

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 221902 Report

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

Pham number 221902 has 14 members, 1 are drafts.

Phages represented in each track:

Track 1: HangryHippo\_211, Teutsch\_212, EGole\_216, Peebs\_210, Larnav\_212, Watermoore\_212, Tribute\_209, Pepperwood\_213, Samisti12\_217, BlueOtter\_211, Cross\_212

Track 2 : Riptide\_220Track 3 : Stanimal\_226Track 4 : Tomas 226

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

The start number called the most often in the published annotations is 21, it was called in 12 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• BlueOtter\_211, Cross\_212, EGole\_216, HangryHippo\_211, Larnav\_212, Peebs\_210, Pepperwood\_213, Samisti12\_217, Stanimal\_226, Teutsch\_212, Tribute\_209, Watermoore\_212,

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

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

Riptide\_220, Tomas\_226,

# Summary by start number:

#### Start 20:

- Found in 2 of 14 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Riptide\_220 (BE1), Tomas\_226 (BE2),

### Start 21:

- Found in 12 of 14 (85.7%) of genes in pham
- Manual Annotations of this start: 12 of 13

- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueOtter\_211 (BE1), Cross\_212 (BE1), EGole\_216 (BE1), HangryHippo\_211 (BE1), Larnav\_212 (BE1), Peebs\_210 (BE1), Pepperwood\_213 (BE1), Samisti12\_217 (BE1), Stanimal\_226 (BE2), Teutsch\_212 (BE1), Tribute\_209 (BE1), Watermoore\_212 (BE1),

## Summary by clusters:

There are 2 clusters represented in this pham: BE2, BE1,

Info for manual annotations of cluster BE1:

•Start number 21 was manually annotated 11 times for cluster BE1.

Info for manual annotations of cluster BE2:

- •Start number 20 was manually annotated 1 time for cluster BE2.
- •Start number 21 was manually annotated 1 time for cluster BE2.

### Gene Information:

Gene: BlueOtter\_211 Start: 106797, Stop: 106940, Start Num: 21 Candidate Starts for BlueOtter\_211: (16, 106734), (18, 106743), (19, 106746), (Start: 21 @106797 has 12 MA's), Gene: Cross\_212 Start: 107442, Stop: 107585, Start Num: 21 Candidate Starts for Cross\_212: (16, 107379), (18, 107388), (19, 107391), (Start: 21 @107442 has 12 MA's), Gene: EGole\_216 Start: 109139, Stop: 109282, Start Num: 21 Candidate Starts for EGole\_216: (16, 109076), (18, 109085), (19, 109088), (Start: 21 @109139 has 12 MA's),

Gene: HangryHippo\_211 Start: 106797, Stop: 106940, Start Num: 21 Candidate Starts for HangryHippo\_211: (16, 106734), (18, 106743), (19, 106746), (Start: 21 @106797 has 12 MA's),

Gene: Larnav\_212 Start: 107258, Stop: 107401, Start Num: 21 Candidate Starts for Larnav\_212: (16, 107195), (18, 107204), (19, 107207), (Start: 21 @107258 has 12 MA's),

Gene: Peebs\_210 Start: 107229, Stop: 107372, Start Num: 21 Candidate Starts for Peebs\_210: (16, 107166), (18, 107175), (19, 107178), (Start: 21 @107229 has 12 MA's),

Gene: Pepperwood\_213 Start: 107461, Stop: 107604, Start Num: 21 Candidate Starts for Pepperwood\_213: (16, 107398), (18, 107407), (19, 107410), (Start: 21 @107461 has 12 MA's),

Gene: Riptide\_220 Start: 106574, Stop: 106720, Start Num: 20 Candidate Starts for Riptide\_220: (16, 106514), (18, 106523), (19, 106526), (Start: 20 @106574 has 1 MA's), (22, 106646),

Gene: Samisti12\_217 Start: 109088, Stop: 109231, Start Num: 21

Candidate Starts for Samisti12\_217:

(16, 109025), (18, 109034), (19, 109037), (Start: 21 @109088 has 12 MA's),

Gene: Stanimal\_226 Start: 109175, Stop: 109336, Start Num: 21

Candidate Starts for Stanimal 226:

(1, 108977), (2, 109004), (3, 109007), (4, 109025), (5, 109031), (6, 109052), (7, 109055), (8, 109070), (9, 109079), (11, 109088), (12, 109094), (13, 109097), (15, 109112), (17, 109118), (18, 109124), (Start: 21 @109175 has 12 MA's),

Gene: Teutsch\_212 Start: 107917, Stop: 108060, Start Num: 21

Candidate Starts for Teutsch 212:

(16, 107854), (18, 107863), (19, 107866), (Start: 21 @107917 has 12 MA's),

Gene: Tomas\_226 Start: 109189, Stop: 109332, Start Num: 20

Candidate Starts for Tomas\_226:

(8, 109084), (9, 109093), (10, 109099), (11, 109102), (14, 109114), (16, 109129), (18, 109138), (19, 109108), (19, 109108), (10, 109108), (1

109141), (Start: 20 @109189 has 1 MA's), (22, 109258),

Gene: Tribute\_209 Start: 108082, Stop: 108225, Start Num: 21

Candidate Starts for Tribute\_209:

(16, 108019), (18, 108028), (19, 108031), (Start: 21 @108082 has 12 MA's),

Gene: Watermoore\_212 Start: 108440, Stop: 108583, Start Num: 21

Candidate Starts for Watermoore 212:

(16, 108377), (18, 108386), (19, 108389), (Start: 21 @108440 has 12 MA's),