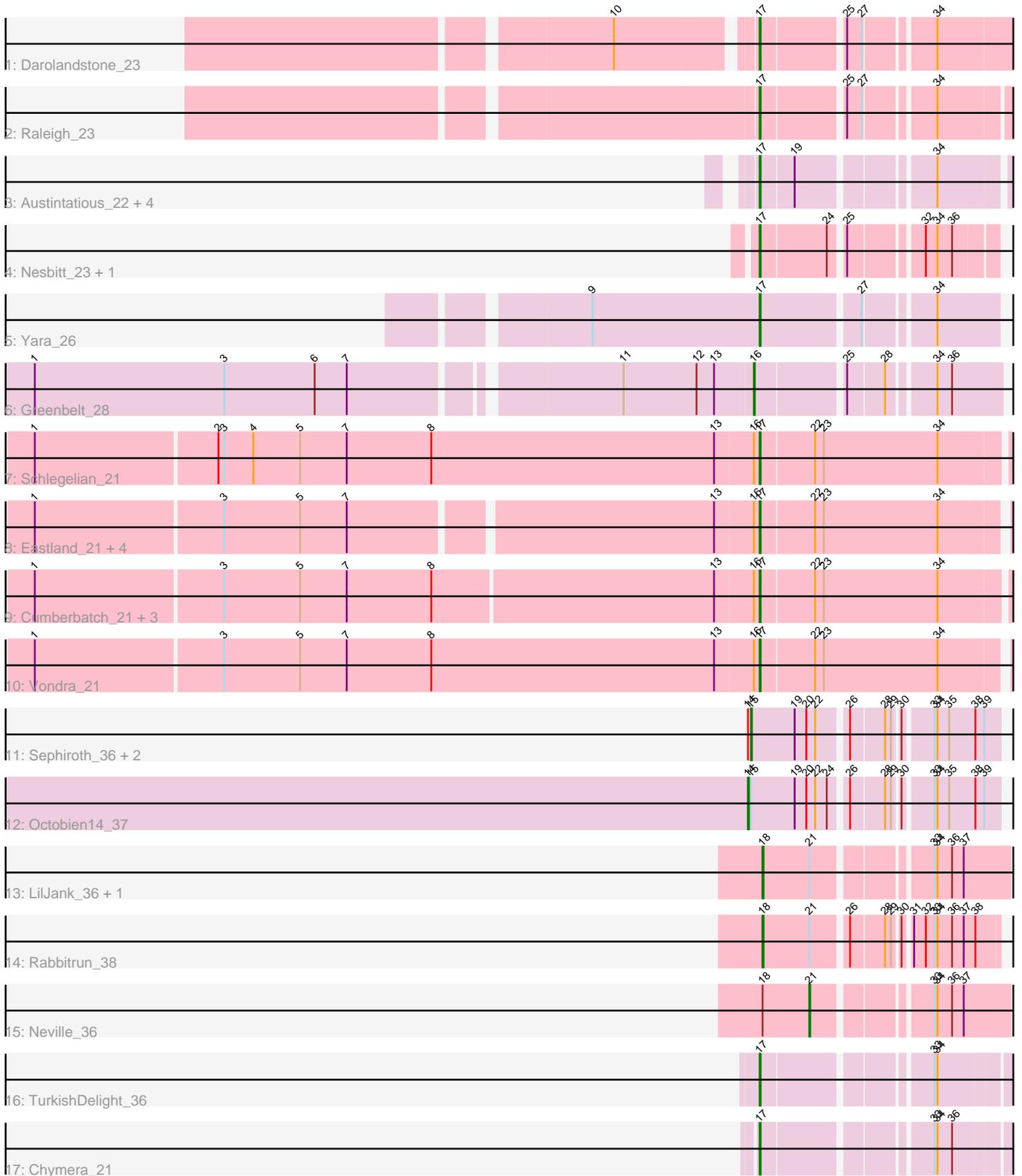


# Pham 291390



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 291390 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291390 has 32 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Darolandstone\_23
- Track 2 : Raleigh\_23
- Track 3 : Austintatious\_22, Bioscum\_22, Ididsumtinwong\_22, PapayaSalad\_22, Lishka\_22
- Track 4 : Nesbitt\_23, AbbeyMikolon\_23
- Track 5 : Yara\_26
- Track 6 : Greenbelt\_28
- Track 7 : Schlegelian\_21
- Track 8 : Eastland\_21, AxeJC\_21, Eklok\_21, Piccadilly\_21, FrumpyGal\_21
- Track 9 : Cumberbatch\_21, ArizonaGT\_21, HFrancette\_21, Ignacio\_21
- Track 10 : Vondra\_21
- Track 11 : Sephiroth\_36, Syleon\_36, Kundefre\_35
- Track 12 : Octobien14\_37
- Track 13 : LilJank\_36, Trax\_36
- Track 14 : Rabbitrun\_38
- Track 15 : Neville\_36
- Track 16 : TurkishDelight\_36
- Track 17 : Chymera\_21

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

The start number called the most often in the published annotations is 17, it was called in 23 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbeyMikolon\_23, ArizonaGT\_21, Austintatious\_22, AxeJC\_21, Bioscum\_22, Chymera\_21, Cumberbatch\_21, Darolandstone\_23, Eastland\_21, Eklok\_21, FrumpyGal\_21, HFrancette\_21, Ididsumtinwong\_22, Ignacio\_21, Lishka\_22, Nesbitt\_23, PapayaSalad\_22, Piccadilly\_21, Raleigh\_23, Schlegelian\_21, TurkishDelight\_36, Vondra\_21, Yara\_26,

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

-

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

- Greenbelt\_28, Kudrefre\_35, LilJank\_36, Neville\_36, Octobien14\_37, Rabbitrun\_38, Sephiroth\_36, Syleon\_36, Trax\_36,

### Summary by start number:

Start 14:

- Found in 4 of 32 ( 12.5% ) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Octobien14\_37 (DU1),

Start 15:

- Found in 4 of 32 ( 12.5% ) of genes in pham
- Manual Annotations of this start: 3 of 31
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Kudrefre\_35 (DU1), Sephiroth\_36 (DU1), Syleon\_36 (DU1),

Start 16:

- Found in 12 of 32 ( 37.5% ) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Greenbelt\_28 (BN),

Start 17:

- Found in 23 of 32 ( 71.9% ) of genes in pham
- Manual Annotations of this start: 23 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbeyMikolon\_23 (BL), ArizonaGT\_21 (BP), Austintatious\_22 (BC3), AxeJC\_21 (BP), Bioscum\_22 (BC3), Chymera\_21 (singleton), Cumberbatch\_21 (BP), Darolandstone\_23 (BC2), Eastland\_21 (BP), Eklok\_21 (BP), FrumpyGal\_21 (BP), HFrancette\_21 (BP), Ididsumtinwong\_22 (BC3), Ignacio\_21 (BP), Lishka\_22 (BC3), Nesbitt\_23 (BL), PapayaSalad\_22 (BC3), Piccadilly\_21 (BP), Raleigh\_23 (BC2), Schlegelian\_21 (BP), TurkishDelight\_36 (singleton), Vondra\_21 (BP), Yara\_26 (BN),

Start 18:

- Found in 4 of 32 ( 12.5% ) of genes in pham
- Manual Annotations of this start: 2 of 31
- Called 75.0% of time when present
- Phage (with cluster) where this start called: LilJank\_36 (DU2), Rabbitrun\_38 (DU2), Trax\_36 (DU2),

Start 21:

- Found in 4 of 32 ( 12.5% ) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Neville\_36 (DU2),

### Summary by clusters:

There are 8 clusters represented in this pham: singleton, BL, BN, BP, DU1, DU2, BC2, BC3,

Info for manual annotations of cluster BC2:

- Start number 17 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 17 was manually annotated 5 times for cluster BC3.

Info for manual annotations of cluster BL:

- Start number 17 was manually annotated 2 times for cluster BL.

Info for manual annotations of cluster BN:

- Start number 16 was manually annotated 1 time for cluster BN.
- Start number 17 was manually annotated 1 time for cluster BN.

Info for manual annotations of cluster BP:

- Start number 17 was manually annotated 11 times for cluster BP.

Info for manual annotations of cluster DU1:

- Start number 14 was manually annotated 1 time for cluster DU1.
- Start number 15 was manually annotated 3 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 18 was manually annotated 2 times for cluster DU2.
- Start number 21 was manually annotated 1 time for cluster DU2.

### ***Gene Information:***

Gene: AbbeyMikolon\_23 Start: 18386, Stop: 18598, Start Num: 17

Candidate Starts for AbbeyMikolon\_23:

(Start: 17 @18386 has 23 MA's), (24, 18452), (25, 18464), (32, 18530), (34, 18542), (36, 18557),

Gene: ArizonaGT\_21 Start: 17942, Stop: 18202, Start Num: 17

Candidate Starts for ArizonaGT\_21:

(1, 17210), (3, 17399), (5, 17477), (7, 17525), (8, 17612), (13, 17897), (Start: 16 @17936 has 1 MA's), (Start: 17 @17942 has 23 MA's), (22, 17996), (23, 18005), (34, 18122),

Gene: Austintatious\_22 Start: 17098, Stop: 17331, Start Num: 17

Candidate Starts for Austintatious\_22:

(Start: 17 @17098 has 23 MA's), (19, 17131), (34, 17254),

Gene: AxeJC\_21 Start: 17926, Stop: 18183, Start Num: 17

Candidate Starts for AxeJC\_21:

(1, 17209), (3, 17398), (5, 17476), (7, 17524), (13, 17881), (Start: 16 @17920 has 1 MA's), (Start: 17 @17926 has 23 MA's), (22, 17980), (23, 17989), (34, 18106),

Gene: Bioscum\_22 Start: 17134, Stop: 17367, Start Num: 17

Candidate Starts for Bioscum\_22:

(Start: 17 @17134 has 23 MA's), (19, 17167), (34, 17290),

Gene: Chymera\_21 Start: 17166, Stop: 17393, Start Num: 17  
Candidate Starts for Chymera\_21:  
(Start: 17 @17166 has 23 MA's), (33, 17319), (34, 17322), (36, 17337),

Gene: Cumberbatch\_21 Start: 17942, Stop: 18202, Start Num: 17  
Candidate Starts for Cumberbatch\_21:  
(1, 17210), (3, 17399), (5, 17477), (7, 17525), (8, 17612), (13, 17897), (Start: 16 @17936 has 1 MA's),  
(Start: 17 @17942 has 23 MA's), (22, 17996), (23, 18005), (34, 18122),

Gene: Darolandstone\_23 Start: 19517, Stop: 19762, Start Num: 17  
Candidate Starts for Darolandstone\_23:  
(10, 19388), (Start: 17 @19517 has 23 MA's), (25, 19595), (27, 19610), (34, 19673),

Gene: Eastland\_21 Start: 17911, Stop: 18168, Start Num: 17  
Candidate Starts for Eastland\_21:  
(1, 17194), (3, 17383), (5, 17461), (7, 17509), (13, 17866), (Start: 16 @17905 has 1 MA's), (Start: 17  
@17911 has 23 MA's), (22, 17965), (23, 17974), (34, 18091),

Gene: Eklok\_21 Start: 17926, Stop: 18183, Start Num: 17  
Candidate Starts for Eklok\_21:  
(1, 17209), (3, 17398), (5, 17476), (7, 17524), (13, 17881), (Start: 16 @17920 has 1 MA's), (Start: 17  
@17926 has 23 MA's), (22, 17980), (23, 17989), (34, 18106),

Gene: FrumpyGal\_21 Start: 17911, Stop: 18168, Start Num: 17  
Candidate Starts for FrumpyGal\_21:  
(1, 17194), (3, 17383), (5, 17461), (7, 17509), (13, 17866), (Start: 16 @17905 has 1 MA's), (Start: 17  
@17911 has 23 MA's), (22, 17965), (23, 17974), (34, 18091),

Gene: Greenbelt\_28 Start: 20069, Stop: 20296, Start Num: 16  
Candidate Starts for Greenbelt\_28:  
(1, 19364), (3, 19559), (6, 19652), (7, 19685), (11, 19937), (12, 20012), (13, 20030), (Start: 16 @20069  
has 1 MA's), (25, 20153), (28, 20189), (34, 20231), (36, 20246),

Gene: HFrancette\_21 Start: 17957, Stop: 18214, Start Num: 17  
Candidate Starts for HFrancette\_21:  
(1, 17225), (3, 17414), (5, 17492), (7, 17540), (8, 17627), (13, 17912), (Start: 16 @17951 has 1 MA's),  
(Start: 17 @17957 has 23 MA's), (22, 18011), (23, 18020), (34, 18137),

Gene: Ididsumtinwong\_22 Start: 17134, Stop: 17367, Start Num: 17  
Candidate Starts for Ididsumtinwong\_22:  
(Start: 17 @17134 has 23 MA's), (19, 17167), (34, 17290),

Gene: Ignacio\_21 Start: 17957, Stop: 18214, Start Num: 17  
Candidate Starts for Ignacio\_21:  
(1, 17225), (3, 17414), (5, 17492), (7, 17540), (8, 17627), (13, 17912), (Start: 16 @17951 has 1 MA's),  
(Start: 17 @17957 has 23 MA's), (22, 18011), (23, 18020), (34, 18137),

Gene: Kudrefre\_35 Start: 29727, Stop: 29957, Start Num: 15  
Candidate Starts for Kudrefre\_35:  
(Start: 14 @29724 has 1 MA's), (Start: 15 @29727 has 3 MA's), (19, 29772), (20, 29784), (22, 29793),  
(26, 29820), (28, 29853), (29, 29859), (30, 29865), (33, 29892), (34, 29895), (35, 29907), (38, 29934),  
(39, 29943),

Gene: LilJank\_36 Start: 31388, Stop: 31618, Start Num: 18

Candidate Starts for LilJank\_36:

(Start: 18 @31388 has 2 MA's), (Start: 21 @31436 has 1 MA's), (33, 31541), (34, 31544), (36, 31559), (37, 31571),

Gene: Lishka\_22 Start: 17098, Stop: 17331, Start Num: 17

Candidate Starts for Lishka\_22:

(Start: 17 @17098 has 23 MA's), (19, 17131), (34, 17254),

Gene: Nesbitt\_23 Start: 18458, Stop: 18670, Start Num: 17

Candidate Starts for Nesbitt\_23:

(Start: 17 @18458 has 23 MA's), (24, 18524), (25, 18536), (32, 18602), (34, 18614), (36, 18629),

Gene: Neville\_36 Start: 31076, Stop: 31258, Start Num: 21

Candidate Starts for Neville\_36:

(Start: 18 @31028 has 2 MA's), (Start: 21 @31076 has 1 MA's), (33, 31181), (34, 31184), (36, 31199), (37, 31211),

Gene: Octobien14\_37 Start: 30411, Stop: 30644, Start Num: 14

Candidate Starts for Octobien14\_37:

(Start: 14 @30411 has 1 MA's), (Start: 15 @30414 has 3 MA's), (19, 30459), (20, 30471), (22, 30480), (24, 30492), (26, 30507), (28, 30540), (29, 30546), (30, 30552), (33, 30579), (34, 30582), (35, 30594), (38, 30621), (39, 30630),

Gene: PapayaSalad\_22 Start: 17109, Stop: 17342, Start Num: 17

Candidate Starts for PapayaSalad\_22:

(Start: 17 @17109 has 23 MA's), (19, 17142), (34, 17265),

Gene: Piccadilly\_21 Start: 17910, Stop: 18167, Start Num: 17

Candidate Starts for Piccadilly\_21:

(1, 17193), (3, 17382), (5, 17460), (7, 17508), (13, 17865), (Start: 16 @17904 has 1 MA's), (Start: 17 @17910 has 23 MA's), (22, 17964), (23, 17973), (34, 18090),

Gene: Rabbitrun\_38 Start: 31471, Stop: 31689, Start Num: 18

Candidate Starts for Rabbitrun\_38:

(Start: 18 @31471 has 2 MA's), (Start: 21 @31519 has 1 MA's), (26, 31552), (28, 31585), (29, 31591), (30, 31597), (31, 31603), (32, 31615), (33, 31624), (34, 31627), (36, 31642), (37, 31654), (38, 31666),

Gene: Raleigh\_23 Start: 19748, Stop: 19987, Start Num: 17

Candidate Starts for Raleigh\_23:

(Start: 17 @19748 has 23 MA's), (25, 19826), (27, 19841), (34, 19904),

Gene: Schlegelian\_21 Start: 17946, Stop: 18206, Start Num: 17

Candidate Starts for Schlegelian\_21:

(1, 17208), (2, 17391), (3, 17397), (4, 17427), (5, 17475), (7, 17523), (8, 17610), (13, 17901), (Start: 16 @17940 has 1 MA's), (Start: 17 @17946 has 23 MA's), (22, 18000), (23, 18009), (34, 18126),

Gene: Sephiroth\_36 Start: 29898, Stop: 30128, Start Num: 15

Candidate Starts for Sephiroth\_36:

(Start: 14 @29895 has 1 MA's), (Start: 15 @29898 has 3 MA's), (19, 29943), (20, 29955), (22, 29964), (26, 29991), (28, 30024), (29, 30030), (30, 30036), (33, 30063), (34, 30066), (35, 30078), (38, 30105), (39, 30114),

Gene: Syleon\_36 Start: 29820, Stop: 30050, Start Num: 15

Candidate Starts for Syleon\_36:

(Start: 14 @29817 has 1 MA's), (Start: 15 @29820 has 3 MA's), (19, 29865), (20, 29877), (22, 29886), (26, 29913), (28, 29946), (29, 29952), (30, 29958), (33, 29985), (34, 29988), (35, 30000), (38, 30027), (39, 30036),

Gene: Trax\_36 Start: 31334, Stop: 31564, Start Num: 18

Candidate Starts for Trax\_36:

(Start: 18 @31334 has 2 MA's), (Start: 21 @31382 has 1 MA's), (33, 31487), (34, 31490), (36, 31505), (37, 31517),

Gene: TurkishDelight\_36 Start: 34260, Stop: 34487, Start Num: 17

Candidate Starts for TurkishDelight\_36:

(Start: 17 @34260 has 23 MA's), (33, 34413), (34, 34416),

Gene: Vondra\_21 Start: 17962, Stop: 18219, Start Num: 17

Candidate Starts for Vondra\_21:

(1, 17224), (3, 17413), (5, 17491), (7, 17539), (8, 17626), (13, 17917), (Start: 16 @17956 has 1 MA's), (Start: 17 @17962 has 23 MA's), (22, 18016), (23, 18025), (34, 18142),

Gene: Yara\_26 Start: 20240, Stop: 20461, Start Num: 17

Candidate Starts for Yara\_26:

(9, 20069), (Start: 17 @20240 has 23 MA's), (27, 20336), (34, 20399),