

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 88250 Report

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

Pham number 88250 has 12 members, 6 are drafts.

Phages represented in each track:

Track 1 : Raqqa_20

Track 2 : AbbyDaisy_20

Track 3 : Shoya_18

• Track 4 : Sarge_19, BrayBeast_19

Track 5 : Zucker_21

• Track 6 : BlackSpider_20

Track 7 : Bauer_22

• Track 8 : Hum25_20

Track 9 : Pitbull_20Track 10 : MrSmee 19

• Track 11 : Khuang 17

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

The start number called the most often in the published annotations is 5, it was called in 4 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Bauer_22, BlackSpider_20, BrayBeast_19, MrSmee_19, Sarge_19, Shoya_18,

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

Zucker_21,

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

AbbyDaisy_20, Hum25_20, Khuang_17, Pitbull_20, Ragga_20,

Summary by start number:

Start 2:

- Found in 3 of 12 (25.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hum25_20 (FQ), Khuang_17 (UNK), Pitbull_20 (FQ),

Start 3:

- Found in 2 of 12 (16.7%) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbyDaisy_20 (AY), Raqqa_20 (AY),

Start 5:

- Found in 7 of 12 (58.3%) of genes in pham
- Manual Annotations of this start: 4 of 6
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Bauer_22 (FN), BlackSpider_20 (FN), BrayBeast_19 (FB), MrSmee_19 (UNK), Sarge_19 (FB), Shoya_18 (FB),

Start 7:

- Found in 2 of 12 (16.7%) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Zucker_21 (FN),

Summary by clusters:

There are 5 clusters represented in this pham: AY, FQ, FB, UNK, FN,

Info for manual annotations of cluster AY:

•Start number 3 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster FB:

•Start number 5 was manually annotated 3 times for cluster FB.

Info for manual annotations of cluster FN:

- •Start number 5 was manually annotated 1 time for cluster FN.
- •Start number 7 was manually annotated 1 time for cluster FN.

Gene Information:

Gene: AbbyDaisy_20 Start: 16528, Stop: 17505, Start Num: 3

Candidate Starts for AbbyDaisy 20:

(Start: 3 @ 16528 has 1 MA's), (4, 16534), (6, 16561), (11, 16612), (12, 16672), (15, 16720), (16, 16729), (17, 16732), (21, 16783), (22, 16786), (24, 16834), (26, 16876), (36, 17020), (40, 17077), (47, 17152), (48, 17185), (49, 17191), (50, 17200), (53, 17224), (57, 17338), (60, 17350), (64, 17398), (67, 17425),

Gene: Bauer_22 Start: 17164, Stop: 18111, Start Num: 5

Candidate Starts for Bauer 22:

(1, 17125), (Start: 5 @17164 has 4 MA's), (Start: 7 @17197 has 1 MA's), (8, 17206), (11, 17239), (20, 17395), (23, 17443), (28, 17524), (32, 17587), (39, 17668), (42, 17701), (44, 17716), (54, 17845), (55, 17869), (62, 17974), (63, 17995), (64, 18007), (67, 18034), (70, 18088),

Gene: BlackSpider_20 Start: 16806, Stop: 17753, Start Num: 5

Candidate Starts for BlackSpider 20:

(Start: 5 @ 16806 has 4 MA's), (20, 17037), (23, 17085), (25, 17124), (28, 17166), (34, 17259), (35, 17265), (37, 17289), (38, 17298), (41, 17340), (45, 17388), (53, 17472), (55, 17508), (56, 17574), (59, 17595), (61, 17604), (64, 17649), (67, 17676),

Gene: BrayBeast_19 Start: 15202, Stop: 16134, Start Num: 5

Candidate Starts for BrayBeast 19:

(Start: 5 @ 15202 has 4 MA's), (8, 15244), (11, 15277), (22, 15445), (23, 15487), (25, 15526), (28, 15568), (47, 15808), (53, 15874), (64, 16030), (65, 16036), (66, 16054), (68, 16060),

Gene: Hum25 20 Start: 15002, Stop: 15970, Start Num: 2

Candidate Starts for Hum25 20:

(2, 15002), (11, 15110), (18, 15245), (22, 15278), (23, 15320), (27, 15365), (29, 15398), (30, 15404), (33, 15479), (39, 15533), (44, 15581), (49, 15662), (51, 15686), (52, 15692), (60, 15821), (67, 15887), (69, 15920),

Gene: Khuang_17 Start: 15075, Stop: 16058, Start Num: 2

Candidate Starts for Khuang 17:

(2, 15075), (9, 15147), (14, 15279), (19, 15336), (20, 15339), (21, 15342), (39, 15600), (43, 15639), (46, 15693), (52, 15756), (55, 15798), (58, 15882),

Gene: MrSmee_19 Start: 14896, Stop: 15843, Start Num: 5

Candidate Starts for MrSmee_19:

(Start: 5 @14896 has 4 MA's), (8, 14938), (10, 14956), (11, 14971), (13, 15067), (20, 15127), (23, 15175), (25, 15214), (28, 15256), (35, 15355), (37, 15379), (45, 15478), (53, 15562), (55, 15598), (56, 15664), (60, 15691), (64, 15739), (67, 15766),

Gene: Pitbull_20 Start: 14632, Stop: 15600, Start Num: 2

Candidate Starts for Pitbull_20:

(2, 14632), (11, 14740), (18, 14875), (22, 14908), (23, 14950), (27, 14995), (29, 15028), (31, 15037), (33, 15109), (39, 15163), (44, 15211), (49, 15292), (51, 15316), (52, 15322), (60, 15451), (67, 15517), (69, 15550),

Gene: Ragga_20 Start: 16826, Stop: 17803, Start Num: 3

Candidate Starts for Ragga 20:

(Start: 3 @ 16826 has 1 MA's), (4, 16832), (6, 16859), (11, 16910), (12, 16970), (15, 17018), (16, 17027), (17, 17030), (21, 17081), (22, 17084), (24, 17132), (26, 17174), (40, 17375), (47, 17450), (48, 17483), (49, 17489), (50, 17498), (53, 17522), (60, 17648), (64, 17696), (67, 17723), (71, 17783),

Gene: Sarge_19 Start: 15113, Stop: 16045, Start Num: 5

Candidate Starts for Sarge_19:

(Start: 5 @15113 has 4 MA's), (8, 15155), (11, 15188), (22, 15356), (23, 15398), (25, 15437), (28, 15479), (47, 15719), (53, 15785), (64, 15941), (65, 15947), (66, 15965), (68, 15971),

Gene: Shoya_18 Start: 14749, Stop: 15681, Start Num: 5

Candidate Starts for Shoya_18:

(Start: 5 @ 14749 has 4 MA's), (8, 14791), (10, 14809), (11, 14824), (13, 14920), (17, 14938), (22, 14992), (23, 15034), (25, 15073), (28, 15115), (47, 15355), (53, 15421), (59, 15538), (65, 15583), (66, 15601), (67, 15604),

Gene: Zucker 21 Start: 16510, Stop: 17424, Start Num: 7

Candidate Starts for Zucker_21:

 $\begin{array}{l} (1,\,16438),\,(Start:\,5\,\,@\,16477\,\,has\,\,4\,\,MA's),\,(Start:\,7\,\,@\,16510\,\,has\,\,1\,\,MA's),\,(8,\,16519),\,(11,\,16552),\,(20,\,16708),\,(23,\,16756),\,(28,\,16837),\,(32,\,16900),\,(39,\,16981),\,(42,\,17014),\,(44,\,17029),\,(54,\,17158),\,(55,\,17182),\,(62,\,17287),\,(63,\,17308),\,(64,\,17320),\,(67,\,17347),\,(70,\,17401), \end{array}$