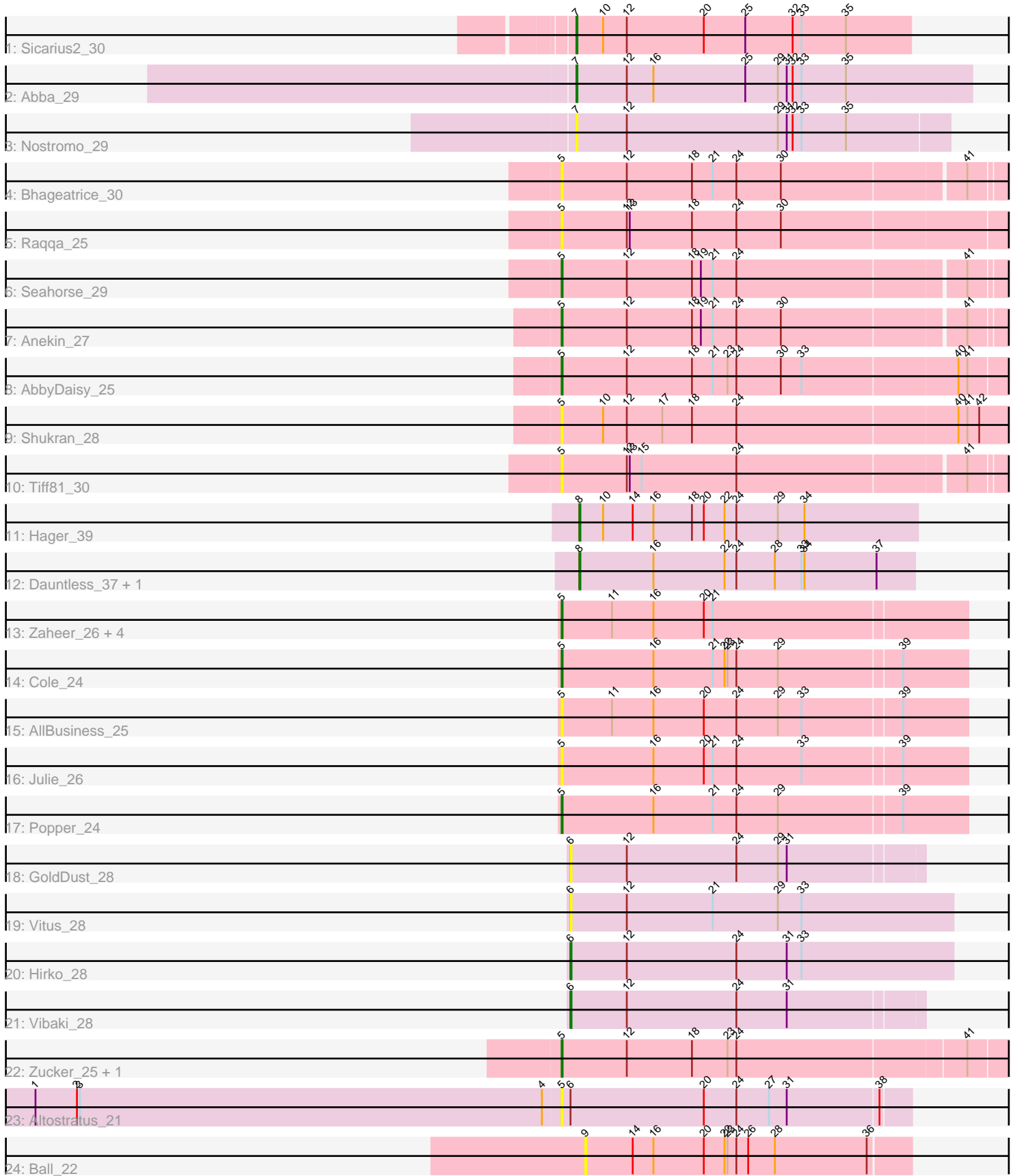


# Pham 198288



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 198288 Report

This analysis was run 01/18/25 on database version 583.

Pham number 198288 has 30 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Sicarius2\_30
- Track 2 : Abba\_29
- Track 3 : Nostromo\_29
- Track 4 : Bhageatrice\_30
- Track 5 : Raqqa\_25
- Track 6 : Seahorse\_29
- Track 7 : Anekin\_27
- Track 8 : AbbyDaisy\_25
- Track 9 : Shukran\_28
- Track 10 : Tiff81\_30
- Track 11 : Hager\_39
- Track 12 : Dauntless\_37, Erudite\_37
- Track 13 : Zaheer\_26, Nandita\_26, Lenoxika\_26, Ryan\_26, Kihatsu\_27
- Track 14 : Cole\_24
- Track 15 : AllBusiness\_25
- Track 16 : Julie\_26
- Track 17 : Popper\_24
- Track 18 : GoldDust\_28
- Track 19 : Vitus\_28
- Track 20 : Hirko\_28
- Track 21 : Vibaki\_28
- Track 22 : Zucker\_25, Bauer\_26
- Track 23 : Altostratus\_21
- Track 24 : Ball\_22

### ***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 10 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbyDaisy\_25, AllBusiness\_25, Altostratus\_21, Anekin\_27, Bauer\_26, Bhageatrice\_30, Cole\_24, Julie\_26, Kihatsu\_27, Lenoxika\_26, Nandita\_26, Popper\_24, Raqqa\_25, Ryan\_26, Seahorse\_29, Shukran\_28, Tiff81\_30, Zaheer\_26,

Zucker\_25,

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

- 

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

- Abba\_29, Ball\_22, Dauntless\_37, Erudite\_37, GoldDust\_28, Hager\_39, Hirko\_28, Nostromo\_29, Sicarius2\_30, Vibaki\_28, Vitus\_28,

### Summary by start number:

Start 5:

- Found in 19 of 30 ( 63.3% ) of genes in pham
- Manual Annotations of this start: 10 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbyDaisy\_25 (AY), AllBusiness\_25 (FF), Altostratus\_21 (FS), Anekin\_27 (AY), Bauer\_26 (FN), Bhageatrice\_30 (AY), Cole\_24 (FF), Julie\_26 (FF), Kihatsu\_27 (FF), Lenoxika\_26 (FF), Nandita\_26 (FF), Popper\_24 (FF), Raqqa\_25 (AY), Ryan\_26 (FF), Seahorse\_29 (AY), Shukran\_28 (AY), Tiff81\_30 (AY), Zaheer\_26 (FF), Zucker\_25 (FN),

Start 6:

- Found in 5 of 30 ( 16.7% ) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 80.0% of time when present
- Phage (with cluster) where this start called: GoldDust\_28 (FL), Hirko\_28 (FL), Vibaki\_28 (FL), Vitus\_28 (FL),

Start 7:

- Found in 3 of 30 ( 10.0% ) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abba\_29 (AO3), Nostromo\_29 (AO3), Sicarius2\_30 (AO2),

Start 8:

- Found in 3 of 30 ( 10.0% ) of genes in pham
- Manual Annotations of this start: 3 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dauntless\_37 (EF), Erudite\_37 (EF), Hager\_39 (EF),

Start 9:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ball\_22 (singleton),

### Summary by clusters:

There are 9 clusters represented in this pham: singleton, FS, EF, AO3, AO2, FF, AY, FL, FN,

Info for manual annotations of cluster AO2:

- Start number 7 was manually annotated 1 time for cluster AO2.

Info for manual annotations of cluster AO3:

- Start number 7 was manually annotated 1 time for cluster AO3.

Info for manual annotations of cluster AY:

- Start number 5 was manually annotated 3 times for cluster AY.

Info for manual annotations of cluster EF:

- Start number 8 was manually annotated 3 times for cluster EF.

Info for manual annotations of cluster FF:

- Start number 5 was manually annotated 5 times for cluster FF.

Info for manual annotations of cluster FL:

- Start number 6 was manually annotated 2 times for cluster FL.

Info for manual annotations of cluster FN:

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

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

Gene: Abba\_29 Start: 24790, Stop: 25188, Start Num: 7

Candidate Starts for Abba\_29:

(Start: 7 @24790 has 2 MA's), (12, 24841), (16, 24868), (25, 24961), (29, 24994), (31, 25003), (32, 25009), (33, 25018), (35, 25063),

Gene: AbbyDaisy\_25 Start: 19357, Stop: 19806, Start Num: 5

Candidate Starts for AbbyDaisy\_25:

(Start: 5 @19357 has 10 MA's), (12, 19423), (18, 19489), (21, 19510), (23, 19525), (24, 19534), (30, 19579), (33, 19600), (40, 19753), (41, 19762),

Gene: AllBusiness\_25 Start: 19877, Stop: 20281, Start Num: 5

Candidate Starts for AllBusiness\_25:

(Start: 5 @19877 has 10 MA's), (11, 19928), (16, 19970), (20, 20021), (24, 20054), (29, 20096), (33, 20120), (39, 20216),

Gene: Altostratus\_21 Start: 17562, Stop: 17909, Start Num: 5

Candidate Starts for Altostratus\_21:

(1, 17031), (2, 17073), (3, 17076), (4, 17544), (Start: 5 @17562 has 10 MA's), (Start: 6 @17571 has 2 MA's), (20, 17706), (24, 17739), (27, 17772), (31, 17790), (38, 17880),

Gene: Anekin\_27 Start: 20364, Stop: 20804, Start Num: 5

Candidate Starts for Anekin\_27:

(Start: 5 @20364 has 10 MA's), (12, 20430), (18, 20496), (19, 20505), (21, 20517), (24, 20541), (30, 20586), (41, 20763),

Gene: Ball\_22 Start: 18509, Stop: 18835, Start Num: 9

Candidate Starts for Ball\_22:

(9, 18509), (14, 18557), (16, 18578), (20, 18629), (22, 18650), (23, 18653), (24, 18662), (26, 18674), (28, 18701), (36, 18794),

Gene: Bauer\_26 Start: 20069, Stop: 20515, Start Num: 5

Candidate Starts for Bauer\_26:

(Start: 5 @20069 has 10 MA's), (12, 20135), (18, 20201), (23, 20237), (24, 20246), (41, 20471),

Gene: Bhageatrice\_30 Start: 21686, Stop: 22126, Start Num: 5

Candidate Starts for Bhageatrice\_30:

(Start: 5 @21686 has 10 MA's), (12, 21752), (18, 21818), (21, 21839), (24, 21863), (30, 21908), (41, 22085),

Gene: Cole\_24 Start: 19378, Stop: 19782, Start Num: 5

Candidate Starts for Cole\_24:

(Start: 5 @19378 has 10 MA's), (16, 19471), (21, 19531), (22, 19543), (23, 19546), (24, 19555), (29, 19597), (39, 19717),

Gene: Dauntless\_37 Start: 24444, Stop: 24782, Start Num: 8

Candidate Starts for Dauntless\_37:

(Start: 8 @24444 has 3 MA's), (16, 24519), (22, 24591), (24, 24603), (28, 24642), (33, 24669), (34, 24672), (37, 24744),

Gene: Erudite\_37 Start: 24444, Stop: 24782, Start Num: 8

Candidate Starts for Erudite\_37:

(Start: 8 @24444 has 3 MA's), (16, 24519), (22, 24591), (24, 24603), (28, 24642), (33, 24669), (34, 24672), (37, 24744),

Gene: GoldDust\_28 Start: 26513, Stop: 26863, Start Num: 6

Candidate Starts for GoldDust\_28:

(Start: 6 @26513 has 2 MA's), (12, 26570), (24, 26681), (29, 26723), (31, 26732),

Gene: Hager\_39 Start: 24364, Stop: 24705, Start Num: 8

Candidate Starts for Hager\_39:

(Start: 8 @24364 has 3 MA's), (10, 24388), (14, 24418), (16, 24439), (18, 24478), (20, 24490), (22, 24511), (24, 24523), (29, 24565), (34, 24592),

Gene: Hirko\_28 Start: 26841, Stop: 27227, Start Num: 6

Candidate Starts for Hirko\_28:

(Start: 6 @26841 has 2 MA's), (12, 26898), (24, 27009), (31, 27060), (33, 27075),

Gene: Julie\_26 Start: 20028, Stop: 20432, Start Num: 5

Candidate Starts for Julie\_26:

(Start: 5 @20028 has 10 MA's), (16, 20121), (20, 20172), (21, 20181), (24, 20205), (33, 20271), (39, 20367),

Gene: Kihatsu\_27 Start: 19902, Stop: 20306, Start Num: 5

Candidate Starts for Kihatsu\_27:

(Start: 5 @19902 has 10 MA's), (11, 19953), (16, 19995), (20, 20046), (21, 20055),

Gene: Lenoxika\_26 Start: 19573, Stop: 19977, Start Num: 5

Candidate Starts for Lenoxika\_26:

(Start: 5 @19573 has 10 MA's), (11, 19624), (16, 19666), (20, 19717), (21, 19726),

Gene: Nandita\_26 Start: 19577, Stop: 19981, Start Num: 5  
Candidate Starts for Nandita\_26:  
(Start: 5 @19577 has 10 MA's), (11, 19628), (16, 19670), (20, 19721), (21, 19730),

Gene: Nostromo\_29 Start: 24269, Stop: 24643, Start Num: 7  
Candidate Starts for Nostromo\_29:  
(Start: 7 @24269 has 2 MA's), (12, 24320), (29, 24473), (31, 24482), (32, 24488), (33, 24497), (35, 24542),

Gene: Popper\_24 Start: 19482, Stop: 19886, Start Num: 5  
Candidate Starts for Popper\_24:  
(Start: 5 @19482 has 10 MA's), (16, 19575), (21, 19635), (24, 19659), (29, 19701), (39, 19821),

Gene: Raqqa\_25 Start: 19651, Stop: 20100, Start Num: 5  
Candidate Starts for Raqqa\_25:  
(Start: 5 @19651 has 10 MA's), (12, 19717), (13, 19720), (18, 19783), (24, 19828), (30, 19873),

Gene: Ryan\_26 Start: 20167, Stop: 20571, Start Num: 5  
Candidate Starts for Ryan\_26:  
(Start: 5 @20167 has 10 MA's), (11, 20218), (16, 20260), (20, 20311), (21, 20320),

Gene: Seahorse\_29 Start: 20763, Stop: 21203, Start Num: 5  
Candidate Starts for Seahorse\_29:  
(Start: 5 @20763 has 10 MA's), (12, 20829), (18, 20895), (19, 20904), (21, 20916), (24, 20940), (41, 21162),

Gene: Shukran\_28 Start: 20319, Stop: 20777, Start Num: 5  
Candidate Starts for Shukran\_28:  
(Start: 5 @20319 has 10 MA's), (10, 20361), (12, 20385), (17, 20421), (18, 20451), (24, 20496), (40, 20715), (41, 20724), (42, 20736),

Gene: Sicarius2\_30 Start: 24899, Stop: 25237, Start Num: 7  
Candidate Starts for Sicarius2\_30:  
(Start: 7 @24899 has 2 MA's), (10, 24926), (12, 24950), (20, 25028), (25, 25070), (32, 25118), (33, 25127), (35, 25172),

Gene: Tiff81\_30 Start: 20491, Stop: 20931, Start Num: 5  
Candidate Starts for Tiff81\_30:  
(Start: 5 @20491 has 10 MA's), (12, 20557), (13, 20560), (15, 20572), (24, 20668), (41, 20890),

Gene: Vibaki\_28 Start: 26388, Stop: 26738, Start Num: 6  
Candidate Starts for Vibaki\_28:  
(Start: 6 @26388 has 2 MA's), (12, 26445), (24, 26556), (31, 26607),

Gene: Vitus\_28 Start: 23173, Stop: 23559, Start Num: 6  
Candidate Starts for Vitus\_28:  
(Start: 6 @23173 has 2 MA's), (12, 23230), (21, 23317), (29, 23383), (33, 23407),

Gene: Zaheer\_26 Start: 20256, Stop: 20660, Start Num: 5  
Candidate Starts for Zaheer\_26:  
(Start: 5 @20256 has 10 MA's), (11, 20307), (16, 20349), (20, 20400), (21, 20409),

Gene: Zucker\_25 Start: 19382, Stop: 19828, Start Num: 5

Candidate Starts for Zucker\_25:

(Start: 5 @19382 has 10 MA's), (12, 19448), (18, 19514), (23, 19550), (24, 19559), (41, 19784),