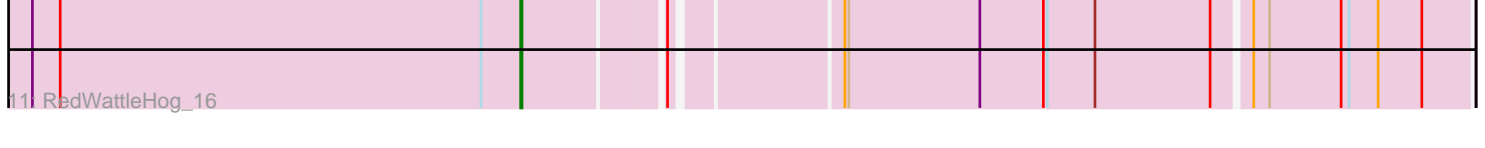
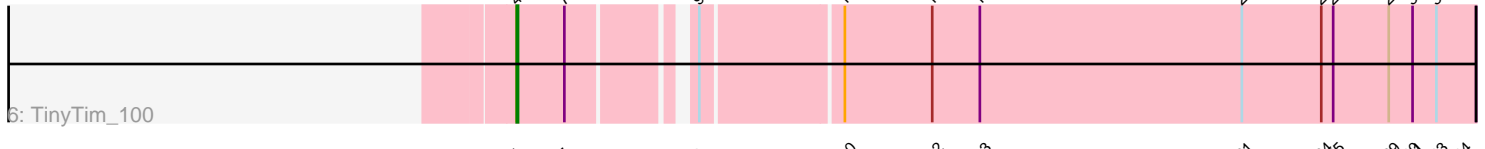
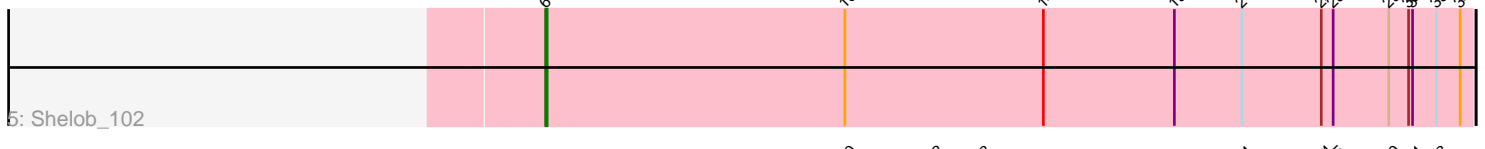
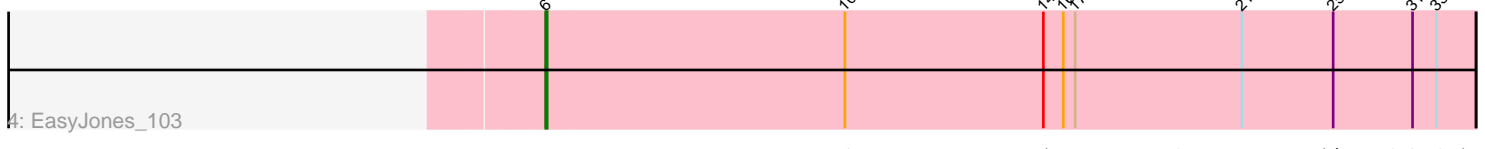
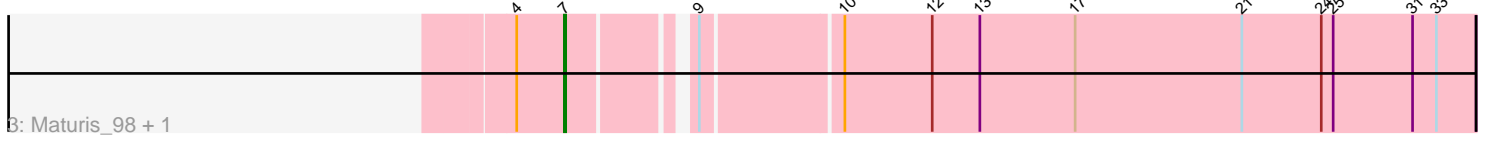
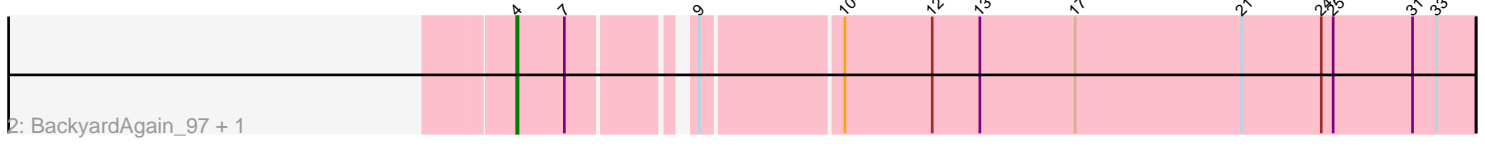
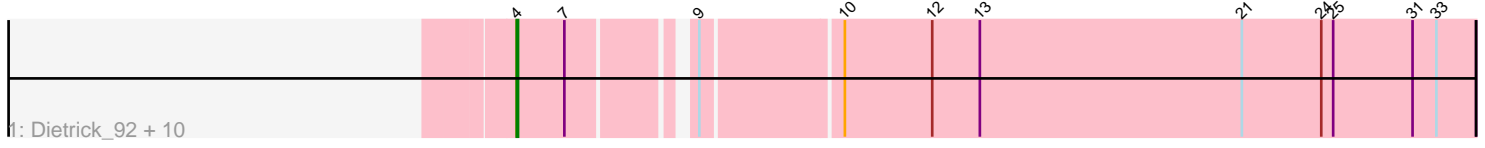


# Pham 293114



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 293114 Report

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

Pham number 293114 has 23 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Dietrick\_92, Ewok\_101, Napoleon13\_96, Melpomini\_94, Bread\_100, Stubby\_93, Ava3\_101, Burrough\_100, JulietS\_94, Babyland\_101, EmmaElysia\_100
- Track 2 : BackyardAgain\_97, Koguma\_97
- Track 3 : Maturis\_98, Grungle\_88
- Track 4 : EasyJones\_103
- Track 5 : Shelob\_102
- Track 6 : TinyTim\_100
- Track 7 : EmToTheThree\_103
- Track 8 : Yucca\_100
- Track 9 : QBert\_94
- Track 10 : Bonray\_100
- Track 11 : RedWattleHog\_16

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

The start number called the most often in the published annotations is 4, it was called in 17 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ava3\_101, Babyland\_101, BackyardAgain\_97, Bonray\_100, Bread\_100, Burrough\_100, Dietrick\_92, EmToTheThree\_103, EmmaElysia\_100, Ewok\_101, JulietS\_94, Koguma\_97, Melpomini\_94, Napoleon13\_96, Stubby\_93, TinyTim\_100, Yucca\_100,

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

- Grungle\_88, Maturis\_98,

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

- EasyJones\_103, QBert\_94, RedWattleHog\_16, Shelob\_102,

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

Start 4:

- Found in 19 of 23 ( 82.6% ) of genes in pham

- Manual Annotations of this start: 17 of 22
- Called 89.5% of time when present
- Phage (with cluster) where this start called: Ava3\_101 (C1), Babyland\_101 (C1), BackyardAgain\_97 (C1), Bonray\_100 (C1), Bread\_100 (C1), Burrough\_100 (C1), Dietrick\_92 (C1), EmToTheThree\_103 (C1), EmmaElysia\_100 (C1), Ewok\_101 (C1), JulietS\_94 (C1), Koguma\_97 (C1), Melpomini\_94 (C1), Napoleon13\_96 (C1), Stubby\_93 (C1), TinyTim\_100 (C1), Yucca\_100 (C1),

Start 5:

- Found in 1 of 23 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog\_16 (DX),

Start 6:

- Found in 3 of 23 ( 13.0% ) of genes in pham
- Manual Annotations of this start: 3 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EasyJones\_103 (C1), QBert\_94 (C1), Shelob\_102 (C1),

Start 7:

- Found in 19 of 23 ( 82.6% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 10.5% of time when present
- Phage (with cluster) where this start called: Grungle\_88 (C1), Maturis\_98 (C1),

### **Summary by clusters:**

There are 2 clusters represented in this pham: C1, DX,

Info for manual annotations of cluster C1:

- Start number 4 was manually annotated 17 times for cluster C1.
- Start number 6 was manually annotated 3 times for cluster C1.
- Start number 7 was manually annotated 1 time for cluster C1.

Info for manual annotations of cluster DX:

- Start number 5 was manually annotated 1 time for cluster DX.

### **Gene Information:**

Gene: Ava3\_101 Start: 50524, Stop: 51213, Start Num: 4

Candidate Starts for Ava3\_101:

(Start: 4 @50524 has 17 MA's), (Start: 7 @50560 has 1 MA's), (9, 50638), (10, 50737), (12, 50803), (13, 50839), (21, 51037), (24, 51097), (25, 51106), (31, 51166), (33, 51184),

Gene: Babyland\_101 Start: 49697, Stop: 50386, Start Num: 4

Candidate Starts for Babyland\_101:

(Start: 4 @49697 has 17 MA's), (Start: 7 @49733 has 1 MA's), (9, 49811), (10, 49910), (12, 49976), (13, 50012), (21, 50210), (24, 50270), (25, 50279), (31, 50339), (33, 50357),

Gene: BackyardAgain\_97 Start: 49527, Stop: 50216, Start Num: 4

Candidate Starts for BackyardAgain\_97:

(Start: 4 @49527 has 17 MA's), (Start: 7 @49563 has 1 MA's), (9, 49641), (10, 49740), (12, 49806), (13, 49842), (17, 49914), (21, 50040), (24, 50100), (25, 50109), (31, 50169), (33, 50187),

Gene: Bonray\_100 Start: 50950, Stop: 51636, Start Num: 4

Candidate Starts for Bonray\_100:

(Start: 4 @50950 has 17 MA's), (Start: 7 @50986 has 1 MA's), (9, 51064), (10, 51163), (12, 51229), (13, 51265), (21, 51463), (25, 51532), (29, 51574), (30, 51589), (31, 51592), (33, 51610), (34, 51628),

Gene: Bread\_100 Start: 50610, Stop: 51299, Start Num: 4

Candidate Starts for Bread\_100:

(Start: 4 @50610 has 17 MA's), (Start: 7 @50646 has 1 MA's), (9, 50724), (10, 50823), (12, 50889), (13, 50925), (21, 51123), (24, 51183), (25, 51192), (31, 51252), (33, 51270),

Gene: Burrough\_100 Start: 51109, Stop: 51798, Start Num: 4

Candidate Starts for Burrough\_100:

(Start: 4 @51109 has 17 MA's), (Start: 7 @51145 has 1 MA's), (9, 51223), (10, 51322), (12, 51388), (13, 51424), (21, 51622), (24, 51682), (25, 51691), (31, 51751), (33, 51769),

Gene: Dietrick\_92 Start: 48775, Stop: 49464, Start Num: 4

Candidate Starts for Dietrick\_92:

(Start: 4 @48775 has 17 MA's), (Start: 7 @48811 has 1 MA's), (9, 48889), (10, 48988), (12, 49054), (13, 49090), (21, 49288), (24, 49348), (25, 49357), (31, 49417), (33, 49435),

Gene: EasyJones\_103 Start: 50149, Stop: 50850, Start Num: 6

Candidate Starts for EasyJones\_103:

(Start: 6 @50149 has 3 MA's), (10, 50374), (14, 50524), (16, 50539), (17, 50548), (21, 50674), (25, 50743), (31, 50803), (33, 50821),

Gene: EmToTheThree\_103 Start: 52294, Stop: 52980, Start Num: 4

Candidate Starts for EmToTheThree\_103:

(Start: 4 @52294 has 17 MA's), (Start: 7 @52330 has 1 MA's), (9, 52408), (10, 52507), (12, 52573), (13, 52609), (21, 52807), (24, 52867), (25, 52876), (29, 52918), (30, 52933), (31, 52936), (33, 52954), (34, 52972),

Gene: EmmaElysia\_100 Start: 49825, Stop: 50514, Start Num: 4

Candidate Starts for EmmaElysia\_100:

(Start: 4 @49825 has 17 MA's), (Start: 7 @49861 has 1 MA's), (9, 49939), (10, 50038), (12, 50104), (13, 50140), (21, 50338), (24, 50398), (25, 50407), (31, 50467), (33, 50485),

Gene: Ewok\_101 Start: 50470, Stop: 51159, Start Num: 4

Candidate Starts for Ewok\_101:

(Start: 4 @50470 has 17 MA's), (Start: 7 @50506 has 1 MA's), (9, 50584), (10, 50683), (12, 50749), (13, 50785), (21, 50983), (24, 51043), (25, 51052), (31, 51112), (33, 51130),

Gene: Grungle\_88 Start: 47460, Stop: 48113, Start Num: 7

Candidate Starts for Grungle\_88:

(Start: 4 @47424 has 17 MA's), (Start: 7 @47460 has 1 MA's), (9, 47538), (10, 47637), (12, 47703), (13, 47739), (17, 47811), (21, 47937), (24, 47997), (25, 48006), (31, 48066), (33, 48084),

Gene: JulietS\_94 Start: 48305, Stop: 48994, Start Num: 4

Candidate Starts for JulietS\_94:

(Start: 4 @48305 has 17 MA's), (Start: 7 @48341 has 1 MA's), (9, 48419), (10, 48518), (12, 48584), (13, 48620), (21, 48818), (24, 48878), (25, 48887), (31, 48947), (33, 48965),

Gene: Koguma\_97 Start: 48525, Stop: 49214, Start Num: 4

Candidate Starts for Koguma\_97:

(Start: 4 @48525 has 17 MA's), (Start: 7 @48561 has 1 MA's), (9, 48639), (10, 48738), (12, 48804), (13, 48840), (17, 48912), (21, 49038), (24, 49098), (25, 49107), (31, 49167), (33, 49185),

Gene: Maturis\_98 Start: 50754, Stop: 51407, Start Num: 7

Candidate Starts for Maturis\_98:

(Start: 4 @50718 has 17 MA's), (Start: 7 @50754 has 1 MA's), (9, 50832), (10, 50931), (12, 50997), (13, 51033), (17, 51105), (21, 51231), (24, 51291), (25, 51300), (31, 51360), (33, 51378),

Gene: Melpomini\_94 Start: 48216, Stop: 48905, Start Num: 4

Candidate Starts for Melpomini\_94:

(Start: 4 @48216 has 17 MA's), (Start: 7 @48252 has 1 MA's), (9, 48330), (10, 48429), (12, 48495), (13, 48531), (21, 48729), (24, 48789), (25, 48798), (31, 48858), (33, 48876),

Gene: Napoleon13\_96 Start: 48654, Stop: 49343, Start Num: 4

Candidate Starts for Napoleon13\_96:

(Start: 4 @48654 has 17 MA's), (Start: 7 @48690 has 1 MA's), (9, 48768), (10, 48867), (12, 48933), (13, 48969), (21, 49167), (24, 49227), (25, 49236), (31, 49296), (33, 49314),

Gene: QBert\_94 Start: 50142, Stop: 50843, Start Num: 6

Candidate Starts for QBert\_94:

(Start: 6 @50142 has 3 MA's), (10, 50367), (14, 50517), (19, 50616), (21, 50667), (24, 50727), (25, 50736), (30, 50793), (31, 50796), (33, 50814),

Gene: RedWattleHog\_16 Start: 20074, Stop: 20742, Start Num: 5

Candidate Starts for RedWattleHog\_16:

(1, 19705), (2, 19726), (3, 20044), (Start: 5 @20074 has 1 MA's), (8, 20170), (10, 20284), (11, 20287), (13, 20386), (14, 20434), (15, 20437), (18, 20473), (20, 20560), (22, 20584), (23, 20596), (26, 20650), (27, 20656), (28, 20677), (32, 20707),

Gene: Shelob\_102 Start: 51853, Stop: 52551, Start Num: 6

Candidate Starts for Shelob\_102:

(Start: 6 @51853 has 3 MA's), (10, 52078), (14, 52228), (19, 52327), (21, 52378), (24, 52438), (25, 52447), (29, 52489), (30, 52504), (31, 52507), (33, 52525), (34, 52543),

Gene: Stubby\_93 Start: 49286, Stop: 49975, Start Num: 4

Candidate Starts for Stubby\_93:

(Start: 4 @49286 has 17 MA's), (Start: 7 @49322 has 1 MA's), (9, 49400), (10, 49499), (12, 49565), (13, 49601), (21, 49799), (24, 49859), (25, 49868), (31, 49928), (33, 49946),

Gene: TinyTim\_100 Start: 50843, Stop: 51532, Start Num: 4

Candidate Starts for TinyTim\_100:

(Start: 4 @50843 has 17 MA's), (Start: 7 @50879 has 1 MA's), (9, 50957), (10, 51056), (12, 51122), (13, 51158), (21, 51356), (24, 51416), (25, 51425), (29, 51467), (31, 51485), (33, 51503),

Gene: Yucca\_100 Start: 50762, Stop: 51451, Start Num: 4

Candidate Starts for Yucca\_100:

(Start: 4 @50762 has 17 MA's), (Start: 7 @50798 has 1 MA's), (9, 50876), (10, 50975), (12, 51041), (13, 51077), (21, 51275), (25, 51344), (30, 51401), (31, 51404), (33, 51422),

