

Pham 166977



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 166977 Report

This analysis was run 07/09/24 on database version 566.

Pham number 166977 has 21 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Courthouse\_179, Ariel\_183, MiaZeal\_185, KashFlow\_179, Superphikiman\_180
- Track 2 : Hannaconda\_174
- Track 3 : Lucky2013\_178
- Track 4 : Bobby\_166
- Track 5 : Porcelain\_182
- Track 6 : Gonephishing\_176
- Track 7 : Claus\_71
- Track 8 : Tourach\_69
- Track 9 : Baoshan\_68
- Track 10 : MiniMac\_72, MiniLon\_72, Lolly9\_68
- Track 11 : Whirlwind\_69
- Track 12 : Ellson\_67
- Track 13 : DyoEdafos\_72
- Track 14 : Douge\_68, Chaser\_66

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

The start number called the most often in the published annotations is 1, it was called in 7 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ariel\_183, Courthouse\_179, Gonephishing\_176, KashFlow\_179, Lucky2013\_178, MiaZeal\_185, Porcelain\_182, Superphikiman\_180,

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

- Hannaconda\_174,

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

- Baoshan\_68, Bobby\_166, Chaser\_66, Claus\_71, Douge\_68, DyoEdafos\_72, Ellson\_67, Lolly9\_68, MiniLon\_72, MiniMac\_72, Tourach\_69, Whirlwind\_69,

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

Start 1:

- Found in 9 of 21 ( 42.9% ) of genes in pham
- Manual Annotations of this start: 7 of 16
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Ariel\_183 (J), Courthouse\_179 (J), Gonephishing\_176 (J), KashFlow\_179 (J), Lucky2013\_178 (J), MiaZeal\_185 (J), Porcelain\_182 (J), Superphikiman\_180 (J),

Start 4:

- Found in 9 of 21 ( 42.9% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Hannaconda\_174 (J),

Start 11:

- Found in 2 of 21 ( 9.5% ) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bobby\_166 (J), DyoEdafos\_72 (L4),

Start 12:

- Found in 10 of 21 ( 47.6% ) of genes in pham
- Manual Annotations of this start: 6 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Baoshan\_68 (L2), Chaser\_66 (L4), Claus\_71 (L2), Douge\_68 (L4), Ellson\_67 (L3), Lolly9\_68 (L3), MiniLon\_72 (L3), MiniMac\_72 (L3), Tourach\_69 (L2), Whirlwind\_69 (L3),

**Summary by clusters:**

There are 4 clusters represented in this pham: L4, J, L2, L3,

Info for manual annotations of cluster J:

- Start number 1 was manually annotated 7 times for cluster J.
- Start number 4 was manually annotated 1 time for cluster J.
- Start number 11 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster L2:

- Start number 12 was manually annotated 1 time for cluster L2.

Info for manual annotations of cluster L3:

- Start number 12 was manually annotated 4 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 11 was manually annotated 1 time for cluster L4.
- Start number 12 was manually annotated 1 time for cluster L4.

**Gene Information:**

Gene: Ariel\_183 Start: 89861, Stop: 90265, Start Num: 1

Candidate Starts for Ariel\_183:

(Start: 1 @89861 has 7 MA's), (Start: 4 @89882 has 1 MA's), (9, 89927), (13, 89954), (15, 89984), (23, 90104), (28, 90146), (31, 90164), (36, 90194), (38, 90215), (39, 90218),

Gene: Baoshan\_68 Start: 47526, Stop: 47816, Start Num: 12

Candidate Starts for Baoshan\_68:

(Start: 12 @47526 has 6 MA's), (13, 47532), (15, 47559), (16, 47595), (17, 47613), (21, 47637), (26, 47709), (32, 47751), (35, 47757),

Gene: Bobby\_166 Start: 93015, Stop: 93335, Start Num: 11

Candidate Starts for Bobby\_166:

(2, 92946), (3, 92952), (5, 92955), (6, 92979), (Start: 11 @93015 has 2 MA's), (18, 93111), (19, 93117), (20, 93123), (23, 93174), (28, 93216),

Gene: Chaser\_66 Start: 46254, Stop: 46541, Start Num: 12

Candidate Starts for Chaser\_66:

(Start: 12 @46254 has 6 MA's), (15, 46290), (17, 46344), (23, 46407), (27, 46443), (30, 46464), (31, 46467),

Gene: Claus\_71 Start: 47664, Stop: 47954, Start Num: 12

Candidate Starts for Claus\_71:

(Start: 12 @47664 has 6 MA's), (13, 47670), (15, 47697), (16, 47733), (17, 47751), (21, 47775), (26, 47847), (32, 47889), (34, 47892), (35, 47895),

Gene: Courthouse\_179 Start: 90305, Stop: 90709, Start Num: 1

Candidate Starts for Courthouse\_179:

(Start: 1 @90305 has 7 MA's), (Start: 4 @90326 has 1 MA's), (9, 90371), (13, 90398), (15, 90428), (23, 90548), (28, 90590), (31, 90608), (36, 90638), (38, 90659), (39, 90662),

Gene: Douge\_68 Start: 46254, Stop: 46541, Start Num: 12

Candidate Starts for Douge\_68:

(Start: 12 @46254 has 6 MA's), (15, 46290), (17, 46344), (23, 46407), (27, 46443), (30, 46464), (31, 46467),

Gene: DyoEdafos\_72 Start: 46743, Stop: 47033, Start Num: 11

Candidate Starts for DyoEdafos\_72:

(8, 46710), (9, 46725), (Start: 11 @46743 has 2 MA's), (15, 46782), (22, 46896), (23, 46899), (28, 46941), (33, 46980),

Gene: Ellson\_67 Start: 47978, Stop: 48265, Start Num: 12

Candidate Starts for Ellson\_67:

(8, 47942), (Start: 12 @47978 has 6 MA's), (15, 48011), (16, 48047), (22, 48125), (25, 48152), (27, 48164),

Gene: Gonephishing\_176 Start: 91122, Stop: 91526, Start Num: 1

Candidate Starts for Gonephishing\_176:

(Start: 1 @91122 has 7 MA's), (Start: 4 @91143 has 1 MA's), (9, 91188), (13, 91215), (15, 91245), (23, 91365), (24, 91368), (28, 91407), (31, 91425), (36, 91455), (38, 91476), (39, 91479),

Gene: Hannaconda\_174 Start: 92817, Stop: 93200, Start Num: 4

Candidate Starts for Hannaconda\_174:

(Start: 1 @92796 has 7 MA's), (Start: 4 @92817 has 1 MA's), (9, 92862), (13, 92889), (15, 92919), (23, 93039), (28, 93081), (31, 93099), (36, 93129), (38, 93150), (39, 93153),

Gene: KashFlow\_179 Start: 92609, Stop: 93013, Start Num: 1

Candidate Starts for KashFlow\_179:

(Start: 1 @92609 has 7 MA's), (Start: 4 @92630 has 1 MA's), (9, 92675), (13, 92702), (15, 92732), (23, 92852), (28, 92894), (31, 92912), (36, 92942), (38, 92963), (39, 92966),

Gene: Lolly9\_68 Start: 47737, Stop: 48036, Start Num: 12

Candidate Starts for Lolly9\_68:

(Start: 12 @47737 has 6 MA's), (14, 47770), (15, 47773), (16, 47809), (20, 47842), (29, 47944), (35, 47974), (37, 47989),

Gene: Lucky2013\_178 Start: 89376, Stop: 89780, Start Num: 1

Candidate Starts for Lucky2013\_178:

(Start: 1 @89376 has 7 MA's), (Start: 4 @89397 has 1 MA's), (7, 89424), (9, 89442), (13, 89469), (15, 89499), (23, 89619), (28, 89661), (31, 89679), (36, 89709), (38, 89730), (39, 89733),

Gene: MiaZeal\_185 Start: 90523, Stop: 90927, Start Num: 1

Candidate Starts for MiaZeal\_185:

(Start: 1 @90523 has 7 MA's), (Start: 4 @90544 has 1 MA's), (9, 90589), (13, 90616), (15, 90646), (23, 90766), (28, 90808), (31, 90826), (36, 90856), (38, 90877), (39, 90880),

Gene: MiniLon\_72 Start: 47738, Stop: 48037, Start Num: 12

Candidate Starts for MiniLon\_72:

(Start: 12 @47738 has 6 MA's), (14, 47771), (15, 47774), (16, 47810), (20, 47843), (29, 47945), (35, 47975), (37, 47990),

Gene: MiniMac\_72 Start: 47736, Stop: 48035, Start Num: 12

Candidate Starts for MiniMac\_72:

(Start: 12 @47736 has 6 MA's), (14, 47769), (15, 47772), (16, 47808), (20, 47841), (29, 47943), (35, 47973), (37, 47988),

Gene: Porcelain\_182 Start: 90322, Stop: 90726, Start Num: 1

Candidate Starts for Porcelain\_182:

(Start: 1 @90322 has 7 MA's), (Start: 4 @90343 has 1 MA's), (7, 90370), (9, 90388), (10, 90394), (13, 90415), (15, 90445), (23, 90565), (28, 90607), (31, 90625), (36, 90655), (38, 90676), (39, 90679),

Gene: Superphikiman\_180 Start: 90001, Stop: 90405, Start Num: 1

Candidate Starts for Superphikiman\_180:

(Start: 1 @90001 has 7 MA's), (Start: 4 @90022 has 1 MA's), (9, 90067), (13, 90094), (15, 90124), (23, 90244), (28, 90286), (31, 90304), (36, 90334), (38, 90355), (39, 90358),

Gene: Tourach\_69 Start: 47665, Stop: 47955, Start Num: 12

Candidate Starts for Tourach\_69:

(Start: 12 @47665 has 6 MA's), (15, 47698), (16, 47734), (17, 47752), (21, 47776), (32, 47890), (34, 47893), (35, 47896), (37, 47911),

Gene: Whirlwind\_69 Start: 47730, Stop: 48017, Start Num: 12

Candidate Starts for Whirlwind\_69:

(8, 47694), (Start: 12 @47730 has 6 MA's), (15, 47763), (16, 47799), (22, 47877), (23, 47880), (25, 47904),