

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 225003 Report

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

Pham number 225003 has 14 members, 2 are drafts.

Phages represented in each track:

- Track 1: VWB 28
- Track 2 : Kradal_173, Quantum_172, EhyElimayoE_174
- Track 3 : Nirvana_194
- Track 4 : Satis 173
- Track 5 : JustBecause 175
- Track 6 : Kela 173
- Track 7: B3 30
- Track 8 : B22_31, Doucette_33
- Track 9: OnionKnight 29
- Track 10 : Chymera 28
- Track 11 : Kromp_35

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

The start number called the most often in the published annotations is 19, it was called in 5 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• EhyElimayoE_174, JustBecause_175, Kradal_173, Nirvana_194, Quantum_172, Satis_173,

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

Kela_173,

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

B22_31, B3_30, Chymera_28, Doucette_33, Kromp_35, OnionKnight_29, VWB_28,

Summary by start number:

Start 18:

- Found in 2 of 14 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Kela 173 (BM).

Start 19:

- Found in 7 of 14 (50.0%) of genes in pham
- Manual Annotations of this start: 5 of 12
- Called 85.7% of time when present
- Phage (with cluster) where this start called: EhyElimayoE_174 (BM),
 JustBecause_175 (BM), Kradal_173 (BM), Nirvana_194 (BM), Quantum_172 (BM),
 Satis_173 (BM),

Start 20:

- Found in 1 of 14 (7.1%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chymera_28 (singleton),

Start 22:

- Found in 2 of 14 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: OnionKnight_29 (singleton), VWB_28 (BA),

Start 23:

- Found in 1 of 14 (7.1%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kromp_35 (singleton),

Start 24:

- Found in 3 of 14 (21.4%) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: B22_31 (BW), B3_30 (BV), Doucette_33 (BW),

Summary by clusters:

There are 5 clusters represented in this pham: BM, singleton, BW, BA, BV,

Info for manual annotations of cluster BM:

- •Start number 18 was manually annotated 1 time for cluster BM.
- •Start number 19 was manually annotated 5 times for cluster BM.

Info for manual annotations of cluster BV:

•Start number 24 was manually annotated 1 time for cluster BV.

Info for manual annotations of cluster BW:

•Start number 24 was manually annotated 2 times for cluster BW.

Gene Information:

Gene: B22 31 Start: 23303, Stop: 23049, Start Num: 24

Candidate Starts for B22 31:

(15, 23396), (16, 23387), (17, 23375), (Start: 24 @23303 has 3 MA's), (42, 23108), (45, 23081),

Gene: B3_30 Start: 23432, Stop: 23178, Start Num: 24

Candidate Starts for B3 30:

(1, 23747), (2, 23732), (3, 23687), (4, 23678), (5, 23675), (6, 23657), (7, 23639), (8, 23615), (10, 23594), (11, 23579), (12, 23564), (13, 23546), (14, 23543), (Start: 24 @23432 has 3 MA's), (42, 23237), (45, 23210),

Gene: Chymera 28 Start: 21061, Stop: 20819, Start Num: 20

Candidate Starts for Chymera 28:

(Start: 20 @21061 has 1 MA's), (28, 21007), (31, 20977), (38, 20881), (41, 20869), (43, 20845), (44, 20833).

Gene: Doucette_33 Start: 24717, Stop: 24463, Start Num: 24

Candidate Starts for Doucette 33:

(15, 24810), (16, 24801), (17, 24789), (Start: 24 @24717 has 3 MA's), (42, 24522), (45, 24495),

Gene: EhyElimayoE_174 Start: 112216, Stop: 111959, Start Num: 19

Candidate Starts for EhyElimayoE_174:

(Start: 19 @112216 has 5 MA's), (26, 112180), (29, 112156), (30, 112135), (32, 112117),

Gene: JustBecause_175 Start: 109723, Stop: 109463, Start Num: 19

Candidate Starts for JustBecause 175:

(9, 109885), (Start: 18 @109738 has 1 MA's), (Start: 19 @109723 has 5 MA's), (29, 109669), (32, 109630), (39, 109537),

Gene: Kela_173 Start: 109612, Stop: 109337, Start Num: 18

Candidate Starts for Kela_173:

(9, 109759), (Start: 18 @109612 has 1 MA's), (Start: 19 @109597 has 5 MA's), (29, 109543), (32, 109504), (39, 109411),

Gene: Kradal 173 Start: 112213, Stop: 111956, Start Num: 19

Candidate Starts for Kradal 173:

(Start: 19 @112213 has 5 MA's), (26, 112177), (29, 112153), (30, 112132), (32, 112114),

Gene: Kromp_35 Start: 27947, Stop: 27714, Start Num: 23

Candidate Starts for Kromp_35:

(Start: 23 @27947 has 1 MA's), (33, 27845), (34, 27815),

Gene: Nirvana_194 Start: 120173, Stop: 119910, Start Num: 19

Candidate Starts for Nirvana 194:

(Start: 19 @120173 has 5 MA's), (29, 120113), (32, 120074), (37, 119993), (41, 119975),

Gene: OnionKnight_29 Start: 22224, Stop: 21991, Start Num: 22

Candidate Starts for OnionKnight_29:

(Start: 22 @22224 has 1 MA's), (25, 22209), (27, 22197), (43, 22017),

Gene: Quantum_172 Start: 112213, Stop: 111956, Start Num: 19

Candidate Starts for Quantum_172:

(Start: 19 @112213 has 5 MA's), (26, 112177), (29, 112153), (30, 112132), (32, 112114),

Gene: Satis_173 Start: 112209, Stop: 111952, Start Num: 19

Candidate Starts for Satis_173:

(Start: 19 @112209 has 5 MA's), (21, 112203), (26, 112173), (29, 112149), (30, 112128), (32, 112110),

Gene: VWB_28 Start: 25376, Stop: 25146, Start Num: 22

Candidate Starts for VWB_28:

25154),