

Pham 224721



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 224721 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224721 has 40 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Mildred21\_118
- Track 2 : PumpkinSpice\_121
- Track 3 : Amabiko\_121, Rikishi\_124, Spelly\_121, Quaran19\_120, Wipeout\_116, Karimac\_120, Gibbi\_126, Bordeaux\_119, Starbow\_119, Jollison\_120, Birchlyn\_118, Battuta\_119, SaltySpittoon\_120, CeilingFan\_120, TomSawyer\_121
- Track 4 : Mugiwara\_124, Anedea\_114, Bmoc\_116, Riptide\_113
- Track 5 : Spilled\_122, JimJam\_122
- Track 6 : Enygma\_119
- Track 7 : Elmer\_120, Wofford\_116
- Track 8 : LukeCage\_118
- Track 9 : StarPlatinum\_122
- Track 10 : Francob\_148
- Track 11 : Karp\_140, Belfort\_145
- Track 12 : Jada\_148
- Track 13 : Moab\_144, Patelgo\_146
- Track 14 : Emma1919\_150
- Track 15 : Kenrey\_152, Phredrick\_149
- Track 16 : Westy\_147
- Track 17 : MeganTheeKilla\_146
- Track 18 : TunaTartare\_145

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

The start number called the most often in the published annotations is 12, it was called in 22 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amabiko\_121, Anedea\_114, Battuta\_119, Birchlyn\_118, Bmoc\_116, Bordeaux\_119, CeilingFan\_120, Elmer\_120, Enygma\_119, Gibbi\_126, Jollison\_120, Karimac\_120, LukeCage\_118, Mildred21\_118, Mugiwara\_124, PumpkinSpice\_121, Quaran19\_120, Rikishi\_124, Riptide\_113, SaltySpittoon\_120, Spelly\_121, StarPlatinum\_122, Starbow\_119, TomSawyer\_121, Wipeout\_116, Wofford\_116,

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

- JimJam\_122, Spilled\_122,

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

- Belfort\_145, Emma1919\_150, Francob\_148, Jada\_148, Karp\_140, Kenrey\_152, MeganTheeKilla\_146, Moab\_144, Patelgo\_146, Phredrick\_149, TunaTartare\_145, Westy\_147,

### Summary by start number:

Start 4:

- Found in 17 of 40 ( 42.5% ) of genes in pham
- Manual Annotations of this start: 2 of 35
- Called 11.8% of time when present
- Phage (with cluster) where this start called: JimJam\_122 (BE2), Spilled\_122 (BE2),

Start 7:

- Found in 3 of 40 ( 7.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Westy\_147 (BK1),

Start 10:

- Found in 12 of 40 ( 30.0% ) of genes in pham
- Manual Annotations of this start: 11 of 35
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Belfort\_145 (BK1), Emma1919\_150 (BK1), Francob\_148 (BK1), Jada\_148 (BK1), Karp\_140 (BK1), Kenrey\_152 (BK1), MeganTheeKilla\_146 (BK1), Moab\_144 (BK1), Patelgo\_146 (BK1), Phredrick\_149 (BK1), TunaTartare\_145 (BK1),

Start 12:

- Found in 28 of 40 ( 70.0% ) of genes in pham
- Manual Annotations of this start: 22 of 35
- Called 92.9% of time when present
- Phage (with cluster) where this start called: Amabiko\_121 (BE2), Anedea\_114 (BE1), Battuta\_119 (BE2), Birchlyn\_118 (BE2), Bmoc\_116 (BE1), Bordeaux\_119 (BE2), CeilingFan\_120 (BE2), Elmer\_120 (BE2), Enygma\_119 (BE2), Gibbi\_126 (BE2), Jollison\_120 (BE2), Karimac\_120 (BE2), LukeCage\_118 (BE2), Mildred21\_118 (BE1), Mugiwara\_124 (BE2), PumpkinSpice\_121 (BE2), Quaran19\_120 (BE2), Rikishi\_124 (BE2), Riptide\_113 (BE1), SaltySpittoon\_120 (BE2), Spelly\_121 (BE2), StarPlatinum\_122 (BE2), Starbow\_119 (BE2), TomSawyer\_121 (BE2), Wipeout\_116 (BE2), Wofford\_116 (BE2),

### Summary by clusters:

There are 3 clusters represented in this pham: BE2, BE1, BK1,

Info for manual annotations of cluster BE1:

- Start number 12 was manually annotated 3 times for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 4 was manually annotated 2 times for cluster BE2.
- Start number 12 was manually annotated 19 times for cluster BE2.

Info for manual annotations of cluster BK1:

•Start number 10 was manually annotated 11 times for cluster BK1.

**Gene Information:**

Gene: Amabiko\_121 Start: 77937, Stop: 78092, Start Num: 12

Candidate Starts for Amabiko\_121:

(1, 77835), (Start: 4 @77892 has 2 MA's), (Start: 12 @77937 has 22 MA's), (15, 77982), (19, 78066),

Gene: Anedea\_114 Start: 76495, Stop: 76650, Start Num: 12

Candidate Starts for Anedea\_114:

(Start: 12 @76495 has 22 MA's),

Gene: Battuta\_119 Start: 77911, Stop: 78066, Start Num: 12

Candidate Starts for Battuta\_119:

(1, 77809), (Start: 4 @77866 has 2 MA's), (Start: 12 @77911 has 22 MA's), (15, 77956), (19, 78040),

Gene: Belfort\_145 Start: 82737, Stop: 82892, Start Num: 10

Candidate Starts for Belfort\_145:

(Start: 10 @82737 has 11 MA's), (14, 82788), (17, 82851),

Gene: Birchlyn\_118 Start: 75797, Stop: 75952, Start Num: 12

Candidate Starts for Birchlyn\_118:

(1, 75695), (Start: 4 @75752 has 2 MA's), (Start: 12 @75797 has 22 MA's), (15, 75842), (19, 75926),

Gene: Bmoc\_116 Start: 77106, Stop: 77258, Start Num: 12

Candidate Starts for Bmoc\_116:

(Start: 12 @77106 has 22 MA's),

Gene: Bordeaux\_119 Start: 78066, Stop: 78221, Start Num: 12

Candidate Starts for Bordeaux\_119:

(1, 77964), (Start: 4 @78021 has 2 MA's), (Start: 12 @78066 has 22 MA's), (15, 78111), (19, 78195),

Gene: CeilingFan\_120 Start: 77829, Stop: 77984, Start Num: 12

Candidate Starts for CeilingFan\_120:

(1, 77727), (Start: 4 @77784 has 2 MA's), (Start: 12 @77829 has 22 MA's), (15, 77874), (19, 77958),

Gene: Elmer\_120 Start: 79140, Stop: 79295, Start Num: 12

Candidate Starts for Elmer\_120:

(6, 79104), (Start: 12 @79140 has 22 MA's), (15, 79185), (19, 79269),

Gene: Emma1919\_150 Start: 82354, Stop: 82509, Start Num: 10

Candidate Starts for Emma1919\_150:

(2, 82285), (3, 82309), (5, 82324), (Start: 10 @82354 has 11 MA's), (14, 82405), (17, 82468),

Gene: Enygma\_119 Start: 79456, Stop: 79611, Start Num: 12

Candidate Starts for Enygma\_119:

(Start: 12 @79456 has 22 MA's),

Gene: Francob\_148 Start: 82862, Stop: 83017, Start Num: 10

Candidate Starts for Francob\_148:

(2, 82793), (3, 82817), (5, 82832), (7, 82856), (8, 82859), (Start: 10 @82862 has 11 MA's), (14, 82913), (17, 82976),

Gene: Gibbi\_126 Start: 78049, Stop: 78204, Start Num: 12

Candidate Starts for Gibbi\_126:

(1, 77947), (Start: 4 @78004 has 2 MA's), (Start: 12 @78049 has 22 MA's), (15, 78094), (19, 78178),

Gene: Jada\_148 Start: 82145, Stop: 82300, Start Num: 10

Candidate Starts for Jada\_148:

(Start: 10 @82145 has 11 MA's), (14, 82196), (17, 82259),

Gene: JimJam\_122 Start: 78415, Stop: 78615, Start Num: 4

Candidate Starts for JimJam\_122:

(1, 78358), (Start: 4 @78415 has 2 MA's), (Start: 12 @78460 has 22 MA's), (15, 78505), (19, 78589),

Gene: Jollison\_120 Start: 77894, Stop: 78049, Start Num: 12

Candidate Starts for Jollison\_120:

(1, 77792), (Start: 4 @77849 has 2 MA's), (Start: 12 @77894 has 22 MA's), (15, 77939), (19, 78023),

Gene: Karimac\_120 Start: 78175, Stop: 78330, Start Num: 12

Candidate Starts for Karimac\_120:

(1, 78073), (Start: 4 @78130 has 2 MA's), (Start: 12 @78175 has 22 MA's), (15, 78220), (19, 78304),

Gene: Karp\_140 Start: 82164, Stop: 82319, Start Num: 10

Candidate Starts for Karp\_140:

(Start: 10 @82164 has 11 MA's), (14, 82215), (17, 82278),

Gene: Kenrey\_152 Start: 83476, Stop: 83631, Start Num: 10

Candidate Starts for Kenrey\_152:

(3, 83431), (5, 83446), (Start: 10 @83476 has 11 MA's), (14, 83527), (17, 83590),

Gene: LukeCage\_118 Start: 77847, Stop: 77999, Start Num: 12

Candidate Starts for LukeCage\_118:

(Start: 12 @77847 has 22 MA's), (15, 77892), (18, 77967),

Gene: MeganTheeKilla\_146 Start: 81670, Stop: 81822, Start Num: 10

Candidate Starts for MeganTheeKilla\_146:

(Start: 10 @81670 has 11 MA's), (14, 81721), (16, 81757), (17, 81781),

Gene: Mildred21\_118 Start: 77407, Stop: 77559, Start Num: 12

Candidate Starts for Mildred21\_118:

(11, 77401), (Start: 12 @77407 has 22 MA's), (13, 77410),

Gene: Moab\_144 Start: 83836, Stop: 83991, Start Num: 10

Candidate Starts for Moab\_144:

(Start: 10 @83836 has 11 MA's), (14, 83887), (17, 83950),

Gene: Mugiwara\_124 Start: 78535, Stop: 78690, Start Num: 12

Candidate Starts for Mugiwara\_124:

(Start: 12 @78535 has 22 MA's),

Gene: Patelgo\_146 Start: 84528, Stop: 84683, Start Num: 10

Candidate Starts for Patelgo\_146:

(Start: 10 @84528 has 11 MA's), (14, 84579), (17, 84642),

Gene: Phredrick\_149 Start: 81811, Stop: 81966, Start Num: 10

Candidate Starts for Phredrick\_149:

(3, 81766), (5, 81781), (Start: 10 @81811 has 11 MA's), (14, 81862), (17, 81925),

Gene: PumpkinSpice\_121 Start: 78501, Stop: 78656, Start Num: 12

Candidate Starts for PumpkinSpice\_121:

(Start: 12 @78501 has 22 MA's), (15, 78546), (19, 78630),

Gene: Quaran19\_120 Start: 77928, Stop: 78083, Start Num: 12

Candidate Starts for Quaran19\_120:

(1, 77826), (Start: 4 @77883 has 2 MA's), (Start: 12 @77928 has 22 MA's), (15, 77973), (19, 78057),

Gene: Rikishi\_124 Start: 77843, Stop: 77998, Start Num: 12

Candidate Starts for Rikishi\_124:

(1, 77741), (Start: 4 @77798 has 2 MA's), (Start: 12 @77843 has 22 MA's), (15, 77888), (19, 77972),

Gene: Riptide\_113 Start: 75931, Stop: 76086, Start Num: 12

Candidate Starts for Riptide\_113:

(Start: 12 @75931 has 22 MA's),

Gene: SaltySpittoon\_120 Start: 77940, Stop: 78095, Start Num: 12

Candidate Starts for SaltySpittoon\_120:

(1, 77838), (Start: 4 @77895 has 2 MA's), (Start: 12 @77940 has 22 MA's), (15, 77985), (19, 78069),

Gene: Spelly\_121 Start: 77892, Stop: 78047, Start Num: 12

Candidate Starts for Spelly\_121:

(1, 77790), (Start: 4 @77847 has 2 MA's), (Start: 12 @77892 has 22 MA's), (15, 77937), (19, 78021),

Gene: Spilled\_122 Start: 77964, Stop: 78164, Start Num: 4

Candidate Starts for Spilled\_122:

(1, 77907), (Start: 4 @77964 has 2 MA's), (Start: 12 @78009 has 22 MA's), (15, 78054), (19, 78138),

Gene: StarPlatinum\_122 Start: 78906, Stop: 79058, Start Num: 12

Candidate Starts for StarPlatinum\_122:

(Start: 12 @78906 has 22 MA's), (15, 78951), (18, 79026),

Gene: Starbow\_119 Start: 77913, Stop: 78068, Start Num: 12

Candidate Starts for Starbow\_119:

(1, 77811), (Start: 4 @77868 has 2 MA's), (Start: 12 @77913 has 22 MA's), (15, 77958), (19, 78042),

Gene: TomSawyer\_121 Start: 77958, Stop: 78113, Start Num: 12

Candidate Starts for TomSawyer\_121:

(1, 77856), (Start: 4 @77913 has 2 MA's), (Start: 12 @77958 has 22 MA's), (15, 78003), (19, 78087),

Gene: TunaTartare\_145 Start: 84538, Stop: 84702, Start Num: 10

Candidate Starts for TunaTartare\_145:

(3, 84490), (5, 84505), (7, 84529), (8, 84532), (9, 84535), (Start: 10 @84538 has 11 MA's), (17, 84658), (19, 84685),

Gene: Westy\_147 Start: 83690, Stop: 83851, Start Num: 7

Candidate Starts for Westy\_147:

(3, 83651), (5, 83666), (7, 83690), (8, 83693), (Start: 10 @83696 has 11 MA's), (14, 83747), (17, 83810),

Gene: Wipeout\_116 Start: 78282, Stop: 78437, Start Num: 12

Candidate Starts for Wipeout\_116:

(1, 78180), (Start: 4 @78237 has 2 MA's), (Start: 12 @78282 has 22 MA's), (15, 78327), (19, 78411),

Gene: Wofford\_116 Start: 79104, Stop: 79259, Start Num: 12

Candidate Starts for Wofford\_116:

(6, 79068), (Start: 12 @79104 has 22 MA's), (15, 79149), (19, 79233),