

# Pham 216433



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 216433 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216433 has 30 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Mask\_49
- Track 2 : BritBrat\_40
- Track 3 : Bosnia\_46
- Track 4 : Nettuno\_40, Lamberg\_40, GemG\_44, TuertoX\_44, Floral\_42, Gizermo\_44, Ebert\_46, Matteo\_37, Sahara\_43, Mocha12\_44, Sproutie\_44, Bjanes7\_41, Savage\_44, Whiteclaw\_44, Pollux\_44, Cynthia\_44, Clap\_44, Haley23\_44
- Track 5 : JCole\_42
- Track 6 : Vasanti\_41
- Track 7 : Easley\_40
- Track 8 : Suerte\_40
- Track 9 : Lucky10\_38
- Track 10 : MakCheese\_55
- Track 11 : Toron\_43
- Track 12 : Tortellini\_37
- Track 13 : Xavia\_39

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

The start number called the most often in the published annotations is 9, it was called in 23 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bjanes7\_41, Bosnia\_46, Clap\_44, Cynthia\_44, Easley\_40, Ebert\_46, Floral\_42, GemG\_44, Gizermo\_44, Haley23\_44, JCole\_42, Lamberg\_40, Lucky10\_38, MakCheese\_55, Matteo\_37, Mocha12\_44, Nettuno\_40, Pollux\_44, Sahara\_43, Savage\_44, Sproutie\_44, Suerte\_40, Toron\_43, TuertoX\_44, Vasanti\_41, Whiteclaw\_44,

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:

- BritBrat\_40, Mask\_49, Tortellini\_37, Xavia\_39,

## Summary by start number:

### Start 9:

- Found in 26 of 30 ( 86.7% ) of genes in pham
- Manual Annotations of this start: 23 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bjaner7\_41 (CZ2), Bosnia\_46 (CZ1), Clap\_44 (CZ2), Cynthia\_44 (CZ2), Easley\_40 (CZ4), Ebert\_46 (CZ2), Floral\_42 (CY1), GemG\_44 (CZ2), Gizermo\_44 (CZ2), Haley23\_44 (CZ2), JCole\_42 (CZ2), Lamberg\_40 (CZ2), Lucky10\_38 (DH), MakCheese\_55 (DW), Matteo\_37 (CZ2), Mocha12\_44 (CZ2), Nettuno\_40 (CZ2), Pollux\_44 (CY1), Sahara\_43 (CZ2), Savage\_44 (CZ2), Sproutie\_44 (CZ2), Suerte\_40 (CZ4), Toron\_43 (F6), TuertoX\_44 (CZ2), Vasanti\_41 (CZ2), Whiteclaw\_44 (CZ2),

### Start 10:

- Found in 22 of 30 ( 73.3% ) of genes in pham
- Manual Annotations of this start: 3 of 27
- Called 13.6% of time when present
- Phage (with cluster) where this start called: Mask\_49 (AD), Tortellini\_37 (P2), Xavia\_39 (P3),

### Start 11:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BritBrat\_40 (CY2),

## Summary by clusters:

There are 11 clusters represented in this pham: P2, P3, CY1, AD, F6, CY2, CZ2, CZ1, CZ4, DH, DW,

### Info for manual annotations of cluster AD:

- Start number 10 was manually annotated 1 time for cluster AD.

### Info for manual annotations of cluster CY1:

- Start number 9 was manually annotated 2 times for cluster CY1.

### Info for manual annotations of cluster CY2:

- Start number 11 was manually annotated 1 time for cluster CY2.

### Info for manual annotations of cluster CZ1:

- Start number 9 was manually annotated 1 time for cluster CZ1.

### Info for manual annotations of cluster CZ2:

- Start number 9 was manually annotated 17 times for cluster CZ2.

### Info for manual annotations of cluster CZ4:

- Start number 9 was manually annotated 2 times for cluster CZ4.

### Info for manual annotations of cluster DH:

- Start number 9 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster P2:

•Start number 10 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P3:

•Start number 10 was manually annotated 1 time for cluster P3.

**Gene Information:**

Gene: Bjanes7\_41 Start: 31912, Stop: 31289, Start Num: 9

Candidate Starts for Bjanes7\_41:

(Start: 9 @31912 has 23 MA's), (Start: 10 @31873 has 3 MA's), (14, 31816), (23, 31564), (25, 31519), (29, 31435),

Gene: Bosnia\_46 Start: 38276, Stop: 37653, Start Num: 9

Candidate Starts for Bosnia\_46:

(Start: 9 @38276 has 23 MA's), (14, 38180), (23, 37928), (25, 37883), (27, 37808), (29, 37799),

Gene: BritBrat\_40 Start: 34130, Stop: 33591, Start Num: 11

Candidate Starts for BritBrat\_40:

(1, 34370), (2, 34313), (3, 34304), (4, 34301), (6, 34259), (7, 34217), (Start: 11 @34130 has 1 MA's), (16, 34067), (25, 33767), (29, 33683),

Gene: Clap\_44 Start: 32091, Stop: 31468, Start Num: 9

Candidate Starts for Clap\_44:

(Start: 9 @32091 has 23 MA's), (Start: 10 @32052 has 3 MA's), (14, 31995), (23, 31743), (25, 31698), (29, 31614),

Gene: Cynthia\_44 Start: 32091, Stop: 31468, Start Num: 9

Candidate Starts for Cynthia\_44:

(Start: 9 @32091 has 23 MA's), (Start: 10 @32052 has 3 MA's), (14, 31995), (23, 31743), (25, 31698), (29, 31614),

Gene: Easley\_40 Start: 31673, Stop: 31053, Start Num: 9

Candidate Starts for Easley\_40:

(Start: 9 @31673 has 23 MA's), (14, 31577), (23, 31325), (25, 31280), (29, 31196), (35, 31076),

Gene: Ebert\_46 Start: 32015, Stop: 31392, Start Num: 9

Candidate Starts for Ebert\_46:

(Start: 9 @32015 has 23 MA's), (Start: 10 @31976 has 3 MA's), (14, 31919), (23, 31667), (25, 31622), (29, 31538),

Gene: Floral\_42 Start: 35946, Stop: 35323, Start Num: 9

Candidate Starts for Floral\_42:

(Start: 9 @35946 has 23 MA's), (Start: 10 @35907 has 3 MA's), (14, 35850), (23, 35598), (25, 35553), (29, 35469),

Gene: GemG\_44 Start: 32091, Stop: 31468, Start Num: 9

Candidate Starts for GemG\_44:

(Start: 9 @32091 has 23 MA's), (Start: 10 @32052 has 3 MA's), (14, 31995), (23, 31743), (25, 31698), (29, 31614),

Gene: Gizermo\_44 Start: 32091, Stop: 31468, Start Num: 9

Candidate Starts for Gizermo\_44:

(Start: 9 @32091 has 23 MA's), (Start: 10 @32052 has 3 MA's), (14, 31995), (23, 31743), (25, 31698), (29, 31614),

Gene: Haley23\_44 Start: 32091, Stop: 31468, Start Num: 9

Candidate Starts for Haley23\_44:

(Start: 9 @32091 has 23 MA's), (Start: 10 @32052 has 3 MA's), (14, 31995), (23, 31743), (25, 31698), (29, 31614),

Gene: JCole\_42 Start: 31109, Stop: 30486, Start Num: 9

Candidate Starts for JCole\_42:

(Start: 9 @31109 has 23 MA's), (14, 31013), (23, 30761), (25, 30716), (29, 30632),

Gene: Lamberg\_40 Start: 30600, Stop: 29977, Start Num: 9

Candidate Starts for Lamberg\_40:

(Start: 9 @30600 has 23 MA's), (Start: 10 @30561 has 3 MA's), (14, 30504), (23, 30252), (25, 30207), (29, 30123),

Gene: Lucky10\_38 Start: 30583, Stop: 29993, Start Num: 9

Candidate Starts for Lucky10\_38:

(Start: 9 @30583 has 23 MA's), (12, 30514), (14, 30487), (17, 30448), (23, 30235), (25, 30190), (28, 30109), (29, 30100),

Gene: MakCheese\_55 Start: 39149, Stop: 38517, Start Num: 9

Candidate Starts for MakCheese\_55:

(Start: 9 @39149 has 23 MA's), (14, 39053), (23, 38801), (25, 38756), (33, 38573), (36, 38522),

Gene: Mask\_49 Start: 45210, Stop: 44614, Start Num: 10

Candidate Starts for Mask\_49:

(Start: 10 @45210 has 3 MA's), (15, 45147), (20, 44946), (21, 44934), (23, 44892), (26, 44778), (32, 44676),

Gene: Matteo\_37 Start: 29642, Stop: 29019, Start Num: 9

Candidate Starts for Matteo\_37:

(Start: 9 @29642 has 23 MA's), (Start: 10 @29603 has 3 MA's), (14, 29546), (23, 29294), (25, 29249), (29, 29165),

Gene: Mocha12\_44 Start: 32091, Stop: 31468, Start Num: 9

Candidate Starts for Mocha12\_44:

(Start: 9 @32091 has 23 MA's), (Start: 10 @32052 has 3 MA's), (14, 31995), (23, 31743), (25, 31698), (29, 31614),

Gene: Nettuno\_40 Start: 30600, Stop: 29977, Start Num: 9

Candidate Starts for Nettuno\_40:

(Start: 9 @30600 has 23 MA's), (Start: 10 @30561 has 3 MA's), (14, 30504), (23, 30252), (25, 30207), (29, 30123),

Gene: Pollux\_44 Start: 35946, Stop: 35323, Start Num: 9

Candidate Starts for Pollux\_44:

(Start: 9 @35946 has 23 MA's), (Start: 10 @35907 has 3 MA's), (14, 35850), (23, 35598), (25, 35553), (29, 35469),

Gene: Sahara\_43 Start: 31838, Stop: 31215, Start Num: 9

Candidate Starts for Sahara\_43:

(Start: 9 @31838 has 23 MA's), (Start: 10 @31799 has 3 MA's), (14, 31742), (23, 31490), (25, 31445), (29, 31361),

Gene: Savage\_44 Start: 32091, Stop: 31468, Start Num: 9

Candidate Starts for Savage\_44:

(Start: 9 @32091 has 23 MA's), (Start: 10 @32052 has 3 MA's), (14, 31995), (23, 31743), (25, 31698), (29, 31614),

Gene: Sproutie\_44 Start: 32091, Stop: 31468, Start Num: 9

Candidate Starts for Sproutie\_44:

(Start: 9 @32091 has 23 MA's), (Start: 10 @32052 has 3 MA's), (14, 31995), (23, 31743), (25, 31698), (29, 31614),

Gene: Suerte\_40 Start: 32240, Stop: 31662, Start Num: 9

Candidate Starts for Suerte\_40:

(Start: 9 @32240 has 23 MA's), (14, 32144), (23, 31892), (25, 31847), (31, 31694), (34, 31667),

Gene: Toron\_43 Start: 34837, Stop: 34274, Start Num: 9

Candidate Starts for Toron\_43:

(5, 34924), (8, 34843), (Start: 9 @34837 has 23 MA's), (Start: 10 @34798 has 3 MA's), (13, 34753), (18, 34687), (19, 34549), (22, 34498), (24, 34486), (25, 34444), (27, 34372),

Gene: Tortellini\_37 Start: 33401, Stop: 32802, Start Num: 10

Candidate Starts for Tortellini\_37:

(Start: 10 @33401 has 3 MA's), (15, 33338), (20, 33137), (21, 33125), (23, 33083), (26, 32969), (30, 32903), (32, 32867),

Gene: TuertoX\_44 Start: 32091, Stop: 31468, Start Num: 9

Candidate Starts for TuertoX\_44:

(Start: 9 @32091 has 23 MA's), (Start: 10 @32052 has 3 MA's), (14, 31995), (23, 31743), (25, 31698), (29, 31614),

Gene: Vasanti\_41 Start: 31106, Stop: 30483, Start Num: 9

Candidate Starts for Vasanti\_41:

(Start: 9 @31106 has 23 MA's), (14, 31010), (23, 30758), (25, 30713), (29, 30629),

Gene: Whiteclaw\_44 Start: 32091, Stop: 31468, Start Num: 9

Candidate Starts for Whiteclaw\_44:

(Start: 9 @32091 has 23 MA's), (Start: 10 @32052 has 3 MA's), (14, 31995), (23, 31743), (25, 31698), (29, 31614),

Gene: Xavia\_39 Start: 33984, Stop: 33406, Start Num: 10

Candidate Starts for Xavia\_39:

(Start: 10 @33984 has 3 MA's), (15, 33921), (20, 33720), (21, 33708), (23, 33666), (26, 33552), (30, 33486), (32, 33450), (34, 33426),