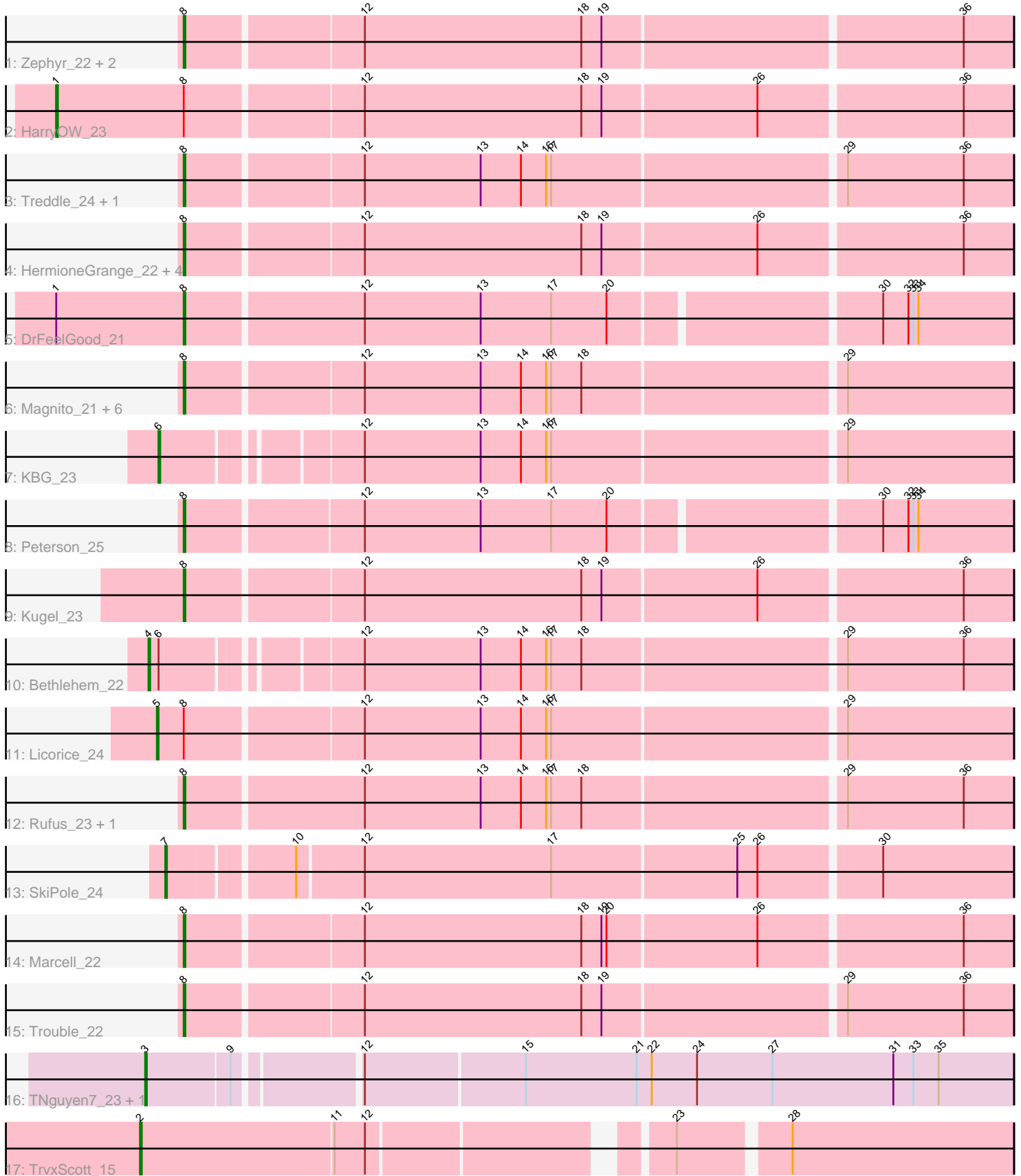


Pham 171665



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 171665 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171665 has 32 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Zephyr\_22, Rhynn\_22, Lockley\_22
- Track 2 : HarryOW\_23
- Track 3 : Treddle\_24, Edtherson\_23
- Track 4 : HermioneGrange\_22, DD5\_23, Aeneas\_24, Lopton\_23, PhrostyMug\_22
- Track 5 : DrFeelGood\_21
- Track 6 : Magnito\_21, Turj99\_21, Froghopper\_23, Slagathor\_23, PattyP\_24, Sagefire\_23, BigPaolini\_23
- Track 7 : KBG\_23
- Track 8 : Peterson\_25
- Track 9 : Kugel\_23
- Track 10 : Bethlehem\_22
- Track 11 : Licorice\_24
- Track 12 : Rufus\_23, Alvin\_23
- Track 13 : SkiPole\_24
- Track 14 : Marcell\_22
- Track 15 : Trouble\_22
- Track 16 : TNguyen7\_23, HelDan\_23
- Track 17 : TrvxScott\_15

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

The start number called the most often in the published annotations is 8, it was called in 24 of the 32 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aeneas\_24, Alvin\_23, BigPaolini\_23, DD5\_23, DrFeelGood\_21, Edtherson\_23, Froghopper\_23, HermioneGrange\_22, Kugel\_23, Lockley\_22, Lopton\_23, Magnito\_21, Marcell\_22, PattyP\_24, Peterson\_25, PhrostyMug\_22, Rhynn\_22, Rufus\_23, Sagefire\_23, Slagathor\_23, Treddle\_24, Trouble\_22, Turj99\_21, Zephyr\_22,

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

- HarryOW\_23, Licorice\_24,

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

- Bethlehem\_22, HelDan\_23, KBG\_23, SkiPole\_24, TNguyen7\_23, TrvxScott\_15,

### Summary by start number:

Start 1:

- Found in 2 of 32 ( 6.2% ) of genes in pham
- Manual Annotations of this start: 1 of 32
- Called 50.0% of time when present
- Phage (with cluster) where this start called: HarryOW\_23 (A1),

Start 2:

- Found in 1 of 32 ( 3.1% ) of genes in pham
- Manual Annotations of this start: 1 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TrvxScott\_15 (BD2),

Start 3:

- Found in 2 of 32 ( 6.2% ) of genes in pham
- Manual Annotations of this start: 2 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: HelDan\_23 (A3), TNguyen7\_23 (A3),

Start 4:

- Found in 1 of 32 ( 3.1% ) of genes in pham
- Manual Annotations of this start: 1 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bethlehem\_22 (A1),

Start 5:

- Found in 1 of 32 ( 3.1% ) of genes in pham
- Manual Annotations of this start: 1 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Licorice\_24 (A1),

Start 6:

- Found in 2 of 32 ( 6.2% ) of genes in pham
- Manual Annotations of this start: 1 of 32
- Called 50.0% of time when present
- Phage (with cluster) where this start called: KBG\_23 (A1),

Start 7:

- Found in 1 of 32 ( 3.1% ) of genes in pham
- Manual Annotations of this start: 1 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SkiPole\_24 (A1),

Start 8:

- Found in 26 of 32 ( 81.2% ) of genes in pham
- Manual Annotations of this start: 24 of 32
- Called 92.3% of time when present
- Phage (with cluster) where this start called: Aeneas\_24 (A1), Alvin\_23 (A1), BigPaolini\_23 (A1), DD5\_23 (A1), DrFeelGood\_21 (A1), Edtherson\_23 (A1),

Froghopper\_23 (A1), HermioneGrange\_22 (A1), Kugel\_23 (A1), Lockley\_22 (A1), Lopton\_23 (A1), Magnito\_21 (A1), Marcell\_22 (A1), PattyP\_24 (A1), Peterson\_25 (A1), PhrostyMug\_22 (A1), Rhynn\_22 (A1), Rufus\_23 (A1), Sagefire\_23 (A1), Slagathor\_23 (A1), Treddle\_24 (A1), Trouble\_22 (A1), Turj99\_21 (A1), Zephyr\_22 (A1),

### **Summary by clusters:**

There are 3 clusters represented in this pham: A1, A3, BD2,

Info for manual annotations of cluster A1:

- Start number 1 was manually annotated 1 time for cluster A1.
- Start number 4 was manually annotated 1 time for cluster A1.
- Start number 5 was manually annotated 1 time for cluster A1.
- Start number 6 was manually annotated 1 time for cluster A1.
- Start number 7 was manually annotated 1 time for cluster A1.
- Start number 8 was manually annotated 24 times for cluster A1.

Info for manual annotations of cluster A3:

- Start number 3 was manually annotated 2 times for cluster A3.

Info for manual annotations of cluster BD2:

- Start number 2 was manually annotated 1 time for cluster BD2.

### **Gene Information:**

Gene: Aeneas\_24 Start: 15784, Stop: 16260, Start Num: 8

Candidate Starts for Aeneas\_24:

(Start: 8 @15784 has 24 MA's), (12, 15883), (18, 16012), (19, 16024), (26, 16114), (36, 16231),

Gene: Alvin\_23 Start: 15994, Stop: 16470, Start Num: 8

Candidate Starts for Alvin\_23:

(Start: 8 @15994 has 24 MA's), (12, 16093), (13, 16162), (14, 16186), (16, 16201), (17, 16204), (18, 16222), (29, 16372), (36, 16441),

Gene: Bethlehem\_22 Start: 16707, Stop: 17192, Start Num: 4

Candidate Starts for Bethlehem\_22:

(Start: 4 @16707 has 1 MA's), (Start: 6 @16713 has 1 MA's), (12, 16815), (13, 16884), (14, 16908), (16, 16923), (17, 16926), (18, 16944), (29, 17094), (36, 17163),

Gene: BigPaolini\_23 Start: 16086, Stop: 16565, Start Num: 8

Candidate Starts for BigPaolini\_23:

(Start: 8 @16086 has 24 MA's), (12, 16188), (13, 16257), (14, 16281), (16, 16296), (17, 16299), (18, 16317), (29, 16467),

Gene: DD5\_23 Start: 16148, Stop: 16624, Start Num: 8

Candidate Starts for DD5\_23:

(Start: 8 @16148 has 24 MA's), (12, 16247), (18, 16376), (19, 16388), (26, 16478), (36, 16595),

Gene: DrFeelGood\_21 Start: 15585, Stop: 16058, Start Num: 8

Candidate Starts for DrFeelGood\_21:

(Start: 1 @15510 has 1 MA's), (Start: 8 @15585 has 24 MA's), (12, 15687), (13, 15756), (17, 15798), (20, 15831), (30, 15981), (32, 15996), (33, 15999), (34, 16002),

Gene: Edtherson\_23 Start: 16242, Stop: 16718, Start Num: 8

Candidate Starts for Edtherson\_23:

(Start: 8 @16242 has 24 MA's), (12, 16341), (13, 16410), (14, 16434), (16, 16449), (17, 16452), (29, 16620), (36, 16689),

Gene: Froghopper\_23 Start: 15416, Stop: 15892, Start Num: 8

Candidate Starts for Froghopper\_23:

(Start: 8 @15416 has 24 MA's), (12, 15515), (13, 15584), (14, 15608), (16, 15623), (17, 15626), (18, 15644), (29, 15794),

Gene: HarryOW\_23 Start: 15740, Stop: 16291, Start Num: 1

Candidate Starts for HarryOW\_23:

(Start: 1 @15740 has 1 MA's), (Start: 8 @15815 has 24 MA's), (12, 15914), (18, 16043), (19, 16055), (26, 16145), (36, 16262),

Gene: HelDan\_23 Start: 14637, Stop: 15134, Start Num: 3

Candidate Starts for HelDan\_23:

(Start: 3 @14637 has 2 MA's), (9, 14685), (12, 14751), (15, 14844), (21, 14910), (22, 14919), (24, 14946), (27, 14991), (31, 15063), (33, 15075), (35, 15090),

Gene: HermioneGrange\_22 Start: 15389, Stop: 15865, Start Num: 8

Candidate Starts for HermioneGrange\_22:

(Start: 8 @15389 has 24 MA's), (12, 15488), (18, 15617), (19, 15629), (26, 15719), (36, 15836),

Gene: KBG\_23 Start: 16352, Stop: 16831, Start Num: 6

Candidate Starts for KBG\_23:

(Start: 6 @16352 has 1 MA's), (12, 16454), (13, 16523), (14, 16547), (16, 16562), (17, 16565), (29, 16733),

Gene: Kugel\_23 Start: 15601, Stop: 16077, Start Num: 8

Candidate Starts for Kugel\_23:

(Start: 8 @15601 has 24 MA's), (12, 15700), (18, 15829), (19, 15841), (26, 15931), (36, 16048),

Gene: Licorice\_24 Start: 16441, Stop: 16932, Start Num: 5

Candidate Starts for Licorice\_24:

(Start: 5 @16441 has 1 MA's), (Start: 8 @16456 has 24 MA's), (12, 16555), (13, 16624), (14, 16648), (16, 16663), (17, 16666), (29, 16834),

Gene: Lockley\_22 Start: 15381, Stop: 15857, Start Num: 8

Candidate Starts for Lockley\_22:

(Start: 8 @15381 has 24 MA's), (12, 15480), (18, 15609), (19, 15621), (36, 15828),

Gene: Lopton\_23 Start: 16805, Stop: 17281, Start Num: 8

Candidate Starts for Lopton\_23:

(Start: 8 @16805 has 24 MA's), (12, 16904), (18, 17033), (19, 17045), (26, 17135), (36, 17252),

Gene: Magnito\_21 Start: 14926, Stop: 15402, Start Num: 8

Candidate Starts for Magnito\_21:

(Start: 8 @14926 has 24 MA's), (12, 15025), (13, 15094), (14, 15118), (16, 15133), (17, 15136), (18, 15154), (29, 15304),

Gene: Marcell\_22 Start: 15675, Stop: 16151, Start Num: 8  
Candidate Starts for Marcell\_22:  
(Start: 8 @15675 has 24 MA's), (12, 15774), (18, 15903), (19, 15915), (20, 15918), (26, 16005), (36, 16122),

Gene: PattyP\_24 Start: 15719, Stop: 16195, Start Num: 8  
Candidate Starts for PattyP\_24:  
(Start: 8 @15719 has 24 MA's), (12, 15818), (13, 15887), (14, 15911), (16, 15926), (17, 15929), (18, 15947), (29, 16097),

Gene: Peterson\_25 Start: 17165, Stop: 17635, Start Num: 8  
Candidate Starts for Peterson\_25:  
(Start: 8 @17165 has 24 MA's), (12, 17264), (13, 17333), (17, 17375), (20, 17408), (30, 17558), (32, 17573), (33, 17576), (34, 17579),

Gene: PhrostyMug\_22 Start: 15488, Stop: 15964, Start Num: 8  
Candidate Starts for PhrostyMug\_22:  
(Start: 8 @15488 has 24 MA's), (12, 15587), (18, 15716), (19, 15728), (26, 15818), (36, 15935),

Gene: Rhynn\_22 Start: 15497, Stop: 15973, Start Num: 8  
Candidate Starts for Rhynn\_22:  
(Start: 8 @15497 has 24 MA's), (12, 15596), (18, 15725), (19, 15737), (36, 15944),

Gene: Rufus\_23 Start: 15862, Stop: 16341, Start Num: 8  
Candidate Starts for Rufus\_23:  
(Start: 8 @15862 has 24 MA's), (12, 15964), (13, 16033), (14, 16057), (16, 16072), (17, 16075), (18, 16093), (29, 16243), (36, 16312),

Gene: Sagefire\_23 Start: 16302, Stop: 16781, Start Num: 8  
Candidate Starts for Sagefire\_23:  
(Start: 8 @16302 has 24 MA's), (12, 16404), (13, 16473), (14, 16497), (16, 16512), (17, 16515), (18, 16533), (29, 16683),

Gene: SkiPole\_24 Start: 15639, Stop: 16118, Start Num: 7  
Candidate Starts for SkiPole\_24:  
(Start: 7 @15639 has 1 MA's), (10, 15705), (12, 15741), (17, 15852), (25, 15960), (26, 15972), (30, 16041),

Gene: Slagathor\_23 Start: 15366, Stop: 15842, Start Num: 8  
Candidate Starts for Slagathor\_23:  
(Start: 8 @15366 has 24 MA's), (12, 15465), (13, 15534), (14, 15558), (16, 15573), (17, 15576), (18, 15594), (29, 15744),

Gene: TNguyen7\_23 Start: 14554, Stop: 15051, Start Num: 3  
Candidate Starts for TNguyen7\_23:  
(Start: 3 @14554 has 2 MA's), (9, 14602), (12, 14668), (15, 14761), (21, 14827), (22, 14836), (24, 14863), (27, 14908), (31, 14980), (33, 14992), (35, 15007),

Gene: Treddle\_24 Start: 16713, Stop: 17189, Start Num: 8  
Candidate Starts for Treddle\_24:  
(Start: 8 @16713 has 24 MA's), (12, 16812), (13, 16881), (14, 16905), (16, 16920), (17, 16923), (29, 17091), (36, 17160),

Gene: Trouble\_22 Start: 15760, Stop: 16236, Start Num: 8

Candidate Starts for Trouble\_22:

(Start: 8 @15760 has 24 MA's), (12, 15859), (18, 15988), (19, 16000), (29, 16138), (36, 16207),

Gene: TrvxScott\_15 Start: 10708, Stop: 11187, Start Num: 2

Candidate Starts for TrvxScott\_15:

(Start: 2 @10708 has 1 MA's), (11, 10822), (12, 10840), (23, 10996), (28, 11056),

Gene: Turj99\_21 Start: 15197, Stop: 15673, Start Num: 8

Candidate Starts for Turj99\_21:

(Start: 8 @15197 has 24 MA's), (12, 15296), (13, 15365), (14, 15389), (16, 15404), (17, 15407), (18, 15425), (29, 15575),

Gene: Zephyr\_22 Start: 15543, Stop: 16019, Start Num: 8

Candidate Starts for Zephyr\_22:

(Start: 8 @15543 has 24 MA's), (12, 15642), (18, 15771), (19, 15783), (36, 15990),