

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 11023 Report

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

Pham number 11023 has 9 members, 4 are drafts.

Phages represented in each track:

Track 1 : Tillums_21

• Track 2 : Anjali_16

Track 3 : Mendel_18

Track 4 : Dunamis_20

• Track 5 : Swim 21

Track 6 : Curie_13

• Track 7 : Evcara 13

Track 8 : PineapplePizza_15

Track 9 : Thatch_14

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 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Anjali_16, Dunamis_20, Mendel_18, Swim_21, Tillums_21,

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

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

Curie_13, Evcara_13, PineapplePizza_15, Thatch_14,

Summary by start number:

Start 4:

- Found in 5 of 9 (55.6%) of genes in pham
- Manual Annotations of this start: 3 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anjali_16 (FD), Dunamis_20 (FD), Mendel_18 (FD), Swim_21 (FD), Tillums_21 (FD),

Start 5:

- Found in 2 of 9 (22.2%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Curie_13 (GI),

Start 6:

- Found in 1 of 9 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PineapplePizza_15 (GI),

Start 8:

- Found in 1 of 9 (11.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Evcara_13 (GI),

Start 9

- Found in 1 of 9 (11.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Thatch_14 (UNK),

Summary by clusters:

There are 3 clusters represented in this pham: UNK, FD, GI,

Info for manual annotations of cluster FD:

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

Info for manual annotations of cluster GI:

- •Start number 5 was manually annotated 1 time for cluster GI.
- Start number 6 was manually annotated 1 time for cluster GI.

Gene Information:

Gene: Anjali 16 Start: 13623, Stop: 14693, Start Num: 4

Candidate Starts for Anjali 16:

(Start: 4 @ 13623 has 3 MA's), (7, 13635), (12, 13713), (13, 13809), (33, 14037), (34, 14079), (36, 14091), (38, 14133), (39, 14160), (40, 14169), (41, 14181), (42, 14190), (45, 14250), (46, 14253), (47, 14271), (48, 14274), (50, 14286), (60, 14532), (63, 14544), (65, 14559), (67, 14577),

Gene: Curie_13 Start: 13064, Stop: 14140, Start Num: 5

Candidate Starts for Curie_13:

(Start: 5 @13064 has 1 MA's), (14, 13250), (17, 13310), (26, 13415), (32, 13469), (37, 13550), (39, 13595), (40, 13604), (41, 13616), (42, 13625), (44, 13664), (47, 13718), (49, 13724), (53, 13787), (59, 13943), (62, 13985), (64, 13994), (65, 14006), (75, 14126),

Gene: Dunamis_20 Start: 13779, Stop: 14846, Start Num: 4

Candidate Starts for Dunamis_20:

(Start: 4 @ 13779 has 3 MA's), (7, 13791), (13, 13962), (22, 14082), (23, 14091), (33, 14190), (34, 14232), (38, 14286), (40, 14322), (41, 14334), (42, 14343), (49, 14430), (51, 14466), (57, 14625), (60, 14685), (63, 14697), (65, 14712), (67, 14730),

Gene: Evcara_13 Start: 13013, Stop: 14074, Start Num: 8 Candidate Starts for Evcara 13:

(Start: 5 @ 13007 has 1 MA's), (8, 13013), (10, 13031), (19, 13277), (20, 13280), (21, 13286), (24, 13337), (25, 13349), (26, 13352), (37, 13487), (41, 13553), (42, 13562), (54, 13784), (56, 13826), (57, 13853), (64, 13928), (65, 13940), (68, 13961), (73, 14030), (75, 14060),

Gene: Mendel_18 Start: 13537, Stop: 14604, Start Num: 4 Candidate Starts for Mendel 18:

(Start: 4 @ 13537 has 3 MA's), (13, 13720), (22, 13840), (23, 13849), (33, 13948), (34, 13990), (38, 14044), (40, 14080), (41, 14092), (42, 14101), (49, 14188), (51, 14224), (57, 14383), (60, 14443), (63, 14455), (65, 14470), (67, 14488),

Gene: PineapplePizza_15 Start: 13741, Stop: 14802, Start Num: 6 Candidate Starts for PineapplePizza 15:

(1, 13666), (Start: 6 @ 13741 has 1 MA's), (15, 13942), (16, 13969), (18, 13984), (21, 14026), (22, 14041), (25, 14089), (29, 14104), (30, 14107), (33, 14149), (37, 14230), (40, 14284), (42, 14305), (43, 14320), (44, 14344), (47, 14380), (49, 14386), (52, 14437), (55, 14548), (57, 14581), (61, 14644), (63, 14653), (65, 14668), (68, 14689), (71, 14716).

Gene: Swim_21 Start: 14036, Stop: 15103, Start Num: 4 Candidate Starts for Swim_21:

(2, 13976), (Start: 4 @ 14036 has 3 MA's), (7, 14048), (13, 14219), (14, 14225), (22, 14339), (23, 14348), (33, 14447), (34, 14489), (38, 14543), (39, 14570), (40, 14579), (41, 14591), (42, 14600), (49, 14687), (51, 14723), (57, 14882), (60, 14942), (63, 14954), (65, 14969), (67, 14987), (70, 15017),

Gene: Thatch_14 Start: 13775, Stop: 14842, Start Num: 9 Candidate Starts for Thatch_14:

(3, 13700), (9, 13775), (11, 13823), (27, 14111), (28, 14117), (31, 14150), (33, 14165), (35, 14210), (36, 14219), (39, 14288), (43, 14333), (58, 14639), (66, 14708), (69, 14747), (72, 14786), (74, 14822),

Gene: Tillums_21 Start: 14169, Stop: 15239, Start Num: 4 Candidate Starts for Tillums 21:

(Start: 4 @ 14169 has 3 MA's), (7, 14181), (12, 14259), (13, 14355), (33, 14583), (34, 14625), (36, 14637), (38, 14679), (39, 14706), (40, 14715), (41, 14727), (42, 14736), (45, 14796), (46, 14799), (47, 14817), (48, 14820), (50, 14832), (57, 15018), (60, 15078), (63, 15090), (65, 15105), (67, 15123),