

Pham 194270



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 194270 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194270 has 27 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Basilisk\_65, Ruchi\_63
- Track 2 : Jamun\_62
- Track 3 : Chickaboom\_65
- Track 4 : TaylorSipht\_64
- Track 5 : Brynnie\_63
- Track 6 : Galaxy\_64
- Track 7 : Vulpecula\_63
- Track 8 : Orcanus\_64
- Track 9 : Eesa\_64
- Track 10 : Kepler\_74, Jerole\_78, Amelia\_70, Coral\_71, Bedetta\_74, Melons\_72, Lunar\_72, Colusalem\_71
- Track 11 : HannahPhantana\_71, Polka\_70
- Track 12 : Cote\_74
- Track 13 : Kuleana\_75
- Track 14 : Daob\_70
- Track 15 : Camara\_68, Juno112\_68
- Track 16 : RedFox\_70
- Track 17 : KHumphrey\_69

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

The start number called the most often in the published annotations is 34, it was called in 10 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Basilisk\_65, Camara\_68, Chickaboom\_65, Eesa\_64, Galaxy\_64, Juno112\_68, KHumphrey\_69, Orcanus\_64, RedFox\_70, Ruchi\_63, TaylorSipht\_64,

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

- Jamun\_62, Vulpecula\_63,

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

- Amelia\_70, Bedetta\_74, Brynnie\_63, Colusalem\_71, Coral\_71, Cote\_74, Daob\_70, HannahPhantana\_71, Jerole\_78, Kepler\_74, Kuleana\_75, Lunar\_72, Melons\_72,

Polka\_70,

### Summary by start number:

Start 30:

- Found in 1 of 27 ( 3.7% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kuleana\_75 (AS2),

Start 31:

- Found in 12 of 27 ( 44.4% ) of genes in pham
- Manual Annotations of this start: 9 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amelia\_70 (AS2), Bedetta\_74 (AS2), Colusalem\_71 (AS2), Coral\_71 (AS2), Cote\_74 (AS2), Daob\_70 (AS2), HannahPhantana\_71 (AS2), Jerole\_78 (AS2), Kepler\_74 (AS2), Lunar\_72 (AS2), Melons\_72 (AS2), Polka\_70 (AS2),

Start 32:

- Found in 2 of 27 ( 7.4% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Vulpecula\_63 (AS1),

Start 34:

- Found in 13 of 27 ( 48.1% ) of genes in pham
- Manual Annotations of this start: 10 of 23
- Called 84.6% of time when present
- Phage (with cluster) where this start called: Basilisk\_65 (AS1), Camara\_68 (AS3), Chickaboom\_65 (AS1), Eesa\_64 (AS1), Galaxy\_64 (AS1), Juno112\_68 (AS3), KHumphrey\_69 (AS3), Orcanus\_64 (AS1), RedFox\_70 (AS3), Ruchi\_63 (AS1), TaylorSipht\_64 (AS1),

Start 40:

- Found in 15 of 27 ( 55.6% ) of genes in pham
- Manual Annotations of this start: 2 of 23
- Called 13.3% of time when present
- Phage (with cluster) where this start called: Brynnie\_63 (AS1), Jamun\_62 (AS1),

### Summary by clusters:

There are 3 clusters represented in this pham: AS3, AS2, AS1,

Info for manual annotations of cluster AS1:

- Start number 32 was manually annotated 1 time for cluster AS1.
- Start number 34 was manually annotated 7 times for cluster AS1.
- Start number 40 was manually annotated 2 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 30 was manually annotated 1 time for cluster AS2.
- Start number 31 was manually annotated 9 times for cluster AS2.

Info for manual annotations of cluster AS3:

•Start number 34 was manually annotated 3 times for cluster AS3.

**Gene Information:**

Gene: Amelia\_70 Start: 37346, Stop: 37591, Start Num: 31

Candidate Starts for Amelia\_70:

(12, 37262), (Start: 31 @37346 has 9 MA's), (36, 37373), (37, 37382), (39, 37385), (42, 37415), (43, 37421), (46, 37466), (47, 37481), (52, 37532), (56, 37571),

Gene: Basilisk\_65 Start: 37815, Stop: 38027, Start Num: 34

Candidate Starts for Basilisk\_65:

(3, 37620), (18, 37752), (Start: 34 @37815 has 10 MA's), (Start: 40 @37842 has 2 MA's), (41, 37851), (45, 37914), (51, 37971), (53, 37992),

Gene: Bedetta\_74 Start: 37509, Stop: 37754, Start Num: 31

Candidate Starts for Bedetta\_74:

(12, 37425), (Start: 31 @37509 has 9 MA's), (36, 37536), (37, 37545), (39, 37548), (42, 37578), (43, 37584), (46, 37629), (47, 37644), (52, 37695), (56, 37734),

Gene: Brynnie\_63 Start: 37788, Stop: 37973, Start Num: 40

Candidate Starts for Brynnie\_63:

(Start: 32 @37755 has 1 MA's), (Start: 40 @37788 has 2 MA's), (41, 37797), (45, 37860), (51, 37917), (53, 37938),

Gene: Camara\_68 Start: 37526, Stop: 37750, Start Num: 34

Candidate Starts for Camara\_68:

(17, 37454), (Start: 34 @37526 has 10 MA's), (Start: 40 @37553 has 2 MA's), (43, 37586), (44, 37601), (50, 37673), (52, 37691), (54, 37703), (56, 37730),

Gene: Chickaboom\_65 Start: 37923, Stop: 38135, Start Num: 34

Candidate Starts for Chickaboom\_65:

(13, 37848), (21, 37875), (23, 37896), (33, 37920), (Start: 34 @37923 has 10 MA's), (36, 37935), (Start: 40 @37950 has 2 MA's), (41, 37959), (45, 38022), (51, 38079), (53, 38100),

Gene: Colusalem\_71 Start: 37323, Stop: 37568, Start Num: 31

Candidate Starts for Colusalem\_71:

(12, 37239), (Start: 31 @37323 has 9 MA's), (36, 37350), (37, 37359), (39, 37362), (42, 37392), (43, 37398), (46, 37443), (47, 37458), (52, 37509), (56, 37548),

Gene: Coral\_71 Start: 37538, Stop: 37783, Start Num: 31

Candidate Starts for Coral\_71:

(12, 37454), (Start: 31 @37538 has 9 MA's), (36, 37565), (37, 37574), (39, 37577), (42, 37607), (43, 37613), (46, 37658), (47, 37673), (52, 37724), (56, 37763),

Gene: Cote\_74 Start: 38262, Stop: 38507, Start Num: 31

Candidate Starts for Cote\_74:

(12, 38181), (19, 38214), (25, 38247), (Start: 31 @38262 has 9 MA's), (36, 38289), (37, 38298), (39, 38301), (42, 38331), (43, 38337), (46, 38382), (47, 38397), (52, 38448), (56, 38487),

Gene: Daob\_70 Start: 37188, Stop: 37433, Start Num: 31

Candidate Starts for Daob\_70:

(1, 36969), (2, 36978), (5, 37014), (7, 37035), (8, 37044), (Start: 31 @37188 has 9 MA's), (36, 37215), (37, 37224), (39, 37227), (42, 37257), (43, 37263), (46, 37308), (47, 37323), (56, 37413),

Gene: Eesa\_64 Start: 39050, Stop: 39250, Start Num: 34

Candidate Starts for Eesa\_64:

(3, 38861), (6, 38894), (10, 38948), (15, 38978), (20, 38996), (Start: 34 @39050 has 10 MA's), (Start: 40 @39077 has 2 MA's), (42, 39104), (44, 39125), (45, 39149), (48, 39185), (51, 39206),

Gene: Galaxy\_64 Start: 36960, Stop: 37175, Start Num: 34

Candidate Starts for Galaxy\_64:

(3, 36777), (6, 36810), (Start: 34 @36960 has 10 MA's), (38, 36984), (Start: 40 @36990 has 2 MA's), (41, 36999), (45, 37062), (49, 37101), (51, 37119), (53, 37140),

Gene: HannahPhantana\_71 Start: 37341, Stop: 37586, Start Num: 31

Candidate Starts for HannahPhantana\_71:

(12, 37257), (Start: 31 @37341 has 9 MA's), (36, 37368), (37, 37377), (39, 37380), (42, 37410), (43, 37416), (46, 37461), (47, 37476), (56, 37566),

Gene: Jamun\_62 Start: 38028, Stop: 38213, Start Num: 40

Candidate Starts for Jamun\_62:

(3, 37818), (Start: 34 @38001 has 10 MA's), (Start: 40 @38028 has 2 MA's), (45, 38100), (51, 38157), (53, 38178),

Gene: Jerole\_78 Start: 37465, Stop: 37710, Start Num: 31

Candidate Starts for Jerole\_78:

(12, 37381), (Start: 31 @37465 has 9 MA's), (36, 37492), (37, 37501), (39, 37504), (42, 37534), (43, 37540), (46, 37585), (47, 37600), (52, 37651), (56, 37690),

Gene: Juno112\_68 Start: 37637, Stop: 37861, Start Num: 34

Candidate Starts for Juno112\_68:

(17, 37565), (Start: 34 @37637 has 10 MA's), (Start: 40 @37664 has 2 MA's), (43, 37697), (44, 37712), (50, 37784), (52, 37802), (54, 37814), (56, 37841),

Gene: KHumphrey\_69 Start: 37510, Stop: 37734, Start Num: 34

Candidate Starts for KHumphrey\_69:

(17, 37438), (24, 37483), (Start: 34 @37510 has 10 MA's), (Start: 40 @37537 has 2 MA's), (43, 37570), (44, 37585), (50, 37657), (52, 37675), (54, 37687), (56, 37714),

Gene: Kepler\_74 Start: 37670, Stop: 37915, Start Num: 31

Candidate Starts for Kepler\_74:

(12, 37586), (Start: 31 @37670 has 9 MA's), (36, 37697), (37, 37706), (39, 37709), (42, 37739), (43, 37745), (46, 37790), (47, 37805), (52, 37856), (56, 37895),

Gene: Kuleana\_75 Start: 38064, Stop: 38273, Start Num: 30

Candidate Starts for Kuleana\_75:

(4, 37878), (11, 37974), (14, 37995), (15, 37998), (26, 38055), (27, 38058), (29, 38061), (Start: 30 @38064 has 1 MA's), (35, 38082), (36, 38091), (37, 38100), (39, 38103), (Start: 40 @38106 has 2 MA's), (42, 38133), (43, 38139), (44, 38154), (51, 38232),

Gene: Lunar\_72 Start: 37670, Stop: 37915, Start Num: 31

Candidate Starts for Lunar\_72:

(12, 37586), (Start: 31 @37670 has 9 MA's), (36, 37697), (37, 37706), (39, 37709), (42, 37739), (43, 37745), (46, 37790), (47, 37805), (52, 37856), (56, 37895),

Gene: Melons\_72 Start: 37679, Stop: 37924, Start Num: 31

Candidate Starts for Melons\_72:

(12, 37595), (Start: 31 @37679 has 9 MA's), (36, 37706), (37, 37715), (39, 37718), (42, 37748), (43, 37754), (46, 37799), (47, 37814), (52, 37865), (56, 37904),

Gene: Orcanus\_64 Start: 38537, Stop: 38737, Start Num: 34

Candidate Starts for Orcanus\_64:

(3, 38348), (6, 38381), (10, 38435), (15, 38465), (20, 38483), (Start: 34 @38537 has 10 MA's), (Start: 40 @38564 has 2 MA's), (42, 38591), (45, 38636), (46, 38642), (48, 38672), (51, 38693), (55, 38732),

Gene: Polka\_70 Start: 37295, Stop: 37540, Start Num: 31

Candidate Starts for Polka\_70:

(12, 37211), (Start: 31 @37295 has 9 MA's), (36, 37322), (37, 37331), (39, 37334), (42, 37364), (43, 37370), (46, 37415), (47, 37430), (56, 37520),

Gene: RedFox\_70 Start: 37895, Stop: 38119, Start Num: 34

Candidate Starts for RedFox\_70:

(22, 37856), (28, 37877), (Start: 34 @37895 has 10 MA's), (Start: 40 @37922 has 2 MA's), (43, 37955), (44, 37970), (52, 38060), (54, 38072), (56, 38099),

Gene: Ruchi\_63 Start: 37737, Stop: 37949, Start Num: 34

Candidate Starts for Ruchi\_63:

(3, 37542), (18, 37674), (Start: 34 @37737 has 10 MA's), (Start: 40 @37764 has 2 MA's), (41, 37773), (45, 37836), (51, 37893), (53, 37914),

Gene: TaylorSipht\_64 Start: 38271, Stop: 38459, Start Num: 34

Candidate Starts for TaylorSipht\_64:

(9, 38142), (16, 38211), (18, 38217), (Start: 34 @38271 has 10 MA's), (37, 38292), (39, 38295), (Start: 40 @38298 has 2 MA's), (41, 38307), (45, 38370), (50, 38418), (51, 38427), (53, 38448),

Gene: Vulpecula\_63 Start: 36929, Stop: 37147, Start Num: 32

Candidate Starts for Vulpecula\_63:

(Start: 32 @36929 has 1 MA's), (Start: 34 @36935 has 10 MA's), (Start: 40 @36962 has 2 MA's), (41, 36971), (45, 37034), (49, 37073), (51, 37091), (53, 37112),