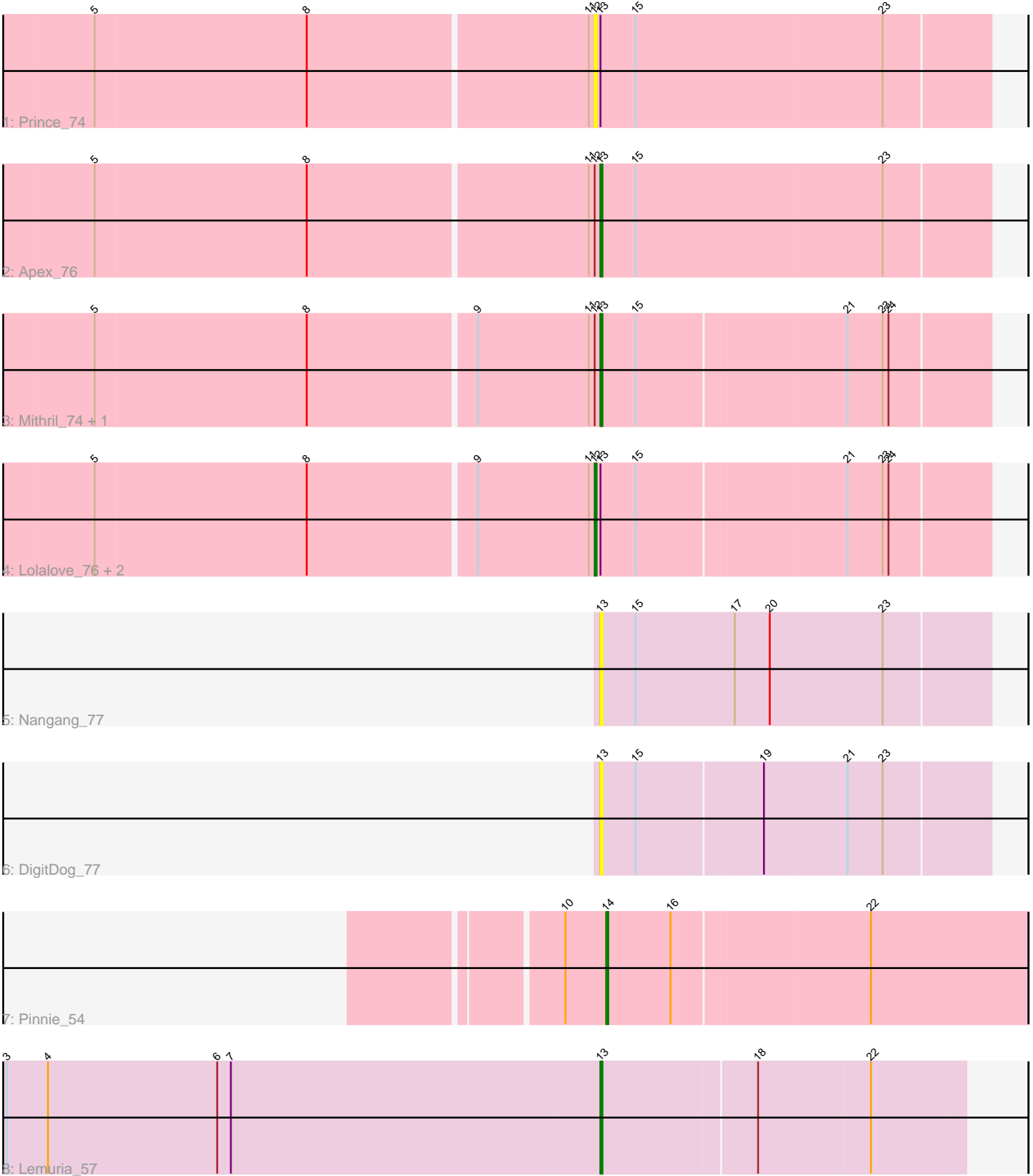


Zoomed Pham 87402



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 87402 Report

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

Pham number 87402 has 11 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Prince\_74
- Track 2 : Apex\_76
- Track 3 : Mithril\_74, VioletZ\_77
- Track 4 : Lolalove\_76, Hangman\_76, Magpie\_72
- Track 5 : Nangang\_77
- Track 6 : DigitDog\_77
- Track 7 : Pinnie\_54
- Track 8 : Lemuria\_57

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

The start number called the most often in the published annotations is 13, it was called in 4 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apex\_76, DigitDog\_77, Lemuria\_57, Mithril\_74, Nangang\_77, VioletZ\_77,

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

- Hangman\_76, Lolalove\_76, Magpie\_72, Prince\_74,

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

- Pinnie\_54,

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

Start 12:

- Found in 7 of 11 ( 63.6% ) of genes in pham
- Manual Annotations of this start: 3 of 8
- Called 57.1% of time when present
- Phage (with cluster) where this start called: Hangman\_76 (B4), Lolalove\_76 (B4), Magpie\_72 (B4), Prince\_74 (B4),

Start 13:

- Found in 10 of 11 ( 90.9% ) of genes in pham

- Manual Annotations of this start: 4 of 8
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Apex\_76 (B4), DigitDog\_77 (B5), Lemuria\_57 (G4), Mithril\_74 (B4), Nangang\_77 (B5), VioletZ\_77 (B4),

Start 14:

- Found in 1 of 11 ( 9.1% ) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pinnie\_54 (G3),

### **Summary by clusters:**

There are 4 clusters represented in this pham: B4, B5, G4, G3,

Info for manual annotations of cluster B4:

- Start number 12 was manually annotated 3 times for cluster B4.
- Start number 13 was manually annotated 3 times for cluster B4.

Info for manual annotations of cluster G3:

- Start number 14 was manually annotated 1 time for cluster G3.

Info for manual annotations of cluster G4:

- Start number 13 was manually annotated 1 time for cluster G4.

### **Gene Information:**

Gene: Apex\_76 Start: 63097, Stop: 62900, Start Num: 13

Candidate Starts for Apex\_76:

(2, 63412), (5, 63352), (8, 63244), (11, 63103), (Start: 12 @63100 has 3 MA's), (Start: 13 @63097 has 4 MA's), (15, 63079), (23, 62953),

Gene: DigitDog\_77 Start: 62058, Stop: 61864, Start Num: 13

Candidate Starts for DigitDog\_77:

(Start: 13 @62058 has 4 MA's), (15, 62040), (19, 61977), (21, 61935), (23, 61917),

Gene: Hangman\_76 Start: 63311, Stop: 63114, Start Num: 12

Candidate Starts for Hangman\_76:

(2, 63623), (5, 63563), (8, 63455), (9, 63371), (11, 63314), (Start: 12 @63311 has 3 MA's), (Start: 13 @63308 has 4 MA's), (15, 63290), (21, 63185), (23, 63167), (24, 63164),

Gene: Lemuria\_57 Start: 40959, Stop: 41141, Start Num: 13

Candidate Starts for Lemuria\_57:

(1, 40545), (3, 40656), (4, 40677), (6, 40764), (7, 40770), (Start: 13 @40959 has 4 MA's), (18, 41037), (22, 41094),

Gene: Lolalove\_76 Start: 62897, Stop: 62700, Start Num: 12

Candidate Starts for Lolalove\_76:

(2, 63209), (5, 63149), (8, 63041), (9, 62957), (11, 62900), (Start: 12 @62897 has 3 MA's), (Start: 13 @62894 has 4 MA's), (15, 62876), (21, 62771), (23, 62753), (24, 62750),

Gene: Magpie\_72 Start: 62509, Stop: 62312, Start Num: 12

Candidate Starts for Magpie\_72:

(2, 62821), (5, 62761), (8, 62653), (9, 62569), (11, 62512), (Start: 12 @62509 has 3 MA's), (Start: 13 @62506 has 4 MA's), (15, 62488), (21, 62383), (23, 62365), (24, 62362),

Gene: Mithril\_74 Start: 62893, Stop: 62699, Start Num: 13

Candidate Starts for Mithril\_74:

(2, 63208), (5, 63148), (8, 63040), (9, 62956), (11, 62899), (Start: 12 @62896 has 3 MA's), (Start: 13 @62893 has 4 MA's), (15, 62875), (21, 62770), (23, 62752), (24, 62749),

Gene: Nangang\_77 Start: 62329, Stop: 62132, Start Num: 13

Candidate Starts for Nangang\_77:

(Start: 13 @62329 has 4 MA's), (15, 62311), (17, 62260), (20, 62242), (23, 62185),

Gene: Pinnie\_54 Start: 40084, Stop: 40296, Start Num: 14

Candidate Starts for Pinnie\_54:

(10, 40063), (Start: 14 @40084 has 1 MA's), (16, 40117), (22, 40216),

Gene: Prince\_74 Start: 63003, Stop: 62803, Start Num: 12

Candidate Starts for Prince\_74:

(2, 63315), (5, 63255), (8, 63147), (11, 63006), (Start: 12 @63003 has 3 MA's), (Start: 13 @63000 has 4 MA's), (15, 62982), (23, 62856),

Gene: VioletZ\_77 Start: 63096, Stop: 62902, Start Num: 13

Candidate Starts for VioletZ\_77:

(2, 63411), (5, 63351), (8, 63243), (9, 63159), (11, 63102), (Start: 12 @63099 has 3 MA's), (Start: 13 @63096 has 4 MA's), (15, 63078), (21, 62973), (23, 62955), (24, 62952),