

Pham 284016



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 284016 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284016 has 35 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Gustav\_59
- Track 2 : GRU1\_93
- Track 3 : Bonum\_9, Kabluna\_9
- Track 4 : MerCougar\_8, Outis\_8, StarStruck\_8
- Track 5 : Buggaboo\_8, SuperSulley\_8
- Track 6 : NosilaM\_9
- Track 7 : GTE8\_91
- Track 8 : Sukkupi\_8, BiPauneto\_8, Yndexa\_8
- Track 9 : Pemberton\_8
- Track 10 : Scuba\_12
- Track 11 : Fury\_12, Pleakley\_12
- Track 12 : HomeFry\_11
- Track 13 : Fresco\_47, Axumite\_47, Shatter\_47, Ligma\_47
- Track 14 : Yago84\_46, AnClar\_47, Sisko\_46
- Track 15 : BiggityBass\_46
- Track 16 : Mariokart\_47
- Track 17 : CharlottesWeb\_46
- Track 18 : GMA2\_47
- Track 19 : Morgana\_102, Cafasso\_96
- Track 20 : ModicumRichard\_95
- Track 21 : Aleemily\_94
- Track 22 : ObLaDi\_95

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

The start number called the most often in the published annotations is 6, it was called in 14 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aleemily\_94, AnClar\_47, Axumite\_47, BiggityBass\_46, Cafasso\_96, CharlottesWeb\_46, Fresco\_47, Gustav\_59, Ligma\_47, Mariokart\_47, ModicumRichard\_95, Morgana\_102, ObLaDi\_95, Shatter\_47, Sisko\_46, Yago84\_46,

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

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

- BiPauneto\_8, Bonum\_9, Buggaboo\_8, Fury\_12, GMA2\_47, GRU1\_93, GTE8\_91, HomeFry\_11, Kabluna\_9, MerCougar\_8, NosilaM\_9, Outis\_8, Pemberton\_8, Pleakley\_12, Scuba\_12, StarStruck\_8, Sukkupi\_8, SuperSulley\_8, Yndexa\_8,

### Summary by start number:

Start 6:

- Found in 16 of 35 ( 45.7% ) of genes in pham
- Manual Annotations of this start: 14 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aleemily\_94 (DZ), AnClar\_47 (DR), Axumite\_47 (DR), BiggityBass\_46 (DR), Cafasso\_96 (DZ), CharlottesWeb\_46 (DR), Fresco\_47 (DR), Gustav\_59 (CD), Ligma\_47 (DR), Mariokart\_47 (DR), ModicumRichard\_95 (DZ), Morgana\_102 (DZ), ObLaDi\_95 (DZ), Shatter\_47 (DR), Sisko\_46 (DR), Yago84\_46 (DR),

Start 7:

- Found in 1 of 35 ( 2.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA2\_47 (DS),

Start 8:

- Found in 18 of 35 ( 51.4% ) of genes in pham
- Manual Annotations of this start: 13 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BiPauneto\_8 (CR4), Bonum\_9 (CR2), Buggaboo\_8 (CR2), Fury\_12 (CR5), GRU1\_93 (CR1), GTE8\_91 (CR2), HomeFry\_11 (CR5), Kabluna\_9 (CR2), MerCougar\_8 (CR2), NosilaM\_9 (CR2), Outis\_8 (CR2), Pemberton\_8 (CR4), Pleakley\_12 (CR5), Scuba\_12 (CR5), StarStruck\_8 (CR2), Sukkupi\_8 (CR4), SuperSulley\_8 (CR2), Yndexa\_8 (CR4),

### Summary by clusters:

There are 8 clusters represented in this pham: CR2, CR1, CR4, CR5, CD, DZ, DR, DS,

Info for manual annotations of cluster CD:

- Start number 6 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster CR2:

- Start number 8 was manually annotated 8 times for cluster CR2.

Info for manual annotations of cluster CR4:

- Start number 8 was manually annotated 3 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 8 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster DR:

- Start number 6 was manually annotated 9 times for cluster DR.

Info for manual annotations of cluster DZ:

- Start number 6 was manually annotated 4 times for cluster DZ.

**Gene Information:**

Gene: Aleemily\_94 Start: 55554, Stop: 56000, Start Num: 6

Candidate Starts for Aleemily\_94:

(Start: 6 @55554 has 14 MA's), (14, 55635), (21, 55725), (27, 55770), (44, 55935),

Gene: AnClar\_47 Start: 43032, Stop: 42556, Start Num: 6

Candidate Starts for AnClar\_47:

(Start: 6 @43032 has 14 MA's), (11, 42987), (12, 42972), (20, 42867), (34, 42711), (41, 42654), (47, 42585), (48, 42570),

Gene: Axumite\_47 Start: 40708, Stop: 40232, Start Num: 6

Candidate Starts for Axumite\_47:

(1, 40930), (3, 40804), (Start: 6 @40708 has 14 MA's), (29, 40429), (32, 40417), (34, 40390), (41, 40333), (42, 40321), (47, 40264),

Gene: BiPauneto\_8 Start: 3928, Stop: 4389, Start Num: 8

Candidate Starts for BiPauneto\_8:

(Start: 8 @3928 has 13 MA's), (9, 3940), (11, 3952), (19, 4060), (49, 4378),

Gene: BiggityBass\_46 Start: 42504, Stop: 42028, Start Num: 6

Candidate Starts for BiggityBass\_46:

(Start: 6 @42504 has 14 MA's), (26, 42264), (27, 42261), (29, 42222), (32, 42210), (33, 42201), (34, 42183), (47, 42057), (48, 42042),

Gene: Bonum\_9 Start: 5341, Stop: 5799, Start Num: 8

Candidate Starts for Bonum\_9:

(Start: 8 @5341 has 13 MA's), (19, 5473), (24, 5536), (43, 5695), (46, 5743), (49, 5788),

Gene: Buggaboo\_8 Start: 4860, Stop: 5318, Start Num: 8

Candidate Starts for Buggaboo\_8:

(Start: 8 @4860 has 13 MA's), (19, 4992), (43, 5214), (46, 5262), (49, 5307),

Gene: Cafasso\_96 Start: 56105, Stop: 56551, Start Num: 6

Candidate Starts for Cafasso\_96:

(Start: 6 @56105 has 14 MA's), (21, 56276), (27, 56321), (44, 56486),

Gene: CharlottesWeb\_46 Start: 40078, Stop: 39602, Start Num: 6

Candidate Starts for CharlottesWeb\_46:

(Start: 6 @40078 has 14 MA's), (29, 39799), (32, 39787), (34, 39760), (42, 39691), (47, 39634),

Gene: Fresco\_47 Start: 40708, Stop: 40232, Start Num: 6

Candidate Starts for Fresco\_47:

(1, 40930), (3, 40804), (Start: 6 @40708 has 14 MA's), (29, 40429), (32, 40417), (34, 40390), (41, 40333), (42, 40321), (47, 40264),

Gene: Fury\_12 Start: 5438, Stop: 5917, Start Num: 8

Candidate Starts for Fury\_12:

(4, 5363), (Start: 8 @5438 has 13 MA's), (9, 5450), (18, 5567), (21, 5597), (38, 5762), (39, 5765), (46, 5855),

Gene: GMA2\_47 Start: 48456, Stop: 47995, Start Num: 7

Candidate Starts for GMA2\_47:

(7, 48456), (23, 48252), (28, 48222), (31, 48189), (37, 48153), (43, 48087), (44, 48063), (45, 48045),

Gene: GRU1\_93 Start: 64270, Stop: 64728, Start Num: 8

Candidate Starts for GRU1\_93:

(Start: 8 @64270 has 13 MA's), (9, 64282), (16, 64360), (19, 64402), (39, 64582), (46, 64672), (49, 64717),

Gene: GTE8\_91 Start: 66184, Stop: 66642, Start Num: 8

Candidate Starts for GTE8\_91:

(2, 66049), (5, 66157), (Start: 8 @66184 has 13 MA's), (9, 66196), (13, 66232), (19, 66316), (30, 66436), (40, 66514), (46, 66586), (49, 66631),

Gene: Gustav\_59 Start: 40519, Stop: 40055, Start Num: 6

Candidate Starts for Gustav\_59:

(Start: 6 @40519 has 14 MA's), (25, 40309), (32, 40243), (35, 40213), (47, 40090),

Gene: HomeFry\_11 Start: 4943, Stop: 5422, Start Num: 8

Candidate Starts for HomeFry\_11:

(Start: 8 @4943 has 13 MA's), (10, 4964), (17, 5036), (18, 5072), (21, 5102), (38, 5267), (39, 5270), (46, 5360),

Gene: Kabluna\_9 Start: 4732, Stop: 5190, Start Num: 8

Candidate Starts for Kabluna\_9:

(Start: 8 @4732 has 13 MA's), (19, 4864), (24, 4927), (43, 5086), (46, 5134), (49, 5179),

Gene: Ligma\_47 Start: 40708, Stop: 40232, Start Num: 6

Candidate Starts for Ligma\_47:

(1, 40930), (3, 40804), (Start: 6 @40708 has 14 MA's), (29, 40429), (32, 40417), (34, 40390), (41, 40333), (42, 40321), (47, 40264),

Gene: Mariokart\_47 Start: 40855, Stop: 40379, Start Num: 6

Candidate Starts for Mariokart\_47:

(Start: 6 @40855 has 14 MA's), (32, 40564), (34, 40537), (41, 40480), (42, 40468), (47, 40411),

Gene: MerCougar\_8 Start: 5083, Stop: 5541, Start Num: 8

Candidate Starts for MerCougar\_8:

(Start: 8 @5083 has 13 MA's), (15, 5155), (19, 5215), (43, 5437), (46, 5485), (49, 5530),

Gene: ModicumRichard\_95 Start: 55749, Stop: 56195, Start Num: 6

Candidate Starts for ModicumRichard\_95:

(Start: 6 @55749 has 14 MA's), (14, 55830), (21, 55920), (27, 55965), (44, 56130),

Gene: Morgana\_102 Start: 57954, Stop: 58400, Start Num: 6

Candidate Starts for Morgana\_102:

(Start: 6 @57954 has 14 MA's), (21, 58125), (27, 58170), (44, 58335),

Gene: NosilaM\_9 Start: 5620, Stop: 6078, Start Num: 8

Candidate Starts for NosilaM\_9:

(Start: 8 @5620 has 13 MA's), (19, 5752), (24, 5815), (43, 5974), (49, 6067),

Gene: ObLaDi\_95 Start: 55798, Stop: 56244, Start Num: 6

Candidate Starts for ObLaDi\_95:

(Start: 6 @55798 has 14 MA's), (27, 56014), (43, 56155), (44, 56179),

Gene: Outis\_8 Start: 4774, Stop: 5232, Start Num: 8

Candidate Starts for Outis\_8:

(Start: 8 @4774 has 13 MA's), (15, 4846), (19, 4906), (43, 5128), (46, 5176), (49, 5221),

Gene: Pemberton\_8 Start: 3778, Stop: 4239, Start Num: 8

Candidate Starts for Pemberton\_8:

(Start: 8 @3778 has 13 MA's), (9, 3790), (11, 3802), (19, 3910), (22, 3946), (36, 4066), (49, 4228),

Gene: Pleakley\_12 Start: 5438, Stop: 5917, Start Num: 8

Candidate Starts for Pleakley\_12:

(4, 5363), (Start: 8 @5438 has 13 MA's), (9, 5450), (18, 5567), (21, 5597), (38, 5762), (39, 5765), (46, 5855),

Gene: Scuba\_12 Start: 5536, Stop: 6015, Start Num: 8

Candidate Starts for Scuba\_12:

(4, 5461), (Start: 8 @5536 has 13 MA's), (9, 5548), (18, 5665), (21, 5695), (38, 5860), (39, 5863), (46, 5953),

Gene: Shatter\_47 Start: 40708, Stop: 40232, Start Num: 6

Candidate Starts for Shatter\_47:

(1, 40930), (3, 40804), (Start: 6 @40708 has 14 MA's), (29, 40429), (32, 40417), (34, 40390), (41, 40333), (42, 40321), (47, 40264),

Gene: Sisko\_46 Start: 41036, Stop: 40560, Start Num: 6

Candidate Starts for Sisko\_46:

(Start: 6 @41036 has 14 MA's), (11, 40991), (12, 40976), (20, 40871), (34, 40715), (41, 40658), (47, 40589), (48, 40574),

Gene: StarStruck\_8 Start: 4774, Stop: 5232, Start Num: 8

Candidate Starts for StarStruck\_8:

(Start: 8 @4774 has 13 MA's), (15, 4846), (19, 4906), (43, 5128), (46, 5176), (49, 5221),

Gene: Sukkupi\_8 Start: 3819, Stop: 4280, Start Num: 8

Candidate Starts for Sukkupi\_8:

(Start: 8 @3819 has 13 MA's), (9, 3831), (11, 3843), (19, 3951), (49, 4269),

Gene: SuperSulley\_8 Start: 4860, Stop: 5318, Start Num: 8

Candidate Starts for SuperSulley\_8:

(Start: 8 @4860 has 13 MA's), (19, 4992), (43, 5214), (46, 5262), (49, 5307),

Gene: Yago84\_46 Start: 41111, Stop: 40635, Start Num: 6

Candidate Starts for Yago84\_46:

(Start: 6 @41111 has 14 MA's), (11, 41066), (12, 41051), (20, 40946), (34, 40790), (41, 40733), (47, 40664), (48, 40649),

Gene: Yndexa\_8 Start: 3819, Stop: 4280, Start Num: 8

Candidate Starts for Yndexa\_8:

(Start: 8 @3819 has 13 MA's), (9, 3831), (11, 3843), (19, 3951), (49, 4269),