

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 163826 Report

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

Pham number 163826 has 31 members, 3 are drafts.

Phages represented in each track:

- Track 1: Papez_9, Kenmech_10, TheloniousMonk_9, LilBib_8
- Track 2: Norz 9, Monet 9
- Track 3: Squee_8, Gwendoluna_9, KBG_9, Graduation_10, Solon_8, Nerujay_9
- Track 4: Hermia_10, Buttons_9, SpikeBT_9, Edtherson_9, Treddle_9
- Track 5 : BillKnuckles 9, DD5 9
- Track 6 : Zeuska_8, QTRlifeCrisis_11
- Track 7: StAnnes 29, Hamulus 31, Soul22 35, Kingsley 29
- Track 8 : Ovechkin_31
- Track 9: Ruby_32, MisterCuddles_32, Girr_32
- Track 10 : Mozy_92
- Track 11 : GMÅ4_67

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 19 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• BillKnuckles_9, Buttons_9, DD5_9, Edtherson_9, Graduation_10, Gwendoluna_9, Hermia_10, KBG_9, Kenmech_10, LilBib_8, Monet_9, Nerujay_9, Norz_9, Papez_9, QTRlifeCrisis_11, Solon_8, SpikeBT_9, Squee_8, TheloniousMonk_9, Treddle_9, Zeuska_8,

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

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

• GMA4_67, Girr_32, Hamulus_31, Kingsley_29, MisterCuddles_32, Mozy_92, Ovechkin_31, Ruby_32, Soul22_35, StAnnes_29,

Summary by start number:

Start 1:

Found in 5 of 31 (16.1%) of genes in pham

- Manual Annotations of this start: 1 of 28
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Ovechkin_31 (F1),

Start 2:

- Found in 5 of 31 (16.1%) of genes in pham
- Manual Annotations of this start: 4 of 28
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Hamulus_31 (F1), Kingsley_29 (F1), Soul22_35 (F2), StAnnes_29 (F1),

Start 3:

- Found in 3 of 31 (9.7%) of genes in pham
- Manual Annotations of this start: 3 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Girr_32 (F1), MisterCuddles_32 (F1), Ruby_32 (F1),

Start 5:

- Found in 1 of 31 (3.2%) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mozy_92 (F1),

Start 6:

- Found in 1 of 31 (3.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA4 67 (singleton),

Start 10:

- Found in 21 of 31 (67.7%) of genes in pham
- Manual Annotation's of this start: 19 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BillKnuckles_9 (A1), Buttons_9 (A1), DD5_9 (A1), Edtherson_9 (A1), Graduation_10 (A1), Gwendoluna_9 (A1), Hermia_10 (A1), KBG_9 (A1), Kenmech_10 (A1), LilBib_8 (A1), Monet_9 (A1), Nerujay_9 (A1), Norz_9 (A1), Papez_9 (A1), QTRlifeCrisis_11 (A1), Solon_8 (A1), SpikeBT_9 (A1), Squee_8 (A1), TheloniousMonk_9 (A1), Treddle_9 (A1), Zeuska_8 (A1),

Summary by clusters:

There are 4 clusters represented in this pham: A1, F1, singleton, F2,

Info for manual annotations of cluster A1:

•Start number 10 was manually annotated 19 times for cluster A1.

Info for manual annotations of cluster F1:

- Start number 1 was manually annotated 1 time for cluster F1.
- •Start number 2 was manually annotated 3 times for cluster F1.
- •Start number 3 was manually annotated 3 times for cluster F1.
- •Start number 5 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

•Start number 2 was manually annotated 1 time for cluster F2.

Gene Information:

Gene: BillKnuckles_9 Start: 4709, Stop: 5290, Start Num: 10

Candidate Starts for BillKnuckles_9:

(Start: 10 @4709 has 19 MA's), (13, 4811), (14, 4832), (21, 4880), (27, 5159),

Gene: Buttons_9 Start: 4220, Stop: 4798, Start Num: 10

Candidate Starts for Buttons_9:

(Start: 10 @4220 has 19 MA's), (15, 4346), (27, 4679),

Gene: DD5 9 Start: 4751, Stop: 5332, Start Num: 10

Candidate Starts for DD5 9:

(Start: 10 @4751 has 19 MA's), (13, 4853), (14, 4874), (21, 4922), (27, 5201),

Gene: Edtherson_9 Start: 4530, Stop: 5108, Start Num: 10

Candidate Starts for Edtherson 9:

(Start: 10 @4530 has 19 MA's), (15, 4656), (27, 4989),

Gene: GMA4 67 Start: 43840, Stop: 44490, Start Num: 6

Candidate Starts for GMA4_67:

(6, 43840), (8, 43870), (16, 44059), (17, 44065), (22, 44122), (26, 44284),

Gene: Girr_32 Start: 27712, Stop: 28464, Start Num: 3

Candidate Starts for Girr_32:

(Start: 3 @27712 has 3 MA's), (7, 27775), (9, 27823), (12, 27871), (17, 27982), (19, 27991), (24, 28117), (28, 28384),

Gene: Graduation 10 Start: 4816, Stop: 5397, Start Num: 10

Candidate Starts for Graduation 10:

(Start: 10 @4816 has 19 MA's), (13, 4918), (14, 4939), (21, 4987), (27, 5266),

Gene: Gwendoluna_9 Start: 4700, Stop: 5281, Start Num: 10

Candidate Starts for Gwendoluna_9:

(Start: 10 @4700 has 19 MA's), (13, 4802), (14, 4823), (21, 4871), (27, 5150),

Gene: Hamulus_31 Start: 27654, Stop: 28418, Start Num: 2

Candidate Starts for Hamulus 31:

(Start: 1 @27627 has 1 MA's), (Start: 2 @27654 has 4 MA's), (7, 27729), (9, 27777), (12, 27825), (17, 27936), (19, 27945), (24, 28071), (28, 28338),

27000), (10, 270 10), (21, 2007 1), (20, 20000),

Gene: Hermia_10 Start: 4783, Stop: 5361, Start Num: 10

Candidate Starts for Hermia_10:

(Start: 10 @4783 has 19 MA's), (15, 4909), (27, 5242),

Gene: KBG 9 Start: 4959, Stop: 5540, Start Num: 10

Candidate Starts for KBG 9:

(Start: 10 @4959 has 19 MA's), (13, 5061), (14, 5082), (21, 5130), (27, 5409),

Gene: Kenmech_10 Start: 4617, Stop: 5195, Start Num: 10

Candidate Starts for Kenmech_10:

(Start: 10 @4617 has 19 MA's), (15, 4743), (27, 5076),

Gene: Kingsley_29 Start: 26483, Stop: 27247, Start Num: 2

Candidate Starts for Kingsley_29:

(Start: 1 @26456 has 1 MA's), (Start: 2 @26483 has 4 MA's), (7, 26558), (9, 26606), (12, 26654), (17,

26765), (19, 26774), (24, 26900), (28, 27167),

Gene: LilBib_8 Start: 4381, Stop: 4959, Start Num: 10

Candidate Starts for LilBib 8:

(Start: 10 @4381 has 19 MA's), (15, 4507), (27, 4840),

Gene: MisterCuddles_32 Start: 27712, Stop: 28464, Start Num: 3

Candidate Starts for MisterCuddles_32:

(Start: 3 @27712 has 3 MA's), (7, 27775), (9, 27823), (12, 27871), (17, 27982), (19, 27991), (24,

28117), (28, 28384),

Gene: Monet_9 Start: 4498, Stop: 5076, Start Num: 10

Candidate Starts for Monet_9:

(Start: 10 @4498 has 19 MA's), (15, 4624), (27, 4957),

Gene: Mozy_92 Start: 49652, Stop: 50401, Start Num: 5

Candidate Starts for Mozy_92:

(4, 49640), (Start: 5 @49652 has 1 MA's), (11, 49799), (18, 49931), (20, 49946), (23, 49991), (25,

50144),

Gene: Nerujay 9 Start: 4453, Stop: 5034, Start Num: 10

Candidate Starts for Nerujay_9:

(Start: 10 @4453 has 19 MA's), (13, 4555), (14, 4576), (21, 4624), (27, 4903),

Gene: Norz_9 Start: 4534, Stop: 5112, Start Num: 10

Candidate Starts for Norz 9:

(Start: 10 @4534 has 19 MA's), (15, 4660), (27, 4993),

Gene: Ovechkin_31 Start: 27645, Stop: 28436, Start Num: 1

Candidate Starts for Ovechkin_31:

(Start: 1 @ 27645 has 1 MA's), (Start: 2 @ 27672 has 4 MA's), (7, 27747), (9, 27795), (12, 27843), (17,

27954), (19, 27963), (24, 28089), (28, 28356),

Gene: Papez_9 Start: 5271, Stop: 5849, Start Num: 10

Candidate Starts for Papez_9:

(Start: 10 @5271 has 19 MA's), (15, 5397), (27, 5730),

Gene: QTRlifeCrisis 11 Start: 4494, Stop: 5075, Start Num: 10

Candidate Starts for QTRlifeCrisis_11:

(Start: 10 @4494 has 19 MA's), (13, 4596), (14, 4617), (21, 4665), (27, 4944),

Gene: Ruby_32 Start: 27712, Stop: 28464, Start Num: 3

Candidate Starts for Ruby 32:

(Start: 3 @27712 has 3 MA's), (7, 27775), (9, 27823), (12, 27871), (17, 27982), (19, 27991), (24,

28117), (28, 28384),

Gene: Solon_8 Start: 4653, Stop: 5234, Start Num: 10

Candidate Starts for Solon_8:

(Start: 10 @4653 has 19 MA's), (13, 4755), (14, 4776), (21, 4824), (27, 5103),

Gene: Soul22_35 Start: 27040, Stop: 27804, Start Num: 2

Candidate Starts for Soul22 35:

(Start: 1 @27013 has 1 MA's), (Start: 2 @27040 has 4 MA's), (7, 27115), (9, 27163), (12, 27211), (17,

27322), (19, 27331), (24, 27457), (28, 27724),

Gene: SpikeBT_9 Start: 4433, Stop: 5011, Start Num: 10

Candidate Starts for SpikeBT 9:

(Start: 10 @4433 has 19 MA's), (15, 4559), (27, 4892),

Gene: Squee_8 Start: 4160, Stop: 4741, Start Num: 10

Candidate Starts for Squee_8:

(Start: 10 @4160 has 19 MA's), (13, 4262), (14, 4283), (21, 4331), (27, 4610),

Gene: StAnnes_29 Start: 27239, Stop: 28003, Start Num: 2

Candidate Starts for StAnnes 29:

 $(Start: 1 @27212 \ has \ 1 \ MA's), \ (Start: 2 @27239 \ has \ 4 \ MA's), \ (7, 27314), \ (9, 27362), \ (12, 27410), \ (17, 27314), \ (17,$

27521), (19, 27530), (24, 27656), (28, 27923),

Gene: TheloniousMonk_9 Start: 4484, Stop: 5062, Start Num: 10

Candidate Starts for TheloniousMonk_9:

(Start: 10 @4484 has 19 MA's), (15, 4610), (27, 4943),

Gene: Treddle_9 Start: 4499, Stop: 5077, Start Num: 10

Candidate Starts for Treddle 9:

(Start: 10 @4499 has 19 MA's), (15, 4625), (27, 4958),

Gene: Zeuska_8 Start: 4378, Stop: 4959, Start Num: 10

Candidate Starts for Zeuska_8:

(Start: 10 @4378 has 19 MA's), (13, 4480), (14, 4501), (21, 4549), (27, 4828),