

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 121948 Report

This analysis was run 04/28/24 on database version 559.

Pham number 121948 has 12 members, 9 are drafts.

Phages represented in each track:

Track 1: MAckerman 15

• Track 2 : Claus_15, Baoshan_14

Track 3: Hafay_15

Track 4 : ZhongYanYuan_14

Track 5: Ellson_16, Jobypre_16, Bellis_16, Moostard_16, Snenia_16

Track 6 : Lolly9_16Track 7 : Douge 15

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

The start number called the most often in the published annotations is 4, it was called in 3 of the 3 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Bellis_16, Ellson_16, Jobypre_16, Lolly9_16, Moostard_16, Snenia_16,

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

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

 Baoshan_14, Claus_15, Douge_15, Hafay_15, MAckerman_15, ZhongYanYuan_14,

Summary by start number:

Start 4:

- Found in 6 of 12 (50.0%) of genes in pham
- Manual Annotations of this start: 3 of 3
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bellis_16 (L3), Ellson_16 (L3), Jobypre_16 (L3), Lolly9_16 (L3), Moostard_16 (L3), Snenia_16 (L3),

Start 5:

• Found in 5 of 12 (41.7%) of genes in pham

- No Manual Annotations of this start.
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Baoshan_14 (L2), Claus_15 (L2),

Start 7:

- Found in 7 of 12 (58.3%) of genes in pham
- No Manual Annotations of this start.
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Douge_15 (L4),

Start 10:

- Found in 5 of 12 (41.7%) of genes in pham
- No Manual Annotations of this start.
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Hafay_15 (L2), MAckerman_15 (L1), ZhongYanYuan_14 (L2),

Summary by clusters:

10376), (22, 10442),

There are 4 clusters represented in this pham: L4, L2, L3, L1,

Info for manual annotations of cluster L3:

•Start number 4 was manually annotated 3 times for cluster L3.

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Gene: Baoshan_14 Start: 10181, Stop: 10642, Start Num: 5
Candidate Starts for Baoshan_14:
(5, 10181), (10, 10301), (13, 10349), (14, 10370), (19, 10478), (20, 10493), (22, 10601),

Gene: Bellis_16 Start: 10427, Stop: 10942, Start Num: 4
Candidate Starts for Bellis_16:
(1, 10295), (3, 10325), (Start: 4 @10427 has 3 MA's), (7, 10487), (8, 10490), (9, 10562), (11, 10607), (13, 10640), (15, 10670), (16, 10721), (17, 10742), (19, 10772), (22, 10895),

Gene: Claus_15 Start: 10361, Stop: 10822, Start Num: 5
Candidate Starts for Claus_15:
(5, 10361), (10, 10481), (13, 10529), (14, 10550), (19, 10658), (20, 10673), (22, 10781),

Gene: Douge_15 Start: 10037, Stop: 10483, Start Num: 7
Candidate Starts for Douge_15:
(1, 9845), (2, 9854), (5, 10025), (6, 10031), (7, 10037), (13, 10190), (17, 10289), (18, 10298), (21,
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Gene: Ellson_16 Start: 10445, Stop: 10960, Start Num: 4
Candidate Starts for Ellson_16:
(1, 10313), (3, 10343), (Start: 4 @10445 has 3 MA's), (7, 10505), (8, 10508), (9, 10580), (11, 10625),
(13, 10658), (15, 10688), (16, 10739), (17, 10760), (19, 10790), (22, 10913),
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Gene: Hafay_15 Start: 10506, Stop: 10847, Start Num: 10

Candidate Starts for Hafay_15:

(10, 10506), (13, 10554), (14, 10575), (20, 10698), (22, 10806),

Gene: Jobypre_16 Start: 10431, Stop: 10946, Start Num: 4

Candidate Starts for Jobypre_16:

(1, 10299), (3, 10329), (Start: 4 @10431 has 3 MA's), (7, 10491), (8, 10494), (9, 10566), (11, 10611), (13, 10644), (15, 10674), (16, 10725), (17, 10746), (19, 10776), (22, 10899),

Gene: Lolly9_16 Start: 10438, Stop: 10947, Start Num: 4

Candidate Starts for Lolly9 16:

(1, 10306), (Start: 4 @10438 has 3 MA's), (7, 10498), (8, 10501), (9, 10573), (11, 10618), (13, 10651), (15, 10681), (16, 10732), (17, 10753), (19, 10783), (22, 10906),

Gene: MAckerman_15 Start: 10465, Stop: 10806, Start Num: 10

Candidate Starts for MAckerman 15:

(5, 10345), (10, 10465), (12, 10483), (13, 10513), (16, 10594), (18, 10624), (22, 10768),

Gene: Moostard_16 Start: 10428, Stop: 10943, Start Num: 4

Candidate Starts for Moostard_16:

(1, 10296), (3, 10326), (Start: 4 @10428 has 3 MA's), (7, 10488), (8, 10491), (9, 10563), (11, 10608), (13, 10641), (15, 10671), (16, 10722), (17, 10743), (19, 10773), (22, 10896),

Gene: Snenia_16 Start: 10432, Stop: 10947, Start Num: 4

Candidate Starts for Snenia_16:

(1, 10300), (3, 10330), (Start: 4 @10432 has 3 MA's), (7, 10492), (8, 10495), (9, 10567), (11, 10612), (13, 10645), (15, 10675), (16, 10726), (17, 10747), (19, 10777), (22, 10900),

Gene: ZhongYanYuan_14 Start: 10301, Stop: 10642, Start Num: 10

Candidate Starts for ZhongYanYuan_14:

(5, 10181), (10, 10301), (13, 10349), (14, 10370), (19, 10478), (20, 10493), (22, 10601),