

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 5633 Report

This analysis was run 04/05/24 on database version 557.

Pham number 5633 has 11 members, 1 are drafts.

Phages represented in each track:

Track 1: Splinter\_38, Vendetta\_38, Goib\_40

Track 2 : Banquo\_38

• Track 3 : TZGordon\_40

• Track 4 : DinoDaryn\_39, Huffy\_39

Track 5 : TinaLin\_37Track 6 : Gsput1\_31Track 7 : Schmidt\_33Track 8 : Catfish 38

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

The start number called the most often in the published annotations is 2, it was called in 7 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Banquo\_38, Catfish\_38, Goib\_40, Splinter\_38, TZGordon\_40, TinaLin\_37, Vendetta 38,

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

DinoDaryn\_39, Huffy\_39,

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

Gsput1\_31, Schmidt\_33,

### Summary by start number:

#### Start 1:

- Found in 2 of 11 (18.2%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gsput1\_31 (CU2), Schmidt\_33 (CU4),

#### Start 2:

Found in 9 of 11 (81.8%) of genes in pham

- Manual Annotations of this start: 7 of 10
- Called 77.8% of time when present
- Phage (with cluster) where this start called: Banquo\_38 (CU1), Catfish\_38 (CU5), Goib\_40 (CU1), Splinter\_38 (CU1), TZGordon\_40 (CU1), TinaLin\_37 (CU1), Vendetta\_38 (CU1),

#### Start 4:

- Found in 6 of 11 (54.5%) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 33.3% of time when present
- Phage (with cluster) where this start called: DinoDaryn\_39 (CU1), Huffy\_39 (CU1),

## **Summary by clusters:**

There are 4 clusters represented in this pham: CU5, CU4, CU2, CU1,

Info for manual annotations of cluster CU1:

- •Start number 2 was manually annotated 6 times for cluster CU1.
- •Start number 4 was manually annotated 2 times for cluster CU1.

Info for manual annotations of cluster CU4:

•Start number 1 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CU5:

•Start number 2 was manually annotated 1 time for cluster CU5.

#### Gene Information:

Gene: Banquo 38 Start: 27885, Stop: 27109, Start Num: 2

Candidate Starts for Banquo 38:

(Start: 2 @27885 has 7 MA's), (5, 27828), (8, 27765), (9, 27762), (11, 27699), (14, 27630), (15, 27615), (23, 27483), (24, 27474), (25, 27462), (31, 27408), (36, 27345), (41, 27303), (42, 27297), (46, 27273), (47, 27252), (49, 27225), (53, 27201), (57, 27135),

Gene: Catfish\_38 Start: 29160, Stop: 28381, Start Num: 2

Candidate Starts for Catfish 38:

(Start: 2 @29160 has 7 MA's), (8, 29040), (10, 29013), (12, 28971), (16, 28875), (27, 28746), (31, 28722), (37, 28641), (44, 28602), (46, 28587), (48, 28548), (51, 28527), (52, 28521), (56, 28476),

Gene: DinoDaryn 39 Start: 28064, Stop: 27339, Start Num: 4

Candidate Starts for DinoDaryn\_39:

(Start: 2 @28088 has 7 MA's), (Start: 4 @28064 has 2 MA's), (9, 27965), (10, 27941), (11, 27917), (19, 27752), (21, 27716), (25, 27680), (32, 27623), (36, 27563), (43, 27512), (44, 27506), (46, 27491), (50, 27440), (57, 27365),

Gene: Goib 40 Start: 28760, Stop: 28005, Start Num: 2

Candidate Starts for Goib 40:

(Start: 2 @28760 has 7 MA's), (Start: 4 @28736 has 2 MA's), (9, 28637), (11, 28589), (17, 28439), (19, 28424), (25, 28352), (32, 28295), (33, 28286), (36, 28235), (43, 28184), (44, 28178), (57, 28031),

Gene: Gsput1\_31 Start: 26551, Stop: 25835, Start Num: 1

Candidate Starts for Gsput1 31:

(Start: 1 @26551 has 1 MA's), (6, 26479), (7, 26434), (25, 26146), (28, 26110), (30, 26095), (34, 26038), (35, 26035), (38, 26008), (40, 25999), (50, 25909), (53, 25888), (54, 25879),

Gene: Huffy\_39 Start: 28064, Stop: 27339, Start Num: 4

Candidate Starts for Huffy\_39:

(Start: 2 @28088 has 7 MA's), (Start: 4 @28064 has 2 MA's), (9, 27965), (10, 27941), (11, 27917), (19, 27752), (21, 27716), (25, 27680), (32, 27623), (36, 27563), (43, 27512), (44, 27506), (46, 27491), (50, 27440), (57, 27365),

Gene: Schmidt 33 Start: 25365, Stop: 24664, Start Num: 1

Candidate Starts for Schmidt 33:

(Start: 1 @25365 has 1 MA's), (3, 25350), (12, 25182), (20, 25050), (22, 25002), (25, 24972), (26, 24954), (29, 24924), (33, 24906), (39, 24828), (45, 24795), (55, 24699),

Gene: Splinter\_38 Start: 28689, Stop: 27934, Start Num: 2

Candidate Starts for Splinter\_38:

(Start: 2 @28689 has 7 MA's), (Start: 4 @28665 has 2 MA's), (9, 28566), (11, 28518), (17, 28368), (19, 28353), (25, 28281), (32, 28224), (33, 28215), (36, 28164), (43, 28113), (44, 28107), (57, 27960),

Gene: TZGordon\_40 Start: 28003, Stop: 27254, Start Num: 2

Candidate Starts for TZGordon\_40:

(Start: 2 @28003 has 7 MA's), (Start: 4 @27979 has 2 MA's), (9, 27880), (10, 27856), (11, 27832), (19, 27667), (21, 27631), (25, 27595), (32, 27538), (36, 27478), (43, 27427), (44, 27421), (46, 27406), (50, 27355), (57, 27280),

Gene: TinaLin 37 Start: 27558, Stop: 26782, Start Num: 2

Candidate Starts for TinaLin 37:

(Start: 2 @ 27558 has 7 MA's), (5, 27501), (8, 27438), (9, 27435), (11, 27372), (13, 27333), (14, 27303), (15, 27288), (18, 27210), (23, 27156), (24, 27147), (25, 27135), (31, 27081), (41, 26976), (42, 26970), (49, 26898), (53, 26874), (57, 26808),

Gene: Vendetta 38 Start: 28689, Stop: 27934, Start Num: 2

Candidate Starts for Vendetta 38:

(Start: 2 @28689 has 7 MA's), (Start: 4 @28665 has 2 MA's), (9, 28566), (11, 28518), (17, 28368), (19, 28353), (25, 28281), (32, 28224), (33, 28215), (36, 28164), (43, 28113), (44, 28107), (57, 27960),