

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 203583 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203583 has 9 members, 1 are drafts.

Phages represented in each track:

• Track 1 : Enceladus 116, DirkDirk 117

Track 2 : Silverleaf\_127

Track 3: Wilder\_143, Kahlid\_141

Track 4: Gardann\_140, Underpass\_131, LilDestine\_139

Track 5 : Nicholasp3\_142

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

The start number called the most often in the published annotations is 5, it was called in 4 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Gardann\_140, Kahlid\_141, LilDestine\_139, Underpass\_131, Wilder\_143,

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

Nicholasp3\_142,

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

DirkDirk 117, Enceladus 116, Silverleaf 127,

## Summary by start number:

#### Start 2:

- Found in 3 of 9 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Silverleaf\_127 (L1),

#### Start 3:

- Found in 3 of 9 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 2 of 8
- Called 66.7% of time when present
- Phage (with cluster) where this start called: DirkDirk\_117 (L1), Enceladus\_116 (L1),

#### Start 5:

- Found in 6 of 9 (66.7%) of genes in pham
- Manual Annotations of this start: 4 of 8
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Gardann\_140 (L2), Kahlid\_141 (L2), LilDestine\_139 (L2), Underpass\_131 (L2), Wilder\_143 (L2),

#### Start 7:

- Found in 6 of 9 (66.7%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Nicholasp3\_142 (L2),

### Summary by clusters:

There are 2 clusters represented in this pham: L2, L1,

Info for manual annotations of cluster L1:

- •Start number 2 was manually annotated 1 time for cluster L1.
- •Start number 3 was manually annotated 2 times for cluster L1.

Info for manual annotations of cluster L2:

- •Start number 5 was manually annotated 4 times for cluster L2.
- •Start number 7 was manually annotated 1 time for cluster L2.

### Gene Information:

Gene: DirkDirk 117 Start: 67326, Stop: 66700, Start Num: 3

Candidate Starts for DirkDirk 117:

(1, 67398), (Start: 2 @67365 has 1 MA's), (Start: 3 @67326 has 2 MA's), (4, 67278), (6, 67212), (8, 67173), (9, 67140), (10, 67107), (12, 66999), (14, 66972), (18, 66882), (21, 66795), (22, 66771), (23, 66762),

Gene: Enceladus\_116 Start: 65725, Stop: 65099, Start Num: 3

Candidate Starts for Enceladus\_116:

(1, 65797), (Start: 2 @65764 has 1 MA's), (Start: 3 @65725 has 2 MA's), (4, 65677), (6, 65611), (8, 65572), (9, 65539), (10, 65506), (12, 65398), (14, 65371), (18, 65281), (21, 65194), (22, 65170), (23, 65161),

Gene: Gardann\_140 Start: 75171, Stop: 74662, Start Num: 5

Candidate Starts for Gardann 140:

(Start: 5 @75171 has 4 MA's), (Start: 7 @75138 has 1 MA's), (10, 75054), (11, 75039), (12, 74946), (13, 74928), (14, 74919), (15, 74913), (16, 74868), (17, 74850), (19, 74832), (23, 74733), (24, 74712),

Gene: Kahlid\_141 Start: 75085, Stop: 74576, Start Num: 5

Candidate Starts for Kahlid 141:

(Start: 5 @75085 has 4 MA's), (Start: 7 @75052 has 1 MA's), (10, 74968), (11, 74953), (12, 74860), (13, 74842), (14, 74833), (15, 74827), (16, 74782), (17, 74764), (19, 74746), (24, 74626),

Gene: LilDestine\_139 Start: 74577, Stop: 74068, Start Num: 5

Candidate Starts for LilDestine\_139:

(Start: 5 @74577 has 4 MA's), (Start: 7 @74544 has 1 MA's), (10, 74460), (11, 74445), (12, 74352), (13, 74334), (14, 74325), (15, 74319), (16, 74274), (17, 74256), (19, 74238), (23, 74139), (24, 74118),

Gene: Nicholasp3\_142 Start: 74948, Stop: 74472, Start Num: 7

Candidate Starts for Nicholasp3\_142:

(Start: 5 @74981 has 4 MA's), (Start: 7 @74948 has 1 MA's), (10, 74864), (11, 74849), (12, 74756), (13, 74738), (14, 74729), (15, 74723), (16, 74678), (17, 74660), (19, 74642), (23, 74543), (24, 74522),

Gene: Silverleaf\_127 Start: 72498, Stop: 71839, Start Num: 2 Candidate Starts for Silverleaf\_127:

(1, 72531), (Start: 2 @72498 has 1 MA's), (Start: 3 @72459 has 2 MA's), (4, 72411), (6, 72345), (8, 72306), (9, 72273), (10, 72240), (12, 72144), (14, 72117), (17, 72039), (18, 72036), (20, 71970), (21, 71949), (25, 71883),

Gene: Underpass\_131 Start: 70212, Stop: 69703, Start Num: 5

Candidate Starts for Underpass\_131:

(Start: 5 @70212 has 4 MA's), (Start: 7 @70179 has 1 MA's), (10, 70095), (11, 70080), (12, 69987), (13, 69969), (14, 69960), (15, 69954), (16, 69909), (17, 69891), (19, 69873), (23, 69774), (24, 69753),

Gene: Wilder\_143 Start: 74939, Stop: 74430, Start Num: 5

Candidate Starts for Wilder\_143:

(Start: 5 @74939 has 4 MA's), (Start: 7 @74906 has 1 MA's), (10, 74822), (11, 74807), (12, 74714), (13, 74696), (14, 74687), (15, 74681), (16, 74636), (17, 74618), (19, 74600), (24, 74480),