

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 86859 Report

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

Pham number 86859 has 18 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Abt2graduatex2 37
- Track 2: Asis_35, TP1604_35, Salete_35, BayC_35, BabyGotBac_36, Maih_34
- Track 3 : RainyPolka_37
- Track 4 : Xkcd426_39
- Track 5 : Mischief 19 45
- Track 6 : YDN12_36
- Track 7: Cumberbatch_40, Ignacio_39, HFrancette_40, Vondra_38
- Track 8 : Piccadilly_39, Eastland_39
- Track 9 : OnionKnight_43

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

The start number called the most often in the published annotations is 10, it was called in 9 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Abt2graduatex2_37, Asis_35, BabyGotBac_36, BayC_35, Maih_34, RainyPolka_37, Salete_35, TP1604_35, Xkcd426_39, YDN12_36,

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

Mischief19_45,

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

• Cumberbatch_40, Eastland_39, HFrancette_40, Ignacio_39, OnionKnight_43, Piccadilly_39, Vondra_38,

Summary by start number:

Start 10:

- Found in 11 of 18 (61.1%) of genes in pham
- Manual Annotations of this start: 9 of 17
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Abt2graduatex2_37 (BG), Asis_35 (BG), BabyGotBac_36 (BG), BayC_35 (BG), Maih_34 (BG), RainyPolka_37 (BG),

Salete_35 (BG), TP1604_35 (BG), Xkcd426_39 (BG), YDN12_36 (BG),

Start 11:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mischief19_45 (BG),

Start 12:

- Found in 6 of 18 (33.3%) of genes in pham
- Manual Annotations of this start: 6 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cumberbatch_40 (BP), Eastland_39 (BP), HFrancette_40 (BP), Ignacio_39 (BP), Piccadilly_39 (BP), Vondra_38 (BP),

Start 18:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: OnionKnight_43 (singleton),

Summary by clusters:

There are 3 clusters represented in this pham: singleton, BG, BP,

Info for manual annotations of cluster BG:

- •Start number 10 was manually annotated 9 times for cluster BG.
- •Start number 11 was manually annotated 1 time for cluster BG.

Info for manual annotations of cluster BP:

•Start number 12 was manually annotated 6 times for cluster BP.

Gene Information:

Gene: Abt2graduatex2_37 Start: 30623, Stop: 30024, Start Num: 10

Candidate Starts for Abt2graduatex2_37:

(Start: 10 @30623 has 9 MA's), (13, 30578), (15, 30539), (16, 30521), (17, 30506), (19, 30479), (24, 30365), (26, 30347), (33, 30212), (37, 30173),

Gene: Asis_35 Start: 29809, Stop: 29210, Start Num: 10

Candidate Starts for Asis 35:

(Start: 10 @29809 has 9 MA's), (15, 29725), (17, 29692), (20, 29662), (22, 29611), (24, 29551), (28, 29512), (33, 29398), (37, 29359), (38, 29347),

Gene: BabyGotBac_36 Start: 29809, Stop: 29210, Start Num: 10

Candidate Starts for BabyGotBac_36:

(Start: 10 @29809 has 9 MA's), (15, 29725), (17, 29692), (20, 29662), (22, 29611), (24, 29551), (28, 29512), (33, 29398), (37, 29359), (38, 29347),

Gene: BayC 35 Start: 29809, Stop: 29210, Start Num: 10

Candidate Starts for BayC_35:

(Start: 10 @29809 has 9 MA's), (15, 29725), (17, 29692), (20, 29662), (22, 29611), (24, 29551), (28, 29512), (33, 29398), (37, 29359), (38, 29347),

Gene: Cumberbatch_40 Start: 27295, Stop: 27873, Start Num: 12

Candidate Starts for Cumberbatch_40:

(Start: 12 @27295 has 6 MA's), (23, 27523), (25, 27565), (35, 27727),

Gene: Eastland 39 Start: 27266, Stop: 27844, Start Num: 12

Candidate Starts for Eastland_39:

(Start: 12 @27266 has 6 MA's), (23, 27494), (25, 27536), (35, 27698),

Gene: HFrancette 40 Start: 28044, Stop: 28622, Start Num: 12

Candidate Starts for HFrancette_40:

(Start: 12 @28044 has 6 MA's), (23, 28272), (25, 28314), (35, 28476),

Gene: Ignacio_39 Start: 27947, Stop: 28525, Start Num: 12

Candidate Starts for Ignacio_39:

(Start: 12 @27947 has 6 MA's), (23, 28175), (25, 28217), (35, 28379),

Gene: Maih_34 Start: 29808, Stop: 29209, Start Num: 10

Candidate Starts for Maih 34:

(Start: 10 @29808 has 9 MA's), (15, 29724), (17, 29691), (20, 29661), (22, 29610), (24, 29550), (28, 29511), (33, 29397), (37, 29358), (38, 29346),

Gene: Mischief19_45 Start: 41648, Stop: 41031, Start Num: 11

Candidate Starts for Mischief19_45:

(1, 41984), (2, 41948), (3, 41876), (4, 41867), (5, 41840), (6, 41741), (7, 41729), (8, 41687), (9, 41684), (Start: 10 @41657 has 9 MA's), (Start: 11 @41648 has 1 MA's), (21, 41504), (23, 41435), (32, 41255), (34, 41222), (36, 41207),

Gene: OnionKnight_43 Start: 30805, Stop: 31251, Start Num: 18

Candidate Starts for OnionKnight_43:

(Start: 18 @30805 has 1 MA's), (29, 30991), (31, 31030), (39, 31147),

Gene: Piccadilly_39 Start: 27265, Stop: 27843, Start Num: 12

Candidate Starts for Piccadilly_39:

(Start: 12 @27265 has 6 MA's), (23, 27493), (25, 27535), (35, 27697),

Gene: RainyPolka_37 Start: 30406, Stop: 29807, Start Num: 10

Candidate Starts for RainyPolka_37:

(Start: 10 @30406 has 9 MA's), (15, 30322), (16, 30304), (17, 30289), (19, 30262), (24, 30148), (30, 30067), (33, 29995), (37, 29956),

Gene: Salete 35 Start: 29809, Stop: 29210, Start Num: 10

Candidate Starts for Salete 35:

(Start: 10 @29809 has 9 MA's), (15, 29725), (17, 29692), (20, 29662), (22, 29611), (24, 29551), (28, 29512), (33, 29398), (37, 29359), (38, 29347),

Gene: TP1604_35 Start: 29809, Stop: 29210, Start Num: 10

Candidate Starts for TP1604 35:

(Start: 10 @29809 has 9 MA's), (15, 29725), (17, 29692), (20, 29662), (22, 29611), (24, 29551), (28, 29512), (33, 29398), (37, 29359), (38, 29347),

Gene: Vondra_38 Start: 27115, Stop: 27693, Start Num: 12

Candidate Starts for Vondra_38:

(Start: 12 @27115 has 6 MA's), (23, 27343), (25, 27385), (35, 27547),

Gene: Xkcd426_39 Start: 37038, Stop: 36439, Start Num: 10

Candidate Starts for Xkcd426_39:

(Start: 10 @37038 has 9 MA's), (14, 36969), (15, 36954), (16, 36936), (27, 36753), (28, 36738), (30,

36696), (34, 36618), (40, 36474),

Gene: YDN12_36 Start: 29704, Stop: 29105, Start Num: 10

Candidate Starts for YDN12_36:

(Start: 10 @29704 has 9 MA's), (15, 29620), (17, 29587), (20, 29557), (22, 29506), (24, 29446), (33,

29293), (37, 29254),