# Pham 289573

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 289573 Report

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

Pham number 289573 has 37 members, 36 are drafts.

Phages represented in each track:
• Track 1 : Graynor_17, MrBoss_17
• Track 2 : Fluke_17
• Track 3 : Zixiang_15, Niblet_15, Chicken_15
• Track 4 : Pelletreau_16, Shen_16, Westrich_16, Gravel_16, KendraB23_16
• Track 5 : Amanises_16
• Track 6 : Bibble12_16, Bedetta_16, PhirstandPhine_16, Pineda_16
• Track 7 : Amphitrite_14, Fingolfin_14, Camara_14, AdoptaAdorbs_14, Laphuphu24k_14, Oppalora_14
• Track 8 : Rattail_14, Azaz_14
• Track 9 : AlexMinion_15
• Track 10 : Cashington_14, Solea_15
• Track 11 : AylexOG_15, Pecas_14
• Track 12 : SirBeanington_14
• Track 13 : WalkingDead_14
• Track 14 : Neuvillette_16, Roberts_16, Ezurina_15
• Track 15 : TMaxx_16
• Track 16 : Agamotto_18
• Track 17 : Mireles_16


***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 1 of the 1 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AdoptaAdorbs_14, Amphitrite_14, Azaz_14, Bedetta_16, Bibble12_16, Camara_14, Chicken_15, Fingolfin_14, Fluke_17, Graynor_17, Laphuphu24k_14, MrBoss_17, Niblet_15, Oppalora_14, PhirstandPhine_16, Pineda_16, Rattail_14, Zixiang_15,

Genes that have the "Most Annotated" start but do not call it:
• AlexMinion_15,

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

• Agamotto_18, Amanises_16, AylexOG_15, Cashington_14, Ezurina_15, Gravel_16, KendraB23_16, Mireles_16, Neuvillette_16, Pecas_14, Pelletreau_16, Roberts_16, Shen_16, SirBeanington_14, Solea_15, TMaxx_16, WalkingDead_14, Westrich_16,

**Summary by start number:**

Start 2:
• Found in 24 of 37 ( 64.9% ) of genes in pham
• No Manual Annotations of this start.
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Agamotto_18 (FR), Ezurina_15 (FR), Mireles_16 (FR), Neuvillette_16 (FR), Roberts_16 (FR), TMaxx_16 (FR),

Start 4:
• Found in 6 of 37 ( 16.2% ) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AylexOG_15 (EB), Cashington_14 (EB), Pecas_14 (EB), SirBeanington_14 (EB), Solea_15 (EB), WalkingDead_14 (EB),

Start 5:
• Found in 19 of 37 ( 51.4% ) of genes in pham
• Manual Annotations of this start: 1 of 1
• Called 94.7% of time when present
• Phage (with cluster) where this start called: AdoptaAdorbs_14 (AS3), Amphitrite_14 (AS3), Azaz_14 (AS3), Bedetta_16 (AS2), Bibble12_16 (AS2), Camara_14 (AS3), Chicken_15 (AS1), Fingolfin_14 (AS3), Fluke_17 (AK), Graynor_17 (AK), Laphuphu24k_14 (AS3), MrBoss_17 (AK), Niblet_15 (AS1), Oppalora_14 (AS3), PhirstandPhine_16 (AS2), Pineda_16 (AS2), Rattail_14 (AS3), Zixiang_15 (AS1),

Start 7:
• Found in 19 of 37 ( 51.4% ) of genes in pham
• No Manual Annotations of this start.
• Called 26.3% of time when present
• Phage (with cluster) where this start called: Gravel_16 (AS1), KendraB23_16 (AS1), Pelletreau_16 (AS1), Shen_16 (AS1), Westrich_16 (AS1),

Start 9:
• Found in 22 of 37 ( 59.5% ) of genes in pham
• No Manual Annotations of this start.
• Called 4.5% of time when present
• Phage (with cluster) where this start called: Amanises_16 (AS1),

Start 11:
• Found in 1 of 37 ( 2.7% ) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AlexMinion_15 (AS3),

**Summary by clusters:**

There are 6 clusters represented in this pham: AS3, AS2, FR, AK, AS1, EB,

Info for manual annotations of cluster AK:
•Start number 5 was manually annotated 1 time for cluster AK.

### *Gene Information:*

Gene: AdoptaAdorbs_14 Start: 9452, Stop: 9784, Start Num: 5
Candidate Starts for AdoptaAdorbs_14:
(2, 9356), (3, 9446), (Start: 5 @9452 has 1 MA's), (7, 9488), (9, 9509), (16, 9587), (20, 9611),

Gene: Agamotto_18 Start: 12183, Stop: 12611, Start Num: 2
Candidate Starts for Agamotto_18:
(2, 12183), (29, 12555), (31, 12603),

Gene: AlexMinion_15 Start: 9547, Stop: 9816, Start Num: 11
Candidate Starts for AlexMinion_15:
(2, 9388), (Start: 5 @9484 has 1 MA's), (6, 9505), (7, 9520), (9, 9541), (10, 9544), (11, 9547), (13, 9574), (17, 9622), (20, 9643), (22, 9658),

Gene: Amanises_16 Start: 10105, Stop: 10377, Start Num: 9
Candidate Starts for Amanises_16:
(7, 10084), (9, 10105), (20, 10207), (22, 10222), (30, 10336),

Gene: Amphitrite_14 Start: 9450, Stop: 9782, Start Num: 5
Candidate Starts for Amphitrite_14:
(2, 9354), (3, 9444), (Start: 5 @9450 has 1 MA's), (7, 9486), (9, 9507), (16, 9585), (20, 9609),

Gene: AylexOG_15 Start: 9938, Stop: 10279, Start Num: 4
Candidate Starts for AylexOG_15:
(2, 9836), (4, 9938), (23, 10112),

Gene: Azaz_14 Start: 9503, Stop: 9835, Start Num: 5
Candidate Starts for Azaz_14:
(2, 9407), (Start: 5 @9503 has 1 MA's), (7, 9539), (9, 9560), (16, 9638), (20, 9662),

Gene: Bedetta_16 Start: 10036, Stop: 10362, Start Num: 5
Candidate Starts for Bedetta_16:
(2, 9940), (Start: 5 @10036 has 1 MA's), (7, 10072), (9, 10093), (13, 10126), (21, 10198),

Gene: Bibble12_16 Start: 10039, Stop: 10365, Start Num: 5
Candidate Starts for Bibble12_16:
(2, 9943), (Start: 5 @10039 has 1 MA's), (7, 10075), (9, 10096), (13, 10129), (21, 10201),

Gene: Camara_14 Start: 9453, Stop: 9785, Start Num: 5
Candidate Starts for Camara_14:
(2, 9357), (3, 9447), (Start: 5 @9453 has 1 MA's), (7, 9489), (9, 9510), (16, 9588), (20, 9612),

Gene: Cashington_14 Start: 9610, Stop: 9951, Start Num: 4
Candidate Starts for Cashington_14:
(4, 9610), (23, 9784),

Gene: Chicken_15 Start: 9843, Stop: 10169, Start Num: 5
Candidate Starts for Chicken_15:
(1, 9531), (Start: 5 @9843 has 1 MA's), (27, 10089),

Gene: Ezurina_15 Start: 8704, Stop: 9135, Start Num: 2
Candidate Starts for Ezurina_15:
(2, 8704), (21, 8956), (28, 9067), (29, 9079), (31, 9127),

Gene: Fingolfin_14 Start: 9453, Stop: 9785, Start Num: 5
Candidate Starts for Fingolfin_14:
(2, 9357), (3, 9447), (Start: 5 @9453 has 1 MA's), (7, 9489), (9, 9510), (16, 9588), (20, 9612),

Gene: Fluke_17 Start: 12295, Stop: 12609, Start Num: 5
Candidate Starts for Fluke_17:
(Start: 5 @12295 has 1 MA's), (9, 12352), (12, 12373), (15, 12397), (18, 12436), (19, 12439), (20, 12445), (21, 12448), (27, 12529),

Gene: Gravel_16 Start: 10083, Stop: 10376, Start Num: 7
Candidate Starts for Gravel_16:
(7, 10083), (9, 10104), (20, 10206), (22, 10221), (30, 10335),

Gene: Graynor_17 Start: 12313, Stop: 12627, Start Num: 5
Candidate Starts for Graynor_17:
(2, 12217), (Start: 5 @12313 has 1 MA's), (8, 12364), (9, 12370), (12, 12391), (15, 12415), (19, 12457), (20, 12463), (26, 12532), (27, 12547),

Gene: KendraB23_16 Start: 10084, Stop: 10377, Start Num: 7
Candidate Starts for KendraB23_16:
(7, 10084), (9, 10105), (20, 10207), (22, 10222), (30, 10336),

Gene: Laphuphu24k_14 Start: 9452, Stop: 9784, Start Num: 5
Candidate Starts for Laphuphu24k_14:
(2, 9356), (3, 9446), (Start: 5 @9452 has 1 MA's), (7, 9488), (9, 9509), (16, 9587), (20, 9611),

Gene: Mireles_16 Start: 8901, Stop: 9329, Start Num: 2
Candidate Starts for Mireles_16:
(2, 8901), (25, 9180), (29, 9273), (31, 9321),

Gene: MrBoss_17 Start: 12277, Stop: 12591, Start Num: 5
Candidate Starts for MrBoss_17:
(2, 12181), (Start: 5 @12277 has 1 MA's), (8, 12328), (9, 12334), (12, 12355), (15, 12379), (19, 12421), (20, 12427), (26, 12496), (27, 12511),

Gene: Neuvillette_16 Start: 9135, Stop: 9566, Start Num: 2
Candidate Starts for Neuvillette_16:
(2, 9135), (21, 9387), (28, 9498), (29, 9510), (31, 9558),

Gene: Niblet_15 Start: 9843, Stop: 10169, Start Num: 5
Candidate Starts for Niblet_15:

(1, 9531), (Start: 5 @9843 has 1 MA's), (27, 10089),

Gene: Oppalora_14 Start: 9450, Stop: 9782, Start Num: 5
Candidate Starts for Oppalora_14:
(2, 9354), (3, 9444), (Start: 5 @9450 has 1 MA's), (7, 9486), (9, 9507), (16, 9585), (20, 9609),

Gene: Pecas_14 Start: 9594, Stop: 9935, Start Num: 4
Candidate Starts for Pecas_14:
(2, 9492), (4, 9594), (23, 9768),

Gene: Pelletreau_16 Start: 10083, Stop: 10376, Start Num: 7
Candidate Starts for Pelletreau_16:
(7, 10083), (9, 10104), (20, 10206), (22, 10221), (30, 10335),

Gene: PhirstandPhine_16 Start: 10036, Stop: 10362, Start Num: 5
Candidate Starts for PhirstandPhine_16:
(2, 9940), (Start: 5 @10036 has 1 MA's), (7, 10072), (9, 10093), (13, 10126), (21, 10198),

Gene: Pineda_16 Start: 10036, Stop: 10362, Start Num: 5
Candidate Starts for Pineda_16:
(2, 9940), (Start: 5 @10036 has 1 MA's), (7, 10072), (9, 10093), (13, 10126), (21, 10198),

Gene: Rattail_14 Start: 9503, Stop: 9835, Start Num: 5
Candidate Starts for Rattail_14:
(2, 9407), (Start: 5 @9503 has 1 MA's), (7, 9539), (9, 9560), (16, 9638), (20, 9662),

Gene: Roberts_16 Start: 9135, Stop: 9566, Start Num: 2
Candidate Starts for Roberts_16:
(2, 9135), (21, 9387), (28, 9498), (29, 9510), (31, 9558),

Gene: Shen_16 Start: 10084, Stop: 10377, Start Num: 7
Candidate Starts for Shen_16:
(7, 10084), (9, 10105), (20, 10207), (22, 10222), (30, 10336),

Gene: SirBeanington_14 Start: 9567, Stop: 9908, Start Num: 4
Candidate Starts for SirBeanington_14:
(2, 9465), (4, 9567), (23, 9741),

Gene: Solea_15 Start: 9979, Stop: 10320, Start Num: 4
Candidate Starts for Solea_15:
(4, 9979), (23, 10153),

Gene: TMaxx_16 Start: 8992, Stop: 9420, Start Num: 2
Candidate Starts for TMaxx_16:
(2, 8992), (24, 9262), (29, 9364), (31, 9412),

Gene: WalkingDead_14 Start: 9801, Stop: 10142, Start Num: 4
Candidate Starts for WalkingDead_14:
(4, 9801), (14, 9906), (17, 9933),

Gene: Westrich_16 Start: 10072, Stop: 10365, Start Num: 7
Candidate Starts for Westrich_16:
(7, 10072), (9, 10093), (20, 10195), (22, 10210), (30, 10324),

Gene: Zixiang_15 Start: 9843, Stop: 10169, Start Num: 5
Candidate Starts for Zixiang_15:
(1, 9531), (Start: 5 @9843 has 1 MA's), (27, 10089),