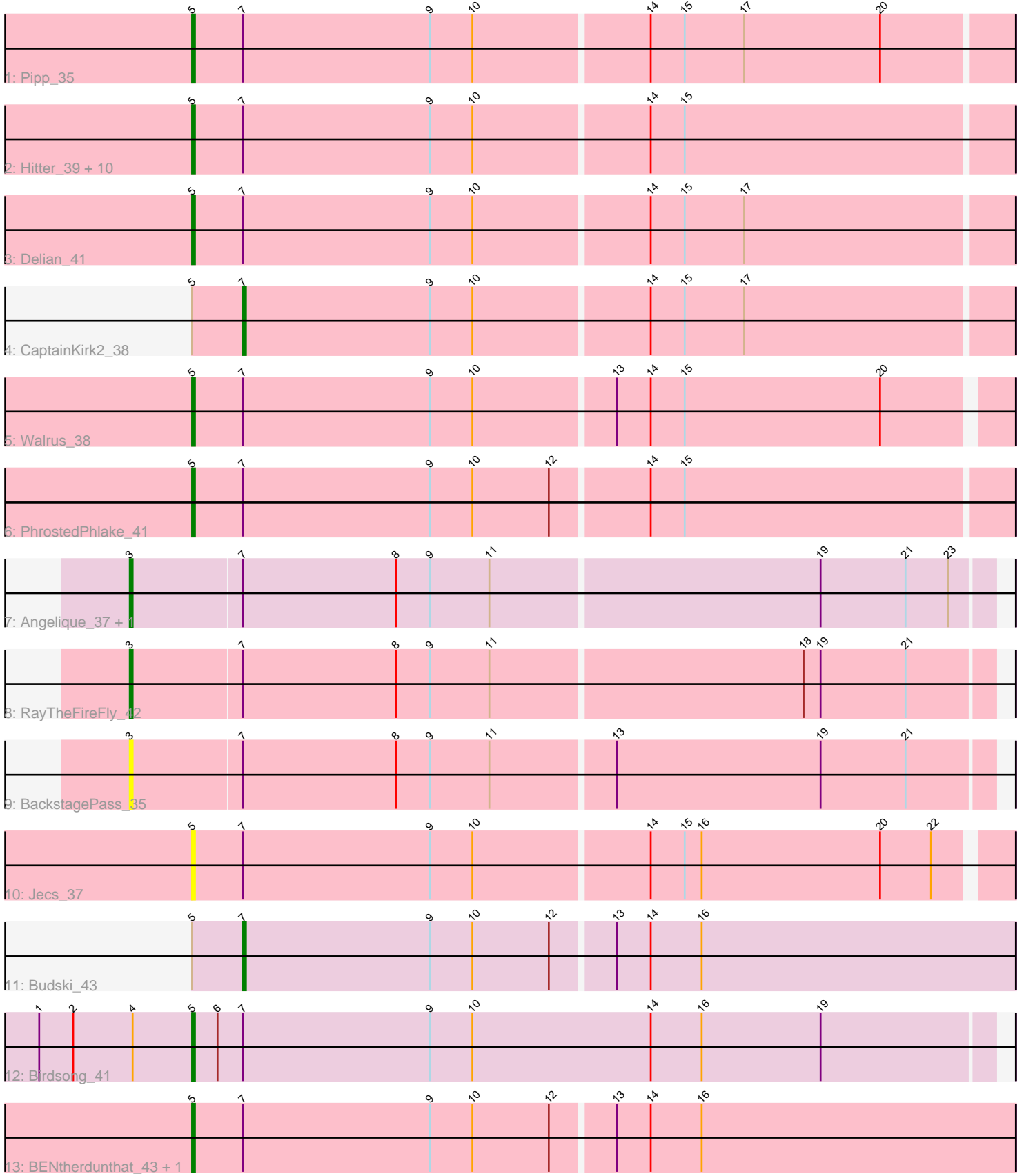


Pham 311959



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 311959 Report

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

Pham number 311959 has 25 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Pipp\_35
- Track 2 : Hitter\_39, BlingBling\_35, Archis\_41, MintFen\_38, Guacamole\_36, Mellie\_35, UmaThurman\_33, JasperJr\_36, Zarbodnamra\_37, Melba\_37, Obliviate\_34
- Track 3 : Delian\_41
- Track 4 : CaptainKirk2\_38
- Track 5 : Walrus\_38
- Track 6 : PhrostedPhlake\_41
- Track 7 : Angelique\_37, Eyre\_33
- Track 8 : RayTheFireFly\_42
- Track 9 : BackstagePass\_35
- Track 10 : Jecs\_37
- Track 11 : Budski\_43
- Track 12 : Birdsong\_41
- Track 13 : BENtherdunthat\_43, Whitney\_46

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

The start number called the most often in the published annotations is 5, it was called in 18 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Archis\_41, BENtherdunthat\_43, Birdsong\_41, BlingBling\_35, Delian\_41, Guacamole\_36, Hitter\_39, JasperJr\_36, Jecs\_37, Melba\_37, Mellie\_35, MintFen\_38, Obliviate\_34, PhrostedPhlake\_41, Pipp\_35, UmaThurman\_33, Walrus\_38, Whitney\_46, Zarbodnamra\_37,

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

- Budski\_43, CaptainKirk2\_38,

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

- Angelique\_37, BackstagePass\_35, Eyre\_33, RayTheFireFly\_42,

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

#### Start 3:

- Found in 4 of 25 ( 16.0% ) of genes in pham
- Manual Annotations of this start: 3 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angelique\_37 (CY1), BackstagePass\_35 (DB), Eyre\_33 (singleton), RayTheFireFly\_42 (DB),

#### Start 5:

- Found in 21 of 25 ( 84.0% ) of genes in pham
- Manual Annotations of this start: 18 of 23
- Called 90.5% of time when present
- Phage (with cluster) where this start called: Archis\_41 (CV), BENtherdunthat\_43 (DN1), Birdsong\_41 (DN), BlingBling\_35 (CV), Delian\_41 (CV), Guacamole\_36 (CV), Hitter\_39 (CV), JasperJr\_36 (CV), Jecs\_37 (DB), Melba\_37 (CV), Mellie\_35 (CV), MintFen\_38 (CV), Obliviate\_34 (CV), PhrostedPhlake\_41 (CV), Pipp\_35 (CV), UmaThurman\_33 (CV), Walrus\_38 (CV), Whitney\_46 (DN1), Zarbodnamra\_37 (CV),

#### Start 7:

- Found in 25 of 25 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 2 of 23
- Called 8.0% of time when present
- Phage (with cluster) where this start called: Budski\_43 (DN), CaptainKirk2\_38 (CV),

### **Summary by clusters:**

There are 6 clusters represented in this pham: DN, CY1, DB, singleton, DN1, CV,

Info for manual annotations of cluster CV:

- Start number 5 was manually annotated 15 times for cluster CV.
- Start number 7 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CY1:

- Start number 3 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster DB:

- Start number 3 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster DN:

- Start number 5 was manually annotated 1 time for cluster DN.
- Start number 7 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 5 was manually annotated 2 times for cluster DN1.

### **Gene Information:**

Gene: Angelique\_37 Start: 29682, Stop: 29981, Start Num: 3

Candidate Starts for Angelique\_37:

(Start: 3 @29682 has 3 MA's), (Start: 7 @29721 has 2 MA's), (8, 29775), (9, 29787), (11, 29808), (19, 29922), (21, 29952), (23, 29967),

Gene: Archis\_41 Start: 30629, Stop: 30913, Start Num: 5

Candidate Starts for Archis\_41:

(Start: 5 @30629 has 18 MA's), (Start: 7 @30647 has 2 MA's), (9, 30713), (10, 30728), (14, 30788), (15, 30800),

Gene: BENtherdunthat\_43 Start: 29876, Stop: 30163, Start Num: 5

Candidate Starts for BENtherdunthat\_43:

(Start: 5 @29876 has 18 MA's), (Start: 7 @29894 has 2 MA's), (9, 29960), (10, 29975), (12, 30002), (13, 30023), (14, 30035), (16, 30053),

Gene: BackstagePass\_35 Start: 28621, Stop: 28920, Start Num: 3

Candidate Starts for BackstagePass\_35:

(Start: 3 @28621 has 3 MA's), (Start: 7 @28660 has 2 MA's), (8, 28714), (9, 28726), (11, 28747), (13, 28789), (19, 28861), (21, 28891),

Gene: Birdsong\_41 Start: 30671, Stop: 30952, Start Num: 5

Candidate Starts for Birdsong\_41:

(1, 30617), (2, 30629), (4, 30650), (Start: 5 @30671 has 18 MA's), (6, 30680), (Start: 7 @30689 has 2 MA's), (9, 30755), (10, 30770), (14, 30833), (16, 30851), (19, 30893),

Gene: BlingBling\_35 Start: 30643, Stop: 30927, Start Num: 5

Candidate Starts for BlingBling\_35:

(Start: 5 @30643 has 18 MA's), (Start: 7 @30661 has 2 MA's), (9, 30727), (10, 30742), (14, 30802), (15, 30814),

Gene: Budski\_43 Start: 31639, Stop: 31908, Start Num: 7

Candidate Starts for Budski\_43:

(Start: 5 @31621 has 18 MA's), (Start: 7 @31639 has 2 MA's), (9, 31705), (10, 31720), (12, 31747), (13, 31768), (14, 31780), (16, 31798),

Gene: CaptainKirk2\_38 Start: 29946, Stop: 30212, Start Num: 7

Candidate Starts for CaptainKirk2\_38:

(Start: 5 @29928 has 18 MA's), (Start: 7 @29946 has 2 MA's), (9, 30012), (10, 30027), (14, 30087), (15, 30099), (17, 30120),

Gene: Delian\_41 Start: 29926, Stop: 30210, Start Num: 5

Candidate Starts for Delian\_41:

(Start: 5 @29926 has 18 MA's), (Start: 7 @29944 has 2 MA's), (9, 30010), (10, 30025), (14, 30085), (15, 30097), (17, 30118),

Gene: Eyre\_33 Start: 25567, Stop: 25866, Start Num: 3

Candidate Starts for Eyre\_33:

(Start: 3 @25567 has 3 MA's), (Start: 7 @25606 has 2 MA's), (8, 25660), (9, 25672), (11, 25693), (19, 25807), (21, 25837), (23, 25852),

Gene: Guacamole\_36 Start: 30491, Stop: 30778, Start Num: 5

Candidate Starts for Guacamole\_36:

(Start: 5 @30491 has 18 MA's), (Start: 7 @30509 has 2 MA's), (9, 30575), (10, 30590), (14, 30650), (15, 30662),

Gene: Hitter\_39 Start: 30225, Stop: 30509, Start Num: 5

Candidate Starts for Hitter\_39:

(Start: 5 @30225 has 18 MA's), (Start: 7 @30243 has 2 MA's), (9, 30309), (10, 30324), (14, 30384), (15, 30396),

Gene: JasperJr\_36 Start: 30491, Stop: 30778, Start Num: 5

Candidate Starts for JasperJr\_36:

(Start: 5 @30491 has 18 MA's), (Start: 7 @30509 has 2 MA's), (9, 30575), (10, 30590), (14, 30650), (15, 30662),

Gene: Jecs\_37 Start: 29101, Stop: 29382, Start Num: 5

Candidate Starts for Jecs\_37:

(Start: 5 @29101 has 18 MA's), (Start: 7 @29119 has 2 MA's), (9, 29185), (10, 29200), (14, 29260), (15, 29272), (16, 29278), (20, 29341), (22, 29359),

Gene: Melba\_37 Start: 30468, Stop: 30752, Start Num: 5

Candidate Starts for Melba\_37:

(Start: 5 @30468 has 18 MA's), (Start: 7 @30486 has 2 MA's), (9, 30552), (10, 30567), (14, 30627), (15, 30639),

Gene: Mellie\_35 Start: 28739, Stop: 29026, Start Num: 5

Candidate Starts for Mellie\_35:

(Start: 5 @28739 has 18 MA's), (Start: 7 @28757 has 2 MA's), (9, 28823), (10, 28838), (14, 28898), (15, 28910),

Gene: MintFen\_38 Start: 30542, Stop: 30826, Start Num: 5

Candidate Starts for MintFen\_38:

(Start: 5 @30542 has 18 MA's), (Start: 7 @30560 has 2 MA's), (9, 30626), (10, 30641), (14, 30701), (15, 30713),

Gene: Obliviate\_34 Start: 28915, Stop: 29199, Start Num: 5

Candidate Starts for Obliviate\_34:

(Start: 5 @28915 has 18 MA's), (Start: 7 @28933 has 2 MA's), (9, 28999), (10, 29014), (14, 29074), (15, 29086),

Gene: PhrostedPhlake\_41 Start: 30723, Stop: 31007, Start Num: 5

Candidate Starts for PhrostedPhlake\_41:

(Start: 5 @30723 has 18 MA's), (Start: 7 @30741 has 2 MA's), (9, 30807), (10, 30822), (12, 30849), (14, 30882), (15, 30894),

Gene: Pipp\_35 Start: 29262, Stop: 29546, Start Num: 5

Candidate Starts for Pipp\_35:

(Start: 5 @29262 has 18 MA's), (Start: 7 @29280 has 2 MA's), (9, 29346), (10, 29361), (14, 29421), (15, 29433), (17, 29454), (20, 29502),

Gene: RayTheFireFly\_42 Start: 30919, Stop: 31218, Start Num: 3

Candidate Starts for RayTheFireFly\_42:

(Start: 3 @30919 has 3 MA's), (Start: 7 @30958 has 2 MA's), (8, 31012), (9, 31024), (11, 31045), (18, 31153), (19, 31159), (21, 31189),

Gene: UmaThurman\_33 Start: 29524, Stop: 29805, Start Num: 5

Candidate Starts for UmaThurman\_33:

(Start: 5 @29524 has 18 MA's), (Start: 7 @29542 has 2 MA's), (9, 29608), (10, 29623), (14, 29683), (15, 29695),

Gene: Walrus\_38 Start: 30117, Stop: 30398, Start Num: 5

Candidate Starts for Walrus\_38:

(Start: 5 @30117 has 18 MA's), (Start: 7 @30135 has 2 MA's), (9, 30201), (10, 30216), (13, 30264), (14, 30276), (15, 30288), (20, 30357),

Gene: Whitney\_46 Start: 33651, Stop: 33938, Start Num: 5

Candidate Starts for Whitney\_46:

(Start: 5 @33651 has 18 MA's), (Start: 7 @33669 has 2 MA's), (9, 33735), (10, 33750), (12, 33777), (13, 33798), (14, 33810), (16, 33828),

Gene: Zarbodnamra\_37 Start: 29948, Stop: 30235, Start Num: 5

Candidate Starts for Zarbodnamra\_37:

(Start: 5 @29948 has 18 MA's), (Start: 7 @29966 has 2 MA's), (9, 30032), (10, 30047), (14, 30107), (15, 30119),