Pham 86517


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 86517 Report

This analysis was run 04/05/24 on database version 557.
Pham number 86517 has 28 members, 5 are drafts.
Phages represented in each track:

- Track 1 : Leo04_169, Tribute_166, EGole_169, Lululemon_171, Cross_168, Peebs_165, Larnāv_177, Sushì23_167, Samisti12_169, Watermoore_167, Teutsch_166, PacMānQ_171, BluēOtter_171, HangryHippo_171, Pep̄perwood_167, Cursive-167
- Track $\overline{2}$ : NootNoot_163, Bartholomune_168, Braelyn_169, Persimmon_169, Squillium_169, Paradiddles_160, Liandry_168, PinkiePie_166
- Track 3 : Evy 162
- Track 4 : Jay2̄Jay_172, Targaryen_168, Warpy_171


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

The start number called the most often in the published annotations is 2 , it was called in 19 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bartholomune_168, BlueOtter_171, Braelyn_169, Cross_168, Cursive_167, EGole_169, HañgryHippo_171, Larnav_177, Leo04_169, Liandry_168, Lululemon_171, NootNoot_163, PacManQ_171, Paradiddles_160, Peebs_165, Pepperwoōd_167, Persimmon_169, Pinkiē्Pie_166, Samisti12_169, Squillium_169, Sushi23_167, Teutsch_166, Tribute_166, Watērmoore_167,

Genes that have the "Most Annotated" start but do not call it:
-
Genes that do not have the "Most Annotated" start:
-Evy_162, Jay2Jay_172, Targaryen_168, Warpy_171,

## Summary by start number:

Start 2:

- Found in 24 of 28 ( $85.7 \%$ ) of genes in pham
- Manual Annotations of this start: 19 of 23
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Bartholomune_168 (BE1),

BlueOtter_171 (BE1), Braelyn_169 (BE1), Cross_168 (BE1), Cursive_167 (BE1), EGole_169 (BE1), HangryHippo_171 (BE1), Larnav_177 (BE1), Leo04_169 (BE1), Liandry 168 (BE1), Lululemon_171 (BE1), NootNoot_163 (BE1), PacManQ_171 (BE1), Paradiddles_160 (BE1), Peebs_165 (BE1), Pepperwood_167 (BE1), Persimmon_169 (BE1), PinkiePie_166(BE1), Samisti12_169 (BE1), Squillium_169 (BE1), Sushì23_167 (BE1), Teutsch_166 (BE1), Tribute_166 (BE1), Watermoōre_167 (BE1),

Start 3:

- Found in 4 of 28 ( $14.3 \%$ ) of genes in pham
- Manual Annotations of this start: 3 of 23
- Called $75.0 \%$ of time when present
- Phage (with cluster) where this start called: Jay2Jay_172 (BE1), Targaryen_168 (BE1), Warpy_171 (BE1),

Start 4:

- Found in 28 of 28 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called $3.6 \%$ of time when present
- Phage (with cluster) where this start called: Evy_162 (BE1),


## Summary by clusters:

There is one cluster represented in this pham: BE1
Info for manual annotations of cluster BE1:

- Start number 2 was manually annotated 19 times for cluster BE1.
- Start number 3 was manually annotated 3 times for cluster BE1.
- Start number 4 was manually annotated 1 time for cluster BE1.


## Gene Information:

Gene: Bartholomune_168 Start: 92849, Stop: 93088, Start Num: 2
Candidate Starts for Bartholomune_168:
(1, 92822), (Start: 2 @92849 has 19 MA's), (Start: 4 @92861 has 1 MA's), (5, 92987), (6, 93029), (7, 93077),

Gene: BlueOtter_171 Start: 94212, Stop: 94454, Start Num: 2
Candidate Starts for BlueOtter_171:
(Start: 2 @94212 has 19 MA's), (Start: 4 @94224 has 1 MA's), (5, 94350), (6, 94392), (7, 94443),
Gene: Braelyn_169 Start: 93798, Stop: 94037, Start Num: 2
Candidate Starts for Braelyn_169:
(1, 93771), (Start: 2 @93798 has 19 MA's), (Start: 4 @93810 has 1 MA's), (5, 93936), (6, 93978), (7, 94026),

Gene: Cross_168 Start: 94857, Stop: 95099, Start Num: 2
Candidate Starts for Cross_168:
(Start: 2 @94857 has 19 MA's), (Start: 4 @94869 has 1 MA's), (5, 94995), (6, 95037), (7, 95088),

Gene: Cursive_167 Start: 93066, Stop: 93308, Start Num: 2
Candidate Starts for Cursive_167:
(Start: 2 @93066 has 19 MA's), (Start: 4 @93078 has 1 MA's), (5, 93204), (6, 93246), (7, 93297),
Gene: EGole_169 Start: 95874, Stop: 96116, Start Num: 2
Candidate Starts for EGole_169:
(Start: 2 @95874 has 19 MA's), (Start: 4 @95886 has 1 MA's), (5, 96012), (6, 96054), (7, 96105),
Gene: Evy_162 Start: 94098, Stop: 94325, Start Num: 4
Candidate Starts for Evy_162:
(Start: 3 @94086 has 3 MA's), (Start: 4 @94098 has 1 MA's), (6, 94266), (7, 94314),
Gene: HangryHippo_171 Start: 94212, Stop: 94454, Start Num: 2
Candidate Starts for HangryHippo_171:
(Start: 2 @94212 has 19 MA's), (Start: 4 @94224 has 1 MA's), (5, 94350), (6, 94392), (7, 94443),
Gene: Jay2Jay_172 Start: 94885, Stop: 95124, Start Num: 3
Candidate Starts for Jay2Jay_172:
(Start: 3 @94885 has 3 MA's), (Start: 4 @94897 has 1 MA's), (6, 95065), (7, 95113),
Gene: Larnav_177 Start: 94831, Stop: 95073, Start Num: 2
Candidate Starts for Larnav_177:
(Start: 2 @94831 has 19 MA's), (Start: 4 @94843 has 1 MA's), (5, 94969), (6, 95011), (7, 95062),
Gene: Leo04_169 Start: 94712, Stop: 94954, Start Num: 2
Candidate Starts for Leo04_169:
(Start: 2 @94712 has 19 MA's), (Start: 4 @94724 has 1 MA's), (5, 94850), (6, 94892), (7, 94943),
Gene: Liandry_168 Start: 93592, Stop: 93831, Start Num: 2
Candidate Starts for Liandry_168:
(1, 93565), (Start: 2 @93592 has 19 MA's), (Start: 4 @93604 has 1 MA's), (5, 93730), (6, 93772), (7, 93820),

Gene: Lululemon_171 Start: 93593, Stop: 93835, Start Num: 2
Candidate Starts for Lululemon_171:
(Start: 2 @93593 has 19 MA's), (Start: 4 @93605 has 1 MA's), (5, 93731), (6, 93773), (7, 93824),

Gene: NootNoot_163 Start: 92495, Stop: 92734, Start Num: 2
Candidate Starts for NootNoot_163:
(1, 92468), (Start: 2 @92495 has 19 MA's), (Start: 4 @92507 has 1 MA's), (5, 92633), (6, 92675), (7, 92723),

Gene: PacManQ_171 Start: 93593, Stop: 93835, Start Num: 2
Candidate Starts for PacManQ_171:
(Start: 2 @93593 has 19 MA's), (Start: 4 @93605 has 1 MA's), (5, 93731), (6, 93773), (7, 93824),
Gene: Paradiddles_160 Start: 94798, Stop: 95037, Start Num: 2
Candidate Starts for Paradiddles_160:
(1, 94771), (Start: 2 @94798 has 19 MA's), (Start: 4 @94810 has 1 MA's), (5, 94936), (6, 94978), (7, 95026),

Gene: Peebs_165 Start: 94534, Stop: 94776, Start Num: 2
Candidate Starts for Peebs_165:
(Start: 2 @94534 has 19 MA's), (Start: 4 @94546 has 1 MA's), (5, 94672), (6, 94714), (7, 94765),
Gene: Pepperwood_167 Start: 94478, Stop: 94720, Start Num: 2
Candidate Starts for Pepperwood_167:
(Start: 2 @94478 has 19 MA's), (Start: 4 @94490 has 1 MA's), (5, 94616), (6, 94658), (7, 94709),
Gene: Persimmon_169 Start: 92952, Stop: 93191, Start Num: 2
Candidate Starts for Persimmon_169:
(1, 92925), (Start: 2 @92952 has 19 MA's), (Start: 4 @92964 has 1 MA's), (5, 93090), (6, 93132), (7, 93180),

Gene: PinkiePie_166 Start: 93592, Stop: 93831, Start Num: 2
Candidate Starts for PinkiePie_166:
(1, 93565), (Start: 2 @93592 has 19 MA's), (Start: 4 @93604 has 1 MA's), (5, 93730), (6, 93772), (7, 93820),

Gene: Samisti12_169 Start: 95918, Stop: 96160, Start Num: 2
Candidate Starts for Samisti12_169:
(Start: 2 @95918 has 19 MA's), (Start: 4 @95930 has 1 MA's), (5, 96056), (6, 96098), (7, 96149),
Gene: Squillium_169 Start: 93594, Stop: 93833, Start Num: 2
Candidate Starts for Squillium_169:
(1, 93567), (Start: 2 @93594 has 19 MA's), (Start: 4 @93606 has 1 MA's), (5, 93732), (6, 93774), (7, 93822),

Gene: Sushi23_167 Start: 94892, Stop: 95134, Start Num: 2
Candidate Starts for Sushi23_167:
(Start: 2 @94892 has 19 MA's), (Start: 4 @94904 has 1 MA's), (5, 95030), (6, 95072), (7, 95123),
Gene: Targaryen_168 Start: 95221, Stop: 95460, Start Num: 3
Candidate Starts for Targaryen_168:
(Start: 3 @95221 has 3 MA's), (Start: 4 @95233 has 1 MA's), (6, 95401), (7, 95449),
Gene: Teutsch_166 Start: 95016, Stop: 95258, Start Num: 2
Candidate Starts for Teutsch_166:
(Start: 2 @95016 has 19 MA's), (Start: 4 @95028 has 1 MA's), (5, 95154), (6, 95196), (7, 95247),
Gene: Tribute_166 Start: 95033, Stop: 95275, Start Num: 2
Candidate Starts for Tribute_166:
(Start: 2 @95033 has 19 MA's), (Start: 4 @95045 has 1 MA's), (5, 95171), (6, 95213), (7, 95264),
Gene: Warpy_171 Start: 94544, Stop: 94783, Start Num: 3
Candidate Starts for Warpy_171:
(Start: 3 @94544 has 3 MA's), (Start: 4 @94556 has 1 MA's), (6, 94724), (7, 94772),
Gene: Watermoore_167 Start: 95428, Stop: 95670, Start Num: 2
Candidate Starts for Watermoore_167:
(Start: 2 @95428 has 19 MA's), (Start: 4 @95440 has 1 MA's), (5, 95566), (6, 95608), (7, 95659),

