

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 222221 Report

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

Pham number 222221 has 5 members, 2 are drafts.

Phages represented in each track:

Track 1 : Teech\_12Track 2 : Fenry\_29

Track 3 : RavenCo17\_28Track 4 : MagicMan\_29

Track 5 : BackstagePass\_29

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

The start number called the most often in the published annotations is 11, it was called in 1 of the 3 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

BackstagePass\_29, MagicMan\_29,

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

• Teech\_12,

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

• Fenry\_29, RavenCo17\_28,

### Summary by start number:

#### Start 1:

- Found in 1 of 5 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 1 of 3
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fenry\_29 (CV),

#### Start 3:

- Found in 1 of 5 (20.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Teech 12 (CS4).

#### Start 10:

- Found in 1 of 5 (20.0%) of genes in pham
- Manual Annotations of this start: 1 of 3
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RavenCo17\_28 (CZ8),

#### Start 11:

- Found in 3 of 5 (60.0%) of genes in pham
- Manual Annotations of this start: 1 of 3
- Called 66.7% of time when present
- Phage (with cluster) where this start called: BackstagePass\_29 (DB), MagicMan\_29 (DB),

## Summary by clusters:

There are 4 clusters represented in this pham: CS4, CZ8, DB, CV,

Info for manual annotations of cluster CV:

•Start number 1 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CZ8:

•Start number 10 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster DB:

•Start number 11 was manually annotated 1 time for cluster DB.

#### Gene Information:

Gene: BackstagePass\_29 Start: 24433, Stop: 26337, Start Num: 11

Candidate Starts for BackstagePass 29:

(Start: 11 @24433 has 1 MA's), (16, 24490), (17, 24493), (19, 24547), (22, 24592), (24, 24610), (37, 24859), (45, 25051), (47, 25111), (51, 25261), (53, 25468), (54, 25474), (56, 25516), (57, 25645), (58, 25720), (59, 25783), (61, 25828), (62, 25855), (63, 25888), (64, 25924), (65, 26008), (67, 26116), (69, 26143), (71, 26206), (72, 26218), (77, 26317),

Gene: Fenry\_29 Start: 24950, Stop: 27100, Start Num: 1

Candidate Starts for Fenry 29:

(Start: 1 @24950 has 1 MA's), (2, 24968), (4, 25037), (5, 25049), (6, 25058), (7, 25061), (9, 25142), (25, 25382), (37, 25625), (38, 25631), (39, 25649), (40, 25652), (41, 25691), (46, 25826), (47, 25874), (49, 25955), (50, 25961), (51, 26024), (54, 26237), (55, 26273), (56, 26279), (58, 26483), (59, 26546), (60, 26585), (62, 26618), (63, 26651), (66, 26795), (67, 26879), (69, 26906), (70, 26960), (71, 26969), (75, 27044),

Gene: MagicMan\_29 Start: 24626, Stop: 26527, Start Num: 11

Candidate Starts for MagicMan\_29:

(Start: 11 @24626 has 1 MA's), (24, 24803), (35, 24968), (37, 25052), (38, 25058), (39, 25076), (40, 25079), (42, 25127), (43, 25190), (47, 25301), (48, 25316), (49, 25382), (50, 25388), (51, 25451), (53, 25658), (54, 25664), (55, 25700), (56, 25706), (58, 25910), (59, 25973), (62, 26045), (63, 26078), (67, 26306), (69, 26333), (71, 26396), (72, 26408), (74, 26462), (77, 26507),

Gene: RavenCo17\_28 Start: 25331, Stop: 27253, Start Num: 10 Candidate Starts for RavenCo17\_28:

 $\begin{array}{l} (8,25256), (Start: 10 @25331 \ has 1 \ MA's), (15,25391), (18,25415), (23,25514), (26,25556), (27,25559), (29,25607), (31,25616), (32,25622), (33,25640), (37,25778), (38,25784), (39,25802), (40,25805), (44,25928), (47,26027), (49,26108), (50,26114), (51,26177), (53,26384), (54,26390), (55,26426), (56,26432), (58,26636), (59,26699), (60,26738), (62,26771), (63,26804), (65,26924), (66,26948), (67,27032), (71,27122), (72,27134), (74,27188), (77,27233), (78,27242), \end{array}$ 

Gene: Teech\_12 Start: 12596, Stop: 14713, Start Num: 3 Candidate Starts for Teech\_12:

(3, 12596), (6, 12677), (7, 12680), (Start: 11 @12776 has 1 MA's), (12, 12785), (13, 12791), (14, 12806), (20, 12908), (21, 12944), (28, 13034), (30, 13052), (34, 13112), (36, 13214), (37, 13235), (39, 13259), (43, 13376), (45, 13427), (47, 13487), (50, 13574), (51, 13637), (52, 13661), (53, 13844), (54, 13850), (55, 13886), (56, 13892), (58, 14096), (59, 14159), (62, 14231), (63, 14264), (65, 14384), (66, 14408), (67, 14492), (68, 14513), (69, 14519), (72, 14594), (73, 14636), (76, 14660), (77, 14693),