

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 190312 Report

This analysis was run 11/02/24 on database version 579.

Pham number 190312 has 10 members, 2 are drafts.

Phages represented in each track:

• Track 1 : B3 32

• Track 2 : E1_33, Anatole_33

• Track 3 : G4_33

• Track 4: Doucette 35, B22 33

Track 5: E6 36

• Track 6 : Kuwabara_52

• Track 7: GAL1_39

• Track 8 : REQ2_43

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

The start number called the most often in the published annotations is 11, it was called in 4 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• B22_33, B3_32, Doucette_35, G4_33,

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

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

Anatole_33, E1_33, E6_36, GAL1_39, Kuwabara_52, REQ2_43,

Summary by start number:

Start 5:

- Found in 1 of 10 (10.0%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kuwabara_52 (DN4),

Start 6:

- Found in 2 of 10 (20.0%) of genes in pham
- No Manual Annotations of this start.

- Called 50.0% of time when present
- Phage (with cluster) where this start called: REQ2_43 (singleton),

Start 7:

- Found in 1 of 10 (10.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GAL1_39 (singleton),

Start 11:

- Found in 4 of 10 (40.0%) of genes in pham
- Manual Annotations of this start: 4 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: B22_33 (BW), B3_32 (BV), Doucette_35 (BW), G4_33 (BW),

Start 12:

- Found in 3 of 10 (30.0%) of genes in pham
- Manual Annotations of this start: 3 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anatole_33 (BV), E1_33 (BV), E6_36 (BW),

Summary by clusters:

There are 4 clusters represented in this pham: DN4, singleton, BW, BV,

Info for manual annotations of cluster BV:

- •Start number 11 was manually annotated 1 time for cluster BV.
- •Start number 12 was manually annotated 2 times for cluster BV.

Info for manual annotations of cluster BW:

- •Start number 11 was manually annotated 3 times for cluster BW.
- •Start number 12 was manually annotated 1 time for cluster BW.

Info for manual annotations of cluster DN4:

•Start number 5 was manually annotated 1 time for cluster DN4.

Gene Information:

Gene: Anatole 33 Start: 24569, Stop: 25372, Start Num: 12

Candidate Starts for Anatole_33:

(Start: 12 @24569 has 3 MA's), (18, 24692), (19, 24695), (20, 24734), (22, 24761), (23, 24785), (27, 24821), (29, 24848), (32, 24881), (33, 24908), (34, 24929), (35, 24938), (39, 24956), (40, 24959), (42, 25001), (45, 25031), (46, 25043), (47, 25076), (49, 25121), (53, 25211), (54, 25277), (55, 25280), (58, 25328), (59, 25361),

Gene: B22 33 Start: 23699, Stop: 24502, Start Num: 11

Candidate Starts for B22 33:

(Start: 11 @23699 has 4 MA's), (18, 23822), (19, 23825), (20, 23864), (22, 23891), (23, 23915), (27, 23951), (29, 23978), (32, 24011), (33, 24038), (35, 24068), (40, 24089), (42, 24131), (46, 24173), (47,

24206), (48, 24224), (49, 24251), (55, 24410), (58, 24458), (59, 24491),

Gene: B3 32 Start: 23829, Stop: 24632, Start Num: 11

Candidate Starts for B3 32:

(Start: 11 @23829 has 4 MA's), (18, 23952), (19, 23955), (20, 23994), (22, 24021), (23, 24045), (27, 24081), (29, 24108), (32, 24141), (33, 24168), (34, 24189), (35, 24198), (36, 24201), (39, 24216), (40, 24219), (42, 24261), (43, 24270), (45, 24291), (46, 24303), (48, 24354), (50, 24384), (52, 24453), (55, 24540), (57, 24573), (58, 24588), (59, 24621),

Gene: Doucette_35 Start: 25113, Stop: 25916, Start Num: 11

Candidate Starts for Doucette 35:

(Start: 11 @25113 has 4 MA's), (18, 25236), (19, 25239), (20, 25278), (22, 25305), (23, 25329), (27, 25365), (29, 25392), (32, 25425), (33, 25452), (35, 25482), (40, 25503), (42, 25545), (46, 25587), (47, 25620), (48, 25638), (49, 25665), (55, 25824), (58, 25872), (59, 25905),

Gene: E1_33 Start: 24569, Stop: 25372, Start Num: 12

Candidate Starts for E1 33:

(Start: 12 @24569 has 3 MA's), (18, 24692), (19, 24695), (20, 24734), (22, 24761), (23, 24785), (27, 24821), (29, 24848), (32, 24881), (33, 24908), (34, 24929), (35, 24938), (39, 24956), (40, 24959), (42, 25001), (45, 25031), (46, 25043), (47, 25076), (49, 25121), (53, 25211), (54, 25277), (55, 25280), (58, 25328), (59, 25361),

Gene: E6 36 Start: 26500, Stop: 27273, Start Num: 12

Candidate Starts for E6 36:

(Start: 12 @26500 has 3 MA's), (15, 26542), (16, 26584), (17, 26593), (21, 26680), (22, 26689), (26, 26728), (31, 26761), (32, 26782), (33, 26809), (35, 26839), (40, 26860), (42, 26902), (45, 26932), (46, 26944), (47, 26977), (48, 26995), (49, 27022), (55, 27181), (58, 27229), (59, 27262),

Gene: G4 33 Start: 24732, Stop: 25535, Start Num: 11

Candidate Starts for G4_33:

(Start: 11 @24732 has 4 MA's), (18, 24855), (19, 24858), (20, 24897), (22, 24924), (23, 24948), (27, 24984), (29, 25011), (32, 25044), (33, 25071), (34, 25092), (35, 25101), (36, 25104), (39, 25119), (40, 25122), (42, 25164), (45, 25194), (46, 25206), (47, 25239), (49, 25284), (53, 25374), (55, 25443), (58, 25491), (59, 25524),

Gene: GAL1_39 Start: 32334, Stop: 33173, Start Num: 7

Candidate Starts for GAL1_39:

(1, 32199), (4, 32229), (6, 32286), (7, 32334), (10, 32376), (13, 32403), (20, 32556), (22, 32583), (25, 32622), (28, 32652), (30, 32676), (37, 32757), (40, 32772), (41, 32775), (44, 32838), (51, 32961), (54, 33096), (55, 33099), (56, 33108),

Gene: Kuwabara_52 Start: 36557, Stop: 37444, Start Num: 5

Candidate Starts for Kuwabara 52:

(2, 36500), (3, 36503), (Start: 5 @36557 has 1 MA's), (8, 36629), (10, 36644), (13, 36671), (14, 36695), (22, 36854), (23, 36878), (34, 37013), (38, 37037), (44, 37109), (46, 37130), (48, 37181), (54, 37367), (55, 37370),

Gene: REQ2_43 Start: 33255, Stop: 34112, Start Num: 6

Candidate Starts for REQ2_43:

(6, 33255), (8, 33318), (9, 33324), (13, 33360), (22, 33540), (24, 33576), (30, 33633), (34, 33699), (45, 33783), (54, 34029), (55, 34032),