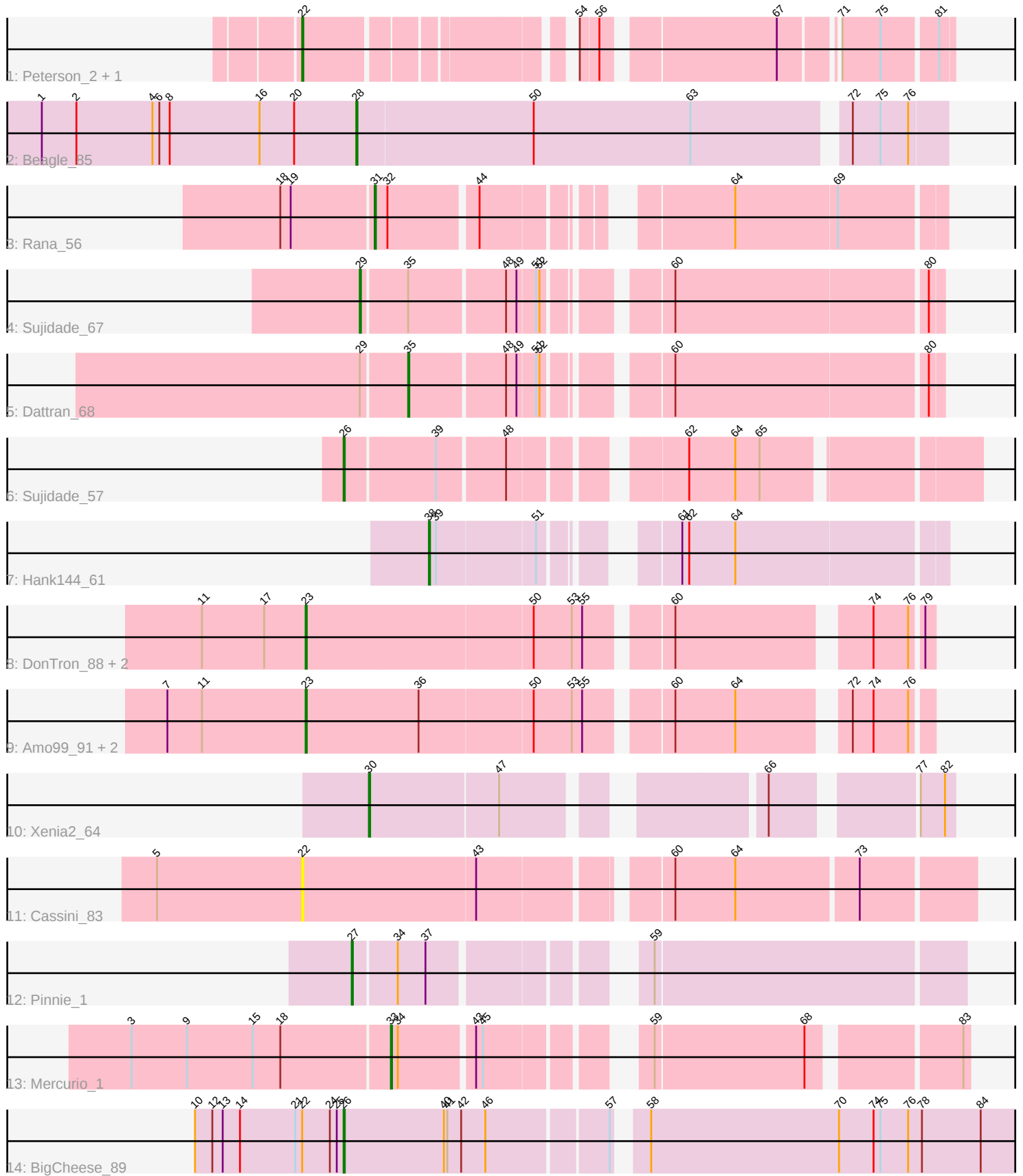


# Pham 331285



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 331285 Report

This analysis was run 09/05/26 on database version 662.

Pham number 331285 has 19 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Peterson\_2, JC27\_3
- Track 2 : Beagle\_85
- Track 3 : Rana\_56
- Track 4 : Sujidade\_67
- Track 5 : Dattran\_68
- Track 6 : Sujidade\_57
- Track 7 : Hank144\_61
- Track 8 : DonTron\_88, Sting\_87, Soos\_84
- Track 9 : Amo99\_91, Jollymon\_88, ColdSoup\_91
- Track 10 : Xenia2\_64
- Track 11 : Cassini\_83
- Track 12 : Pinnie\_1
- Track 13 : Mercurio\_1
- Track 14 : BigCheese\_89

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

The start number called the most often in the published annotations is 23, it was called in 4 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amo99\_91, ColdSoup\_91, DonTron\_88, Jollymon\_88, Soos\_84, Sting\_87,

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

- 

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

- Beagle\_85, BigCheese\_89, Cassini\_83, Dattran\_68, Hank144\_61, JC27\_3, Mercurio\_1, Peterson\_2, Pinnie\_1, Rana\_56, Sujidade\_57, Sujidade\_67, Xenia2\_64,

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

Start 22:

- Found in 4 of 19 ( 21.1% ) of genes in pham

- Manual Annotations of this start: 2 of 16
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Cassini\_83 (FN), JC27\_3 (A1), Peterson\_2 (A1),

#### Start 23:

- Found in 6 of 19 ( 31.6% ) of genes in pham
- Manual Annotations of this start: 4 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amo99\_91 (CP), ColdSoup\_91 (CP), DonTron\_88 (CP), Jollymon\_88 (CP), Soos\_84 (CP), Sting\_87 (CP),

#### Start 26:

- Found in 2 of 19 ( 10.5% ) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BigCheese\_89 (L2), Sujidade\_57 (BD1),

#### Start 27:

- Found in 1 of 19 ( 5.3% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pinnie\_1 (G3),

#### Start 28:

- Found in 1 of 19 ( 5.3% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beagle\_85 (AP2),

#### Start 29:

- Found in 2 of 19 ( 10.5% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Sujidade\_67 (BD1),

#### Start 30:

- Found in 1 of 19 ( 5.3% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Xenia2\_64 (DV),

#### Start 31:

- Found in 1 of 19 ( 5.3% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rana\_56 (BD1),

#### Start 33:

- Found in 1 of 19 ( 5.3% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mercurio\_1 (G4),

Start 35:

- Found in 2 of 19 ( 10.5% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Dattran\_68 (BD1),

Start 38:

- Found in 1 of 19 ( 5.3% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hank144\_61 (BD2),

### **Summary by clusters:**

There are 10 clusters represented in this pham: G4, G3, AP2, A1, BD1, BD2, DV, L2, CP, FN,

Info for manual annotations of cluster A1:

- Start number 22 was manually annotated 2 times for cluster A1.

Info for manual annotations of cluster AP2:

- Start number 28 was manually annotated 1 time for cluster AP2.

Info for manual annotations of cluster BD1:

- Start number 26 was manually annotated 1 time for cluster BD1.
- Start number 29 was manually annotated 1 time for cluster BD1.
- Start number 31 was manually annotated 1 time for cluster BD1.
- Start number 35 was manually annotated 1 time for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 38 was manually annotated 1 time for cluster BD2.

Info for manual annotations of cluster CP:

- Start number 23 was manually annotated 4 times for cluster CP.

Info for manual annotations of cluster DV:

- Start number 30 was manually annotated 1 time for cluster DV.

Info for manual annotations of cluster G3:

- Start number 27 was manually annotated 1 time for cluster G3.

Info for manual annotations of cluster G4:

- Start number 33 was manually annotated 1 time for cluster G4.

Info for manual annotations of cluster L2:

- Start number 26 was manually annotated 1 time for cluster L2.

### **Gene Information:**

Gene: Amo99\_91 Start: 56649, Stop: 57140, Start Num: 23

Candidate Starts for Amo99\_91:

(7, 56529), (11, 56559), (Start: 23 @56649 has 4 MA's), (36, 56745), (50, 56838), (53, 56871), (55, 56880), (60, 56943), (64, 56994), (72, 57075), (74, 57093), (76, 57123),

Gene: Beagle\_85 Start: 50263, Stop: 49775, Start Num: 28

Candidate Starts for Beagle\_85:

(1, 50536), (2, 50506), (4, 50440), (6, 50434), (8, 50425), (16, 50347), (20, 50317), (Start: 28 @50263 has 1 MA's), (50, 50113), (63, 49978), (72, 49855), (75, 49831), (76, 49807),

Gene: BigCheese\_89 Start: 57485, Stop: 58045, Start Num: 26

Candidate Starts for BigCheese\_89:

(10, 57356), (12, 57371), (13, 57380), (14, 57395), (21, 57443), (Start: 22 @57449 has 2 MA's), (24, 57473), (25, 57479), (Start: 26 @57485 has 2 MA's), (40, 57572), (41, 57575), (42, 57587), (46, 57608), (57, 57707), (58, 57725), (70, 57887), (74, 57917), (75, 57923), (76, 57947), (78, 57959), (84, 58010),

Gene: Cassini\_83 Start: 47928, Stop: 48464, Start Num: 22

Candidate Starts for Cassini\_83:

(5, 47802), (Start: 22 @47928 has 2 MA's), (43, 48075), (60, 48216), (64, 48267), (73, 48369),

Gene: ColdSoup\_91 Start: 56730, Stop: 57221, Start Num: 23

Candidate Starts for ColdSoup\_91:

(7, 56610), (11, 56640), (Start: 23 @56730 has 4 MA's), (36, 56826), (50, 56919), (53, 56952), (55, 56961), (60, 57024), (64, 57075), (72, 57156), (74, 57174), (76, 57204),

Gene: Dattran\_68 Start: 45865, Stop: 45455, Start Num: 35

Candidate Starts for Dattran\_68:

(Start: 29 @45901 has 1 MA's), (Start: 35 @45865 has 1 MA's), (48, 45787), (49, 45778), (51, 45763), (52, 45760), (60, 45676), (80, 45466),

Gene: DonTron\_88 Start: 56608, Stop: 57099, Start Num: 23

Candidate Starts for DonTron\_88:

(11, 56518), (17, 56572), (Start: 23 @56608 has 4 MA's), (50, 56797), (53, 56830), (55, 56839), (60, 56902), (74, 57052), (76, 57082), (79, 57091),

Gene: Hank144\_61 Start: 41838, Stop: 41452, Start Num: 38

Candidate Starts for Hank144\_61:

(Start: 38 @41838 has 1 MA's), (39, 41832), (51, 41751), (61, 41670), (62, 41664), (64, 41625),

Gene: JC27\_3 Start: 1139, Stop: 1612, Start Num: 22

Candidate Starts for JC27\_3:

(Start: 22 @1139 has 2 MA's), (54, 1331), (56, 1346), (67, 1481), (71, 1523), (75, 1556), (81, 1601),

Gene: Jollymon\_88 Start: 56730, Stop: 57221, Start Num: 23

Candidate Starts for Jollymon\_88:

(7, 56610), (11, 56640), (Start: 23 @56730 has 4 MA's), (36, 56826), (50, 56919), (53, 56952), (55, 56961), (60, 57024), (64, 57075), (72, 57156), (74, 57174), (76, 57204),

Gene: Mercurio\_1 Start: 275, Stop: 700, Start Num: 33

Candidate Starts for Mercurio\_1:

(3, 56), (9, 104), (15, 161), (18, 185), (Start: 33 @275 has 1 MA's), (34, 281), (43, 341), (45, 347), (59, 452), (68, 578), (83, 695),

Gene: Peterson\_2 Start: 990, Stop: 1463, Start Num: 22

Candidate Starts for Peterson\_2:

(Start: 22 @990 has 2 MA's), (54, 1182), (56, 1197), (67, 1332), (71, 1374), (75, 1407), (81, 1452),

Gene: Pinnie\_1 Start: 56, Stop: 520, Start Num: 27

Candidate Starts for Pinnie\_1:

(Start: 27 @56 has 1 MA's), (34, 89), (37, 113), (59, 260),

Gene: Rana\_56 Start: 41917, Stop: 41495, Start Num: 31

Candidate Starts for Rana\_56:

(18, 41995), (19, 41986), (Start: 31 @41917 has 1 MA's), (32, 41908), (44, 41836), (64, 41668), (69, 41581),

Gene: Soos\_84 Start: 55934, Stop: 56425, Start Num: 23

Candidate Starts for Soos\_84:

(11, 55844), (17, 55898), (Start: 23 @55934 has 4 MA's), (50, 56123), (53, 56156), (55, 56165), (60, 56228), (74, 56378), (76, 56408), (79, 56417),

Gene: Sting\_87 Start: 56373, Stop: 56864, Start Num: 23

Candidate Starts for Sting\_87:

(11, 56283), (17, 56337), (Start: 23 @56373 has 4 MA's), (50, 56562), (53, 56595), (55, 56604), (60, 56667), (74, 56817), (76, 56847), (79, 56856),

Gene: Sujidade\_67 Start: 46444, Stop: 45998, Start Num: 29

Candidate Starts for Sujidade\_67:

(Start: 29 @46444 has 1 MA's), (Start: 35 @46408 has 1 MA's), (48, 46330), (49, 46321), (51, 46306), (52, 46303), (60, 46219), (80, 46009),

Gene: Sujidade\_57 Start: 42775, Stop: 42293, Start Num: 26

Candidate Starts for Sujidade\_57:

(Start: 26 @42775 has 2 MA's), (39, 42700), (48, 42646), (62, 42523), (64, 42484), (65, 42463),

Gene: Xenia2\_64 Start: 43470, Stop: 43901, Start Num: 30

Candidate Starts for Xenia2\_64:

(Start: 30 @43470 has 1 MA's), (47, 43578), (66, 43764), (77, 43872), (82, 43893),