DO:

- Start number 21 was manually annotated 2 times for cluster DO.

### ***Gene Information:***

Gene: Abscondus\_114 Start: 65979, Stop: 66380, Start Num: 15

Candidate Starts for Abscondus\_114:

(1, 65751), (3, 65769), (4, 65781), (7, 65853), (9, 65940), (13, 65967), (Start: 15 @65979 has 2 MA's), (36, 66207), (38, 66219), (39, 66228), (43, 66246), (47, 66276), (54, 66345), (55, 66366),

Gene: Aphelion\_114 Start: 66941, Stop: 67261, Start Num: 20

Candidate Starts for Aphelion\_114:

(Start: 20 @66941 has 11 MA's), (27, 66992), (30, 67013), (36, 67088), (38, 67100), (39, 67109), (43, 67127), (47, 67157), (54, 67226), (55, 67247),

Gene: Bachita\_116 Start: 66804, Stop: 67118, Start Num: 20

Candidate Starts for Bachita\_116:

(Start: 20 @66804 has 11 MA's), (23, 66834), (27, 66855), (32, 66930), (36, 66945), (39, 66966), (43, 66984), (46, 67005), (54, 67083), (55, 67104),

Gene: Budski\_82 Start: 46032, Stop: 46460, Start Num: 12

Candidate Starts for Budski\_82:

(11, 46023), (Start: 12 @46032 has 1 MA's), (31, 46176), (33, 46239), (34, 46242), (37, 46257), (44, 46314), (49, 46350),

Gene: CherryCola\_9 Start: 4423, Stop: 4731, Start Num: 19

Candidate Starts for CherryCola\_9:

(Start: 19 @4423 has 7 MA's), (22, 4435), (23, 4456), (25, 4468), (27, 4477), (28, 4480), (33, 4558), (45, 4621), (53, 4693),

Gene: ClubL\_115 Start: 65734, Stop: 66048, Start Num: 20

Candidate Starts for ClubL\_115:

(Start: 20 @65734 has 11 MA's), (23, 65764), (27, 65785), (32, 65860), (36, 65875), (39, 65896), (43, 65914), (46, 65935), (54, 66013), (55, 66034),

Gene: Cucurbita\_115 Start: 67299, Stop: 67613, Start Num: 20

Candidate Starts for Cucurbita\_115:

(Start: 20 @67299 has 11 MA's), (23, 67329), (27, 67350), (32, 67425), (36, 67440), (39, 67461), (43, 67479), (46, 67500), (54, 67578), (55, 67599),

Gene: Culver\_115 Start: 65329, Stop: 65730, Start Num: 15

Candidate Starts for Culver\_115:

(Start: 15 @65329 has 2 MA's), (36, 65557), (38, 65569), (39, 65578), (43, 65596), (47, 65626), (54, 65695), (55, 65716),

Gene: Denise\_58 Start: 36910, Stop: 37233, Start Num: 18

Candidate Starts for Denise\_58:

(Start: 18 @36910 has 3 MA's), (32, 37036), (33, 37042), (35, 37048), (38, 37072), (46, 37123), (51, 37153), (55, 37222),

Gene: Dusty\_112 Start: 65640, Stop: 65954, Start Num: 20

Candidate Starts for Dusty\_112:

(Start: 20 @65640 has 11 MA's), (23, 65670), (27, 65691), (32, 65766), (36, 65781), (39, 65802), (43, 65820), (46, 65841), (54, 65919),

Gene: Engineer\_115 Start: 66777, Stop: 67091, Start Num: 20

Candidate Starts for Engineer\_115:

(Start: 20 @66777 has 11 MA's), (23, 66807), (27, 66828), (32, 66903), (36, 66918), (39, 66939), (43, 66957), (46, 66978), (54, 67056), (55, 67077),

Gene: Geeche\_113 Start: 65863, Stop: 66177, Start Num: 20

Candidate Starts for Geeche\_113:

(Start: 20 @65863 has 11 MA's), (23, 65893), (27, 65914), (32, 65989), (36, 66004), (39, 66025), (43, 66043), (46, 66064), (54, 66142),

Gene: Halo3\_9 Start: 4498, Stop: 4806, Start Num: 19

Candidate Starts for Halo3\_9:

(10, 4438), (Start: 19 @4498 has 7 MA's), (22, 4510), (23, 4531), (25, 4543), (27, 4552), (28, 4555), (33, 4633), (45, 4696), (53, 4768),

Gene: Kewpiedoll\_10 Start: 5162, Stop: 5464, Start Num: 18

Candidate Starts for Kewpiedoll\_10:

(Start: 18 @5162 has 3 MA's), (23, 5198), (40, 5330), (48, 5384),

Gene: LitninMcQueen\_80 Start: 45316, Stop: 45669, Start Num: 19

Candidate Starts for LitninMcQueen\_80:

(16, 45304), (17, 45310), (Start: 19 @45316 has 7 MA's), (24, 45355), (29, 45367), (33, 45451), (36, 45466), (37, 45469), (43, 45514),

Gene: Lozinak\_114 Start: 66615, Stop: 66929, Start Num: 20

Candidate Starts for Lozinak\_114:

(Start: 20 @66615 has 11 MA's), (23, 66645), (27, 66666), (32, 66741), (36, 66756), (39, 66777), (43, 66795), (46, 66816), (54, 66894), (55, 66915),

Gene: Miskis\_109 Start: 65566, Stop: 65880, Start Num: 20

Candidate Starts for Miskis\_109:

(Start: 20 @65566 has 11 MA's), (23, 65596), (27, 65617), (32, 65692), (36, 65707), (39, 65728), (43, 65746), (46, 65767), (54, 65845),

Gene: MortyNRick\_72 Start: 45215, Stop: 45589, Start Num: 18

Candidate Starts for MortyNRick\_72:

(Start: 18 @45215 has 3 MA's), (32, 45392), (33, 45398), (35, 45404), (38, 45428), (46, 45479), (51, 45509), (53, 45551), (55, 45578),

Gene: Norvs\_115 Start: 66437, Stop: 66802, Start Num: 20

Candidate Starts for Norvs\_115:

(Start: 20 @66437 has 11 MA's), (36, 66629), (38, 66641), (39, 66650), (43, 66668), (46, 66689), (54, 66767), (55, 66788),

Gene: Pepperoni\_53 Start: 34740, Stop: 35117, Start Num: 19

Candidate Starts for Pepperoni\_53:

(8, 34590), (16, 34725), (Start: 19 @34740 has 7 MA's), (26, 34788), (33, 34899), (36, 34914), (37, 34917), (43, 34962),

Gene: PhinkBoden\_114 Start: 66904, Stop: 67218, Start Num: 20

Candidate Starts for PhinkBoden\_114:

(Start: 20 @66904 has 11 MA's), (23, 66934), (27, 66955), (32, 67030), (36, 67045), (39, 67066), (43, 67084), (46, 67105), (54, 67183), (55, 67204),

Gene: Pupper\_232 Start: 149879, Stop: 150214, Start Num: 21

Candidate Starts for Pupper\_232:

(14, 149834), (Start: 21 @149879 has 2 MA's), (23, 149906), (32, 150005), (33, 150011), (41, 150059), (42, 150062), (52, 150152), (56, 150200),

Gene: RogerDodger\_9 Start: 4423, Stop: 4731, Start Num: 19

Candidate Starts for RogerDodger\_9:

(5, 4228), (6, 4237), (10, 4363), (Start: 19 @4423 has 7 MA's), (22, 4435), (23, 4456), (25, 4468), (27, 4477), (28, 4480), (45, 4621), (53, 4693),

Gene: SCentae\_232 Start: 150365, Stop: 150700, Start Num: 21

Candidate Starts for SCentae\_232:

(14, 150320), (Start: 21 @150365 has 2 MA's), (23, 150392), (32, 150491), (33, 150497), (41, 150545), (42, 150548), (52, 150638), (56, 150686),

Gene: Smoothie\_115 Start: 66615, Stop: 66929, Start Num: 20

Candidate Starts for Smoothie\_115:

(Start: 20 @66615 has 11 MA's), (23, 66645), (27, 66666), (32, 66741), (36, 66756), (39, 66777), (43, 66795), (46, 66816), (54, 66894), (55, 66915),

Gene: Valary\_9 Start: 4423, Stop: 4731, Start Num: 19

Candidate Starts for Valary\_9:

(Start: 19 @4423 has 7 MA's), (22, 4435), (23, 4456), (25, 4468), (27, 4477), (28, 4480), (33, 4558), (45, 4621), (53, 4693),

Gene: VanDeWege\_9 Start: 4309, Stop: 4659, Start Num: 19

Candidate Starts for VanDeWege\_9:

(2, 4051), (10, 4249), (Start: 19 @4309 has 7 MA's), (23, 4342), (27, 4363), (28, 4366), (33, 4444), (36, 4462), (39, 4483), (50, 4555),