

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 87579 Report

This analysis was run 03/30/24 on database version 556.

Pham number 87579 has 11 members, 1 are drafts.

Phages represented in each track:

Track 1 : Lucky10\_13

Track 2 : Morkie\_13, PhorbesPhlower\_13

Track 3: BearBQ\_14, Birdsong\_14, MortyNRick\_14, Ecliptus\_14

• Track 4 : ODay 14

Track 5 : Kuwabara\_14, Apricot\_14, Crater\_14

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

The start number called the most often in the published annotations is 6, it was called in 10 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Apricot\_14, BearBQ\_14, Birdsong\_14, Crater\_14, Ecliptus\_14, Kuwabara\_14, Lucky10\_13, Morkie\_13, MortyNRick\_14, ODay\_14, PhorbesPhlower\_13,

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

•

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

•

# Summary by start number:

#### Start 6:

- Found in 11 of 11 (100.0%) of genes in pham
- Manual Annotations of this start: 10 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apricot\_14 (DN3), BearBQ\_14 (DN), Birdsong\_14 (DN), Crater\_14 (DN3), Ecliptus\_14 (DN), Kuwabara\_14 (DN4), Lucky10\_13 (DH), Morkie\_13 (DH), MortyNRick\_14 (DN), ODay\_14 (DN), PhorbesPhlower\_13 (DH),

### Summary by clusters:

There are 4 clusters represented in this pham: DN, DN4, DH, DN3,

Info for manual annotations of cluster DH:

•Start number 6 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN:

•Start number 6 was manually annotated 4 times for cluster DN.

Info for manual annotations of cluster DN3:

•Start number 6 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

•Start number 6 was manually annotated 1 time for cluster DN4.

### Gene Information:

Gene: Apricot\_14 Start: 8548, Stop: 9000, Start Num: 6

Candidate Starts for Apricot\_14:

(5, 8527), (Start: 6 @8548 has 10 MA's), (8, 8650), (9, 8668), (12, 8737), (15, 8824), (17, 8863), (18, 8875), (20, 8902), (21, 8938), (22, 8968),

Gene: BearBQ 14 Start: 8547, Stop: 8984, Start Num: 6

Candidate Starts for BearBQ 14:

(3, 8523), (4, 8526), (Start: 6 @8547 has 10 MA's), (7, 8643), (8, 8649), (9, 8667), (10, 8682), (11, 8727), (14, 8805), (17, 8847), (19, 8883),

Gene: Birdsong\_14 Start: 8547, Stop: 8984, Start Num: 6

Candidate Starts for Birdsong\_14:

(3, 8523), (4, 8526), (Start: 6 @8547 has 10 MA's), (7, 8643), (8, 8649), (9, 8667), (10, 8682), (11, 8727), (14, 8805), (17, 8847), (19, 8883),

Gene: Crater 14 Start: 8548, Stop: 9000, Start Num: 6

Candidate Starts for Crater 14:

(5, 8527), (Start: 6 @8548 has 10 MA's), (8, 8650), (9, 8668), (12, 8737), (15, 8824), (17, 8863), (18, 8875), (20, 8902), (21, 8938), (22, 8968),

Gene: Ecliptus\_14 Start: 8276, Stop: 8713, Start Num: 6

Candidate Starts for Ecliptus 14:

(3, 8252), (4, 8255), (Start: 6 @8276 has 10 MA's), (7, 8372), (8, 8378), (9, 8396), (10, 8411), (11, 8456), (14, 8534), (17, 8576), (19, 8612),

Gene: Kuwabara\_14 Start: 8548, Stop: 9000, Start Num: 6

Candidate Starts for Kuwabara\_14:

(5, 8527), (Start: 6 @8548 has 10 MA's), (8, 8650), (9, 8668), (12, 8737), (15, 8824), (17, 8863), (18, 8875), (20, 8902), (21, 8938), (22, 8968),

Gene: Lucky10 13 Start: 7794, Stop: 8246, Start Num: 6

Candidate Starts for Luckv10 13:

(Start: 6 @7794 has 10 MA's), (7, 7890), (8, 7896), (9, 7914), (10, 7929), (13, 8043), (15, 8070), (16, 8094), (18, 8121), (20, 8148), (22, 8214),

Gene: Morkie\_13 Start: 7759, Stop: 8211, Start Num: 6

Candidate Starts for Morkie\_13:

(Start: 6 @7759 has 10 MA's), (7, 7855), (8, 7861), (9, 7879), (13, 8008), (15, 8035), (16, 8059), (17, 8074), (18, 8086), (20, 8113), (22, 8179),

Gene: MortyNRick\_14 Start: 8547, Stop: 8984, Start Num: 6

Candidate Starts for MortyNRick\_14:

(3, 8523), (4, 8526), (Start: 6 @8547 has 10 MA's), (7, 8643), (8, 8649), (9, 8667), (10, 8682), (11, 8727), (14, 8805), (17, 8847), (19, 8883),

Gene: ODay\_14 Start: 8273, Stop: 8710, Start Num: 6

Candidate Starts for ODay\_14:

(1, 8183), (2, 8222), (Start: 6 @8273 has 10 MA's), (7, 8369), (8, 8375), (9, 8393), (10, 8408), (11, 8453), (14, 8531), (17, 8573), (19, 8609),

Gene: PhorbesPhlower\_13 Start: 7759, Stop: 8211, Start Num: 6

Candidate Starts for PhorbesPhlower 13:

(Start: 6 @7759 has 10 MA's), (7, 7855), (8, 7861), (9, 7879), (13, 8008), (15, 8035), (16, 8059), (17, 8074), (18, 8086), (20, 8113), (22, 8179),