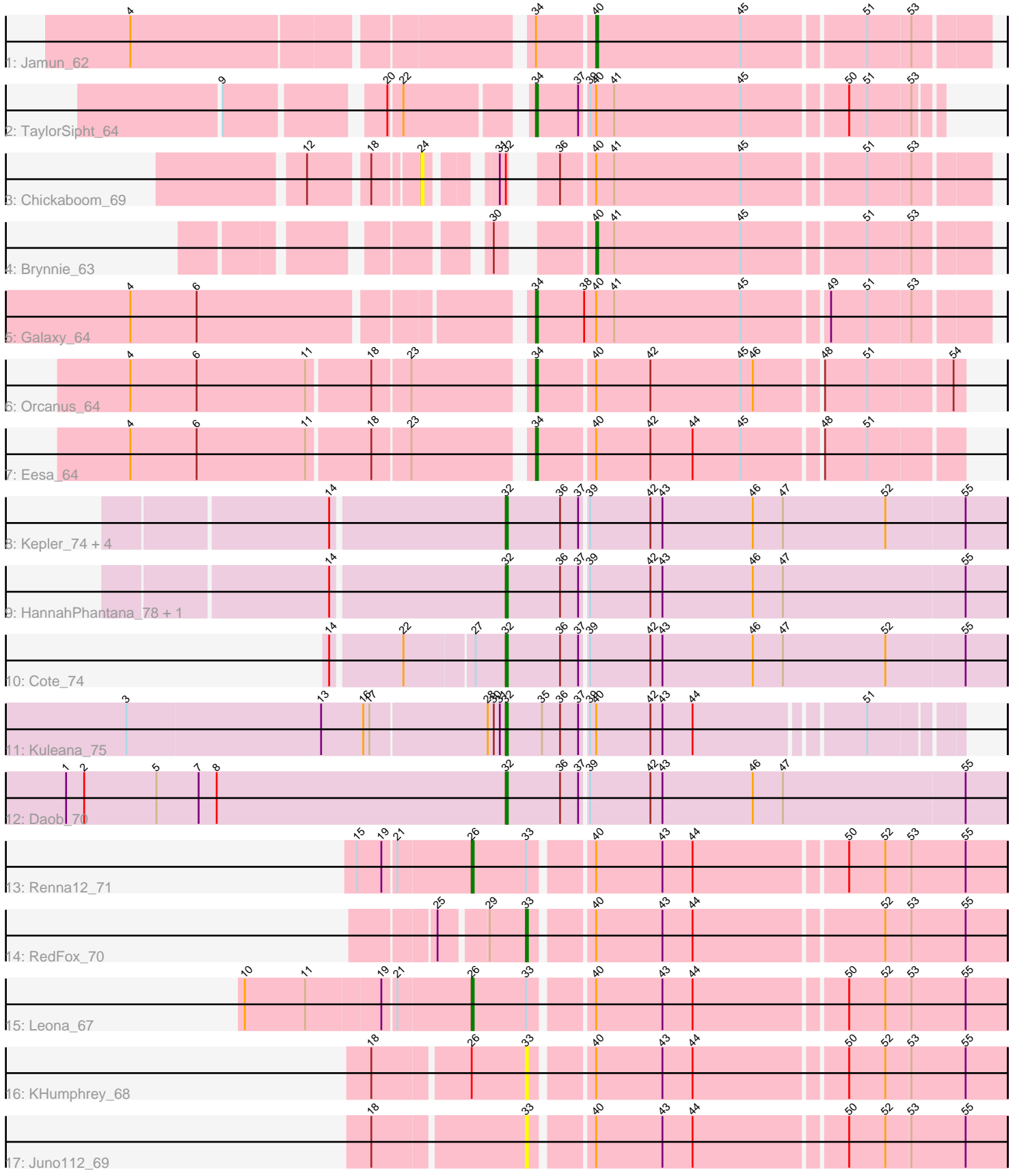


Pham 162162



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 162162 Report

This analysis was run 04/28/24 on database version 559.

Pham number 162162 has 22 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Jamun\_62
- Track 2 : TaylorSipht\_64
- Track 3 : Chickaboom\_69
- Track 4 : Brynnie\_63
- Track 5 : Galaxy\_64
- Track 6 : Orcanus\_64
- Track 7 : Eesa\_64
- Track 8 : Kepler\_74, Amelia\_70, Melons\_72, Coral\_71, Lunar\_72
- Track 9 : HannahPhantana\_78, Polka\_70
- Track 10 : Cote\_74
- Track 11 : Kuleana\_75
- Track 12 : Daob\_70
- Track 13 : Renna12\_71
- Track 14 : RedFox\_70
- Track 15 : Leona\_67
- Track 16 : KHumphrey\_68
- Track 17 : Juno112\_69

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

The start number called the most often in the published annotations is 32, it was called in 9 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amelia\_70, Coral\_71, Cote\_74, Daob\_70, HannahPhantana\_78, Kepler\_74, Kuleana\_75, Lunar\_72, Melons\_72, Polka\_70,

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

- Chickaboom\_69,

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

- Brynnie\_63, Eesa\_64, Galaxy\_64, Jamun\_62, Juno112\_69, KHumphrey\_68, Leona\_67, Orcanus\_64, RedFox\_70, Renna12\_71, TaylorSipht\_64,

## Summary by start number:

### Start 24:

- Found in 1 of 22 ( 4.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chickaboom\_69 (AS1),

### Start 26:

- Found in 3 of 22 ( 13.6% ) of genes in pham
- Manual Annotations of this start: 2 of 18
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Leona\_67 (AS3), Renna12\_71 (AS3),

### Start 32:

- Found in 11 of 22 ( 50.0% ) of genes in pham
- Manual Annotations of this start: 9 of 18
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Amelia\_70 (AS2), Coral\_71 (AS2), Cote\_74 (AS2), Daob\_70 (AS2), HannahPhantana\_78 (AS2), Kepler\_74 (AS2), Kuleana\_75 (AS2), Lunar\_72 (AS2), Melons\_72 (AS2), Polka\_70 (AS2),

### Start 33:

- Found in 5 of 22 ( 22.7% ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Juno112\_69 (AS3), KHumphrey\_68 (AS3), RedFox\_70 (AS3),

### Start 34:

- Found in 5 of 22 ( 22.7% ) of genes in pham
- Manual Annotations of this start: 4 of 18
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Eesa\_64 (AS1), Galaxy\_64 (AS1), Orcanus\_64 (AS1), TaylorSipht\_64 (AS1),

### Start 40:

- Found in 13 of 22 ( 59.1% ) of genes in pham
- Manual Annotations of this start: 2 of 18
- Called 15.4% 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 34 was manually annotated 4 times for cluster AS1.
- Start number 40 was manually annotated 2 times for cluster AS1.

### Info for manual annotations of cluster AS2:

- Start number 32 was manually annotated 9 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 26 was manually annotated 2 times for cluster AS3.
- Start number 33 was manually annotated 1 time for cluster AS3.

**Gene Information:**

Gene: Amelia\_70 Start: 37346, Stop: 37591, Start Num: 32

Candidate Starts for Amelia\_70:

(14, 37262), (Start: 32 @37346 has 9 MA's), (36, 37373), (37, 37382), (39, 37385), (42, 37415), (43, 37421), (46, 37466), (47, 37481), (52, 37532), (55, 37571),

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

Candidate Starts for Brynnie\_63:

(30, 37755), (Start: 40 @37788 has 2 MA's), (41, 37797), (45, 37860), (51, 37917), (53, 37938),

Gene: Chickaboom\_69 Start: 37896, Stop: 38135, Start Num: 24

Candidate Starts for Chickaboom\_69:

(12, 37848), (18, 37875), (24, 37896), (31, 37920), (Start: 32 @37923 has 9 MA's), (36, 37935), (Start: 40 @37950 has 2 MA's), (41, 37959), (45, 38022), (51, 38079), (53, 38100),

Gene: Coral\_71 Start: 37538, Stop: 37783, Start Num: 32

Candidate Starts for Coral\_71:

(14, 37454), (Start: 32 @37538 has 9 MA's), (36, 37565), (37, 37574), (39, 37577), (42, 37607), (43, 37613), (46, 37658), (47, 37673), (52, 37724), (55, 37763),

Gene: Cote\_74 Start: 38262, Stop: 38507, Start Num: 32

Candidate Starts for Cote\_74:

(14, 38181), (22, 38214), (27, 38247), (Start: 32 @38262 has 9 MA's), (36, 38289), (37, 38298), (39, 38301), (42, 38331), (43, 38337), (46, 38382), (47, 38397), (52, 38448), (55, 38487),

Gene: Daob\_70 Start: 37188, Stop: 37433, Start Num: 32

Candidate Starts for Daob\_70:

(1, 36969), (2, 36978), (5, 37014), (7, 37035), (8, 37044), (Start: 32 @37188 has 9 MA's), (36, 37215), (37, 37224), (39, 37227), (42, 37257), (43, 37263), (46, 37308), (47, 37323), (55, 37413),

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

Candidate Starts for Eesa\_64:

(4, 38861), (6, 38894), (11, 38948), (18, 38978), (23, 38996), (Start: 34 @39050 has 4 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:

(4, 36777), (6, 36810), (Start: 34 @36960 has 4 MA's), (38, 36984), (Start: 40 @36990 has 2 MA's), (41, 36999), (45, 37062), (49, 37101), (51, 37119), (53, 37140),

Gene: HannahPhantana\_78 Start: 37341, Stop: 37586, Start Num: 32

Candidate Starts for HannahPhantana\_78:

(14, 37257), (Start: 32 @37341 has 9 MA's), (36, 37368), (37, 37377), (39, 37380), (42, 37410), (43, 37416), (46, 37461), (47, 37476), (55, 37566),

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

Candidate Starts for Jamun\_62:

(4, 37818), (Start: 34 @38001 has 4 MA's), (Start: 40 @38028 has 2 MA's), (45, 38100), (51, 38157), (53, 38178),

Gene: Juno112\_69 Start: 37637, Stop: 37861, Start Num: 33

Candidate Starts for Juno112\_69:

(18, 37565), (Start: 33 @37637 has 1 MA's), (Start: 40 @37664 has 2 MA's), (43, 37697), (44, 37712), (50, 37784), (52, 37802), (53, 37814), (55, 37841),

Gene: KHumphrey\_68 Start: 37510, Stop: 37734, Start Num: 33

Candidate Starts for KHumphrey\_68:

(18, 37438), (Start: 26 @37483 has 2 MA's), (Start: 33 @37510 has 1 MA's), (Start: 40 @37537 has 2 MA's), (43, 37570), (44, 37585), (50, 37657), (52, 37675), (53, 37687), (55, 37714),

Gene: Kepler\_74 Start: 37670, Stop: 37915, Start Num: 32

Candidate Starts for Kepler\_74:

(14, 37586), (Start: 32 @37670 has 9 MA's), (36, 37697), (37, 37706), (39, 37709), (42, 37739), (43, 37745), (46, 37790), (47, 37805), (52, 37856), (55, 37895),

Gene: Kuleana\_75 Start: 38064, Stop: 38273, Start Num: 32

Candidate Starts for Kuleana\_75:

(3, 37878), (13, 37974), (16, 37995), (17, 37998), (28, 38055), (30, 38058), (31, 38061), (Start: 32 @38064 has 9 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: Leona\_67 Start: 37757, Stop: 38008, Start Num: 26

Candidate Starts for Leona\_67:

(10, 37649), (11, 37679), (19, 37715), (21, 37721), (Start: 26 @37757 has 2 MA's), (Start: 33 @37784 has 1 MA's), (Start: 40 @37811 has 2 MA's), (43, 37844), (44, 37859), (50, 37931), (52, 37949), (53, 37961), (55, 37988),

Gene: Lunar\_72 Start: 37670, Stop: 37915, Start Num: 32

Candidate Starts for Lunar\_72:

(14, 37586), (Start: 32 @37670 has 9 MA's), (36, 37697), (37, 37706), (39, 37709), (42, 37739), (43, 37745), (46, 37790), (47, 37805), (52, 37856), (55, 37895),

Gene: Melons\_72 Start: 37679, Stop: 37924, Start Num: 32

Candidate Starts for Melons\_72:

(14, 37595), (Start: 32 @37679 has 9 MA's), (36, 37706), (37, 37715), (39, 37718), (42, 37748), (43, 37754), (46, 37799), (47, 37814), (52, 37865), (55, 37904),

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

Candidate Starts for Orcanus\_64:

(4, 38348), (6, 38381), (11, 38435), (18, 38465), (23, 38483), (Start: 34 @38537 has 4 MA's), (Start: 40 @38564 has 2 MA's), (42, 38591), (45, 38636), (46, 38642), (48, 38672), (51, 38693), (54, 38732),

Gene: Polka\_70 Start: 37295, Stop: 37540, Start Num: 32

Candidate Starts for Polka\_70:

(14, 37211), (Start: 32 @37295 has 9 MA's), (36, 37322), (37, 37331), (39, 37334), (42, 37364), (43, 37370), (46, 37415), (47, 37430), (55, 37520),

Gene: RedFox\_70 Start: 37895, Stop: 38119, Start Num: 33

Candidate Starts for RedFox\_70:

(25, 37856), (29, 37877), (Start: 33 @37895 has 1 MA's), (Start: 40 @37922 has 2 MA's), (43, 37955), (44, 37970), (52, 38060), (53, 38072), (55, 38099),

Gene: Renna12\_71 Start: 38335, Stop: 38586, Start Num: 26

Candidate Starts for Renna12\_71:

(15, 38281), (19, 38293), (21, 38299), (Start: 26 @38335 has 2 MA's), (Start: 33 @38362 has 1 MA's), (Start: 40 @38389 has 2 MA's), (43, 38422), (44, 38437), (50, 38509), (52, 38527), (53, 38539), (55, 38566),

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

Candidate Starts for TaylorSipht\_64:

(9, 38142), (20, 38211), (22, 38217), (Start: 34 @38271 has 4 MA's), (37, 38292), (39, 38295), (Start: 40 @38298 has 2 MA's), (41, 38307), (45, 38370), (50, 38418), (51, 38427), (53, 38448),