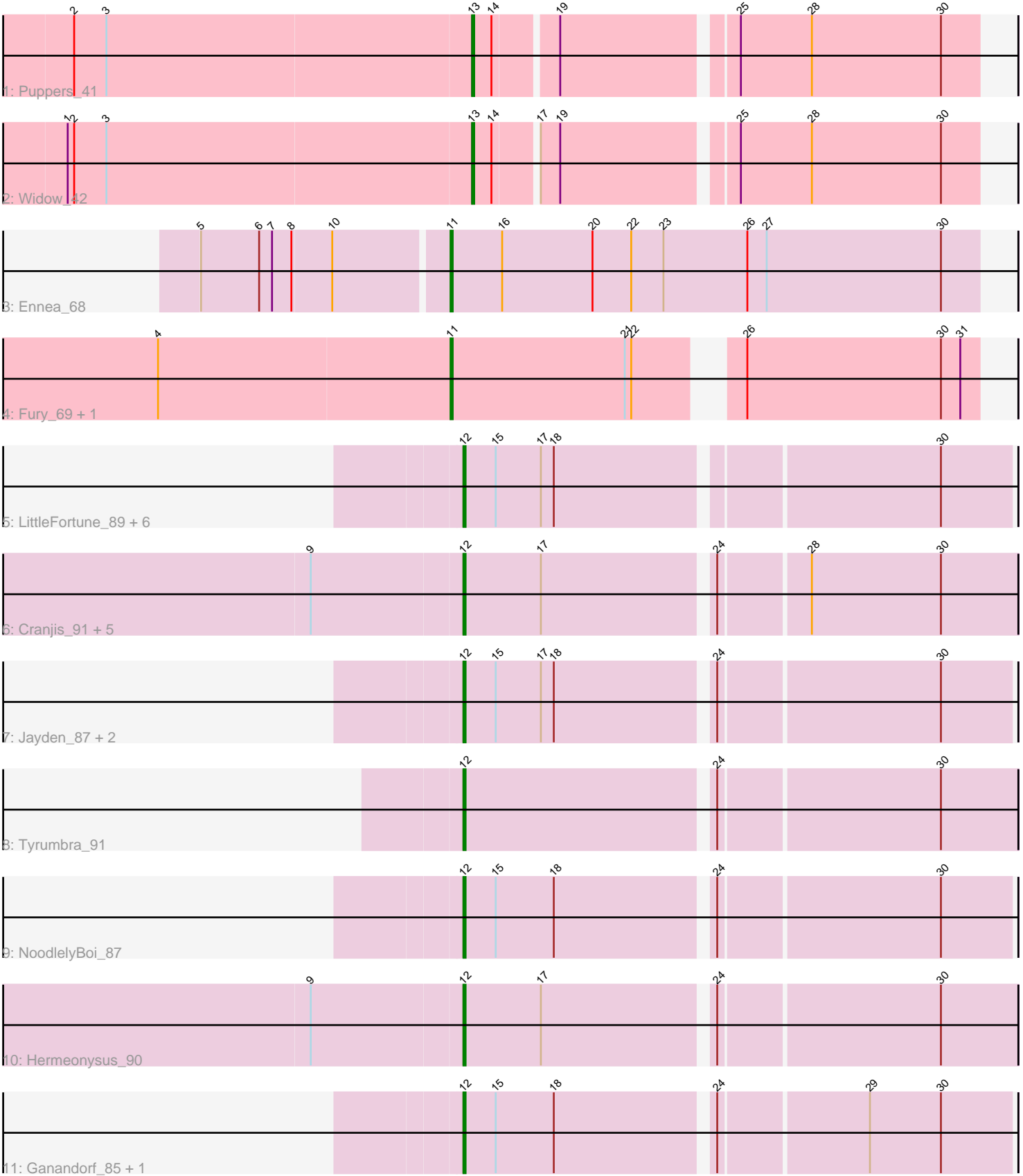


Pham 3670



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 3670 Report

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

Pham number 3670 has 26 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Puppies\_41
- Track 2 : Widow\_42
- Track 3 : Ennea\_68
- Track 4 : Fury\_69, Pleakley\_69
- Track 5 : LittleFortune\_89, Phrancesco\_88, PierreOrion\_87, Yeti\_87, Piperis\_88, Busephilis\_86, Selwyn23\_88
- Track 6 : Cranjis\_91, Kowalski\_90, Onika\_90, Ramiel05\_90, Scumberland\_92, BrazzalePHS\_90
- Track 7 : Jayden\_87, Teamocil\_92, Gina\_92
- Track 8 : Tyumbra\_91
- Track 9 : NoodlelyBoi\_87
- Track 10 : Hermeonysus\_90
- Track 11 : Ganandorf\_85, Antares\_88

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

The start number called the most often in the published annotations is 12, it was called in 18 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antares\_88, BrazzalePHS\_90, Busephilis\_86, Cranjis\_91, Ganandorf\_85, Gina\_92, Hermeonysus\_90, Jayden\_87, Kowalski\_90, LittleFortune\_89, NoodlelyBoi\_87, Onika\_90, Phrancesco\_88, PierreOrion\_87, Piperis\_88, Ramiel05\_90, Scumberland\_92, Selwyn23\_88, Teamocil\_92, Tyumbra\_91, Yeti\_87,

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

- 

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

- Ennea\_68, Fury\_69, Pleakley\_69, Puppies\_41, Widow\_42,

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

Start 11:

- Found in 3 of 26 ( 11.5% ) 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: Ennea\_68 (CR3), Fury\_69 (CR5), Pleakley\_69 (CR5),

Start 12:

- Found in 21 of 26 ( 80.8% ) of genes in pham
- Manual Annotations of this start: 18 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antares\_88 (EC), BrazzalePHS\_90 (EC), Busephilis\_86 (EC), Cranjis\_91 (EC), Ganandorf\_85 (EC), Gina\_92 (EC), Hermeonysus\_90 (EC), Jayden\_87 (EC), Kowalski\_90 (EC), LittleFortune\_89 (EC), NoodlelyBoi\_87 (EC), Onika\_90 (EC), Phrancesco\_88 (EC), PierreOrion\_87 (EC), Piperis\_88 (EC), Ramiel05\_90 (EC), Scumberland\_92 (EC), Selwyn23\_88 (EC), Teamocil\_92 (EC), Tyrumbra\_91 (EC), Yeti\_87 (EC),

Start 13:

- Found in 2 of 26 ( 7.7% ) of genes in pham
- Manual Annotations of this start: 2 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Puppies\_41 (CD), Widow\_42 (CD),

### **Summary by clusters:**

There are 4 clusters represented in this pham: CR3, CR5, EC, CD,

Info for manual annotations of cluster CD:

- Start number 13 was manually annotated 2 times for cluster CD.

Info for manual annotations of cluster CR3:

- Start number 11 was manually annotated 1 time for cluster CR3.

Info for manual annotations of cluster CR5:

- Start number 11 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster EC:

- Start number 12 was manually annotated 18 times for cluster EC.

### **Gene Information:**

Gene: Antares\_88 Start: 52167, Stop: 52409, Start Num: 12

Candidate Starts for Antares\_88:

(Start: 12 @52167 has 18 MA's), (15, 52182), (18, 52209), (24, 52278), (29, 52344), (30, 52377),

Gene: BrazzalePHS\_90 Start: 52972, Stop: 53217, Start Num: 12

Candidate Starts for BrazzalePHS\_90:

(9, 52903), (Start: 12 @52972 has 18 MA's), (17, 53008), (24, 53083), (28, 53122), (30, 53182),

Gene: Busephilis\_86 Start: 51654, Stop: 51896, Start Num: 12

Candidate Starts for Busephilis\_86:

(Start: 12 @51654 has 18 MA's), (15, 51669), (17, 51690), (18, 51696), (30, 51864),

Gene: Cranjis\_91 Start: 52939, Stop: 53184, Start Num: 12

Candidate Starts for Cranjis\_91:

(9, 52870), (Start: 12 @52939 has 18 MA's), (17, 52975), (24, 53050), (28, 53089), (30, 53149),

Gene: Ennea\_68 Start: 50419, Stop: 50174, Start Num: 11

Candidate Starts for Ennea\_68:

(5, 50530), (6, 50503), (7, 50497), (8, 50488), (10, 50470), (Start: 11 @50419 has 3 MA's), (16, 50395), (20, 50353), (22, 50335), (23, 50320), (26, 50281), (27, 50272), (30, 50191),

Gene: Fury\_69 Start: 48458, Stop: 48231, Start Num: 11

Candidate Starts for Fury\_69:

(4, 48593), (Start: 11 @48458 has 3 MA's), (21, 48377), (22, 48374), (26, 48338), (30, 48248), (31, 48239),

Gene: Ganandorf\_85 Start: 51298, Stop: 51540, Start Num: 12

Candidate Starts for Ganandorf\_85:

(Start: 12 @51298 has 18 MA's), (15, 51313), (18, 51340), (24, 51409), (29, 51475), (30, 51508),

Gene: Gina\_92 Start: 51829, Stop: 52071, Start Num: 12

Candidate Starts for Gina\_92:

(Start: 12 @51829 has 18 MA's), (15, 51844), (17, 51865), (18, 51871), (24, 51940), (30, 52039),

Gene: Hermeonysus\_90 Start: 52660, Stop: 52905, Start Num: 12

Candidate Starts for Hermeonysus\_90:

(9, 52591), (Start: 12 @52660 has 18 MA's), (17, 52696), (24, 52771), (30, 52870),

Gene: Jayden\_87 Start: 51437, Stop: 51679, Start Num: 12

Candidate Starts for Jayden\_87:

(Start: 12 @51437 has 18 MA's), (15, 51452), (17, 51473), (18, 51479), (24, 51548), (30, 51647),

Gene: Kowalski\_90 Start: 52967, Stop: 53212, Start Num: 12

Candidate Starts for Kowalski\_90:

(9, 52898), (Start: 12 @52967 has 18 MA's), (17, 53003), (24, 53078), (28, 53117), (30, 53177),

Gene: LittleFortune\_89 Start: 51945, Stop: 52187, Start Num: 12

Candidate Starts for LittleFortune\_89:

(Start: 12 @51945 has 18 MA's), (15, 51960), (17, 51981), (18, 51987), (30, 52155),

Gene: NoodlelyBoi\_87 Start: 52078, Stop: 52320, Start Num: 12

Candidate Starts for NoodlelyBoi\_87:

(Start: 12 @52078 has 18 MA's), (15, 52093), (18, 52120), (24, 52189), (30, 52288),

Gene: Onika\_90 Start: 52938, Stop: 53183, Start Num: 12

Candidate Starts for Onika\_90:

(9, 52869), (Start: 12 @52938 has 18 MA's), (17, 52974), (24, 53049), (28, 53088), (30, 53148),

Gene: Phrancesco\_88 Start: 52060, Stop: 52302, Start Num: 12

Candidate Starts for Phrancesco\_88:

(Start: 12 @52060 has 18 MA's), (15, 52075), (17, 52096), (18, 52102), (30, 52270),

Gene: PierreOrion\_87 Start: 51769, Stop: 52011, Start Num: 12

Candidate Starts for PierreOrion\_87:

(Start: 12 @51769 has 18 MA's), (15, 51784), (17, 51805), (18, 51811), (30, 51979),

Gene: Piperis\_88 Start: 51648, Stop: 51890, Start Num: 12

Candidate Starts for Piperis\_88:

(Start: 12 @51648 has 18 MA's), (15, 51663), (17, 51684), (18, 51690), (30, 51858),

Gene: Pleakley\_69 Start: 48459, Stop: 48232, Start Num: 11

Candidate Starts for Pleakley\_69:

(4, 48594), (Start: 11 @48459 has 3 MA's), (21, 48378), (22, 48375), (26, 48339), (30, 48249), (31, 48240),

Gene: Puppies\_41 Start: 32251, Stop: 32030, Start Num: 13

Candidate Starts for Puppies\_41:

(2, 32434), (3, 32419), (Start: 13 @32251 has 2 MA's), (14, 32242), (19, 32215), (25, 32140), (28, 32107), (30, 32047),

Gene: Ramiel05\_90 Start: 52967, Stop: 53212, Start Num: 12

Candidate Starts for Ramiel05\_90:

(9, 52898), (Start: 12 @52967 has 18 MA's), (17, 53003), (24, 53078), (28, 53117), (30, 53177),

Gene: Scumberland\_92 Start: 52993, Stop: 53238, Start Num: 12

Candidate Starts for Scumberland\_92:

(9, 52924), (Start: 12 @52993 has 18 MA's), (17, 53029), (24, 53104), (28, 53143), (30, 53203),

Gene: Selwyn23\_88 Start: 51873, Stop: 52115, Start Num: 12

Candidate Starts for Selwyn23\_88:

(Start: 12 @51873 has 18 MA's), (15, 51888), (17, 51909), (18, 51915), (30, 52083),

Gene: Teamocil\_92 Start: 51922, Stop: 52164, Start Num: 12

Candidate Starts for Teamocil\_92:

(Start: 12 @51922 has 18 MA's), (15, 51937), (17, 51958), (18, 51964), (24, 52033), (30, 52132),

Gene: Tyumbra\_91 Start: 53692, Stop: 53937, Start Num: 12

Candidate Starts for Tyumbra\_91:

(Start: 12 @53692 has 18 MA's), (24, 53803), (30, 53902),

Gene: Widow\_42 Start: 32976, Stop: 32755, Start Num: 13

Candidate Starts for Widow\_42:

(1, 33162), (2, 33159), (3, 33144), (Start: 13 @32976 has 2 MA's), (14, 32967), (17, 32949), (19, 32940), (25, 32865), (28, 32832), (30, 32772),

Gene: Yeti\_87 Start: 51490, Stop: 51732, Start Num: 12

Candidate Starts for Yeti\_87:

(Start: 12 @51490 has 18 MA's), (15, 51505), (17, 51526), (18, 51532), (30, 51700),