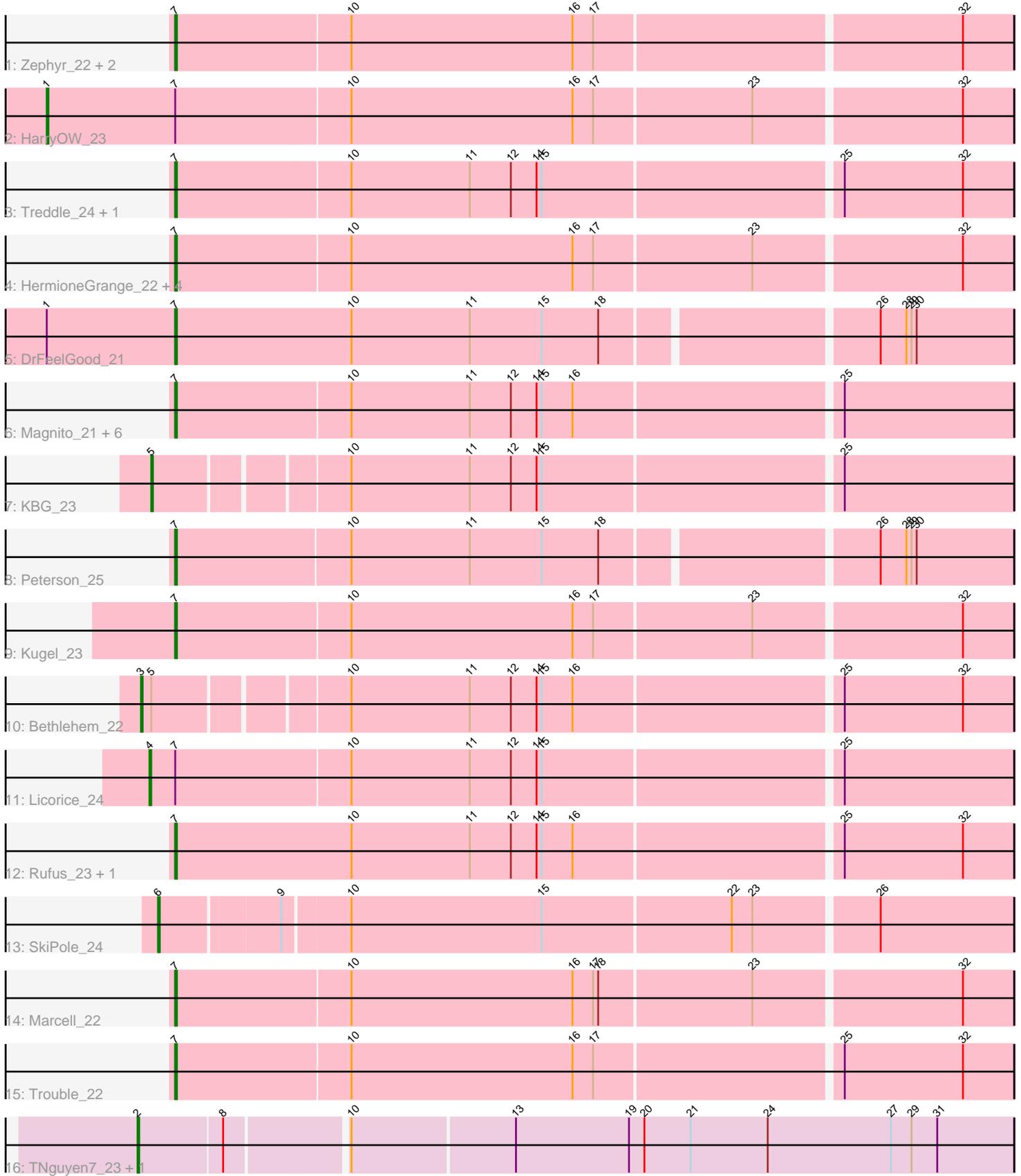# Pham 291398

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 291398 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291398 has 31 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

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

The start number called the most often in the published annotations is 7, it was called in 24 of the 31 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,

Summary by start number:

Start 1:
• Found in 2 of 31 (6.5%) of genes in pham
• Manual Annotations of this start: 1 of 31
• Called 50.0% of time when present
• Phage (with cluster) where this start called: HarryOW_23 (A1),

Start 2:
• Found in 2 of 31 (6.5%) of genes in pham
• Manual Annotations of this start: 2 of 31
• Called 100.0% of time when present
• Phage (with cluster) where this start called: HelDan_23 (A3), TNguyen7_23 (A3),

Start 3:
• Found in 1 of 31 (3.2%) of genes in pham
• Manual Annotations of this start: 1 of 31
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bethlehem_22 (A1),

Start 4:
• Found in 1 of 31 (3.2%) of genes in pham
• Manual Annotations of this start: 1 of 31
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Licorice_24 (A1),

Start 5:
• Found in 2 of 31 (6.5%) of genes in pham
• Manual Annotations of this start: 1 of 31
• Called 50.0% of time when present
• Phage (with cluster) where this start called: KBG_23 (A1),

Start 6:
• Found in 1 of 31 (3.2%) of genes in pham
• Manual Annotations of this start: 1 of 31
• Called 100.0% of time when present
• Phage (with cluster) where this start called: SkiPole_24 (A1),

Start 7:
• Found in 26 of 31 (83.9%) of genes in pham
• Manual Annotations of this start: 24 of 31
• 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 2 clusters represented in this pham: A1, A3,

Info for manual annotations of cluster A1:
•Start number 1 was manually annotated 1 time for cluster A1.
•Start number 3 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 24 times for cluster A1.

Info for manual annotations of cluster A3:
•Start number 2 was manually annotated 2 times for cluster A3.

Gene Information:

Gene: Aeneas_24 Start: 15784, Stop: 16260, Start Num: 7
Candidate Starts for Aeneas_24:
(Start: 7 @15784 has 24 MA's), (10, 15883), (16, 16012), (17, 16024), (23, 16114), (32, 16231),

Gene: Alvin_23 Start: 15994, Stop: 16470, Start Num: 7
Candidate Starts for Alvin_23:
(Start: 7 @15994 has 24 MA's), (10, 16093), (11, 16162), (12, 16186), (14, 16201), (15, 16204), (16, 16222), (25, 16372), (32, 16441),

Gene: Bethlehem_22 Start: 16707, Stop: 17192, Start Num: 3
Candidate Starts for Bethlehem_22:
(Start: 3 @16707 has 1 MA's), (Start: 5 @16713 has 1 MA's), (10, 16815), (11, 16884), (12, 16908), (14, 16923), (15, 16926), (16, 16944), (25, 17094), (32, 17163),

Gene: BigPaolini_23 Start: 16086, Stop: 16565, Start Num: 7
Candidate Starts for BigPaolini_23:
(Start: 7 @16086 has 24 MA's), (10, 16188), (11, 16257), (12, 16281), (14, 16296), (15, 16299), (16, 16317), (25, 16467),

Gene: DD5_23 Start: 16148, Stop: 16624, Start Num: 7
Candidate Starts for DD5_23:
(Start: 7 @16148 has 24 MA's), (10, 16247), (16, 16376), (17, 16388), (23, 16478), (32, 16595),

Gene: DrFeelGood_21 Start: 15585, Stop: 16058, Start Num: 7
Candidate Starts for DrFeelGood_21:
(Start: 1 @15510 has 1 MA's), (Start: 7 @15585 has 24 MA's), (10, 15687), (11, 15756), (15, 15798), (18, 15831), (26, 15981), (28, 15996), (29, 15999), (30, 16002),

Gene: Edtherson_23 Start: 16242, Stop: 16718, Start Num: 7
Candidate Starts for Edtherson_23:
(Start: 7 @16242 has 24 MA's), (10, 16341), (11, 16410), (12, 16434), (14, 16449), (15, 16452), (25, 16620), (32, 16689),

Gene: Froghopper_23 Start: 15416, Stop: 15892, Start Num: 7
Candidate Starts for Froghopper_23:

(Start: 7 @15416 has 24 MA's), (10, 15515), (11, 15584), (12, 15608), (14, 15623), (15, 15626), (16, 15644), (25, 15794),

Gene: HarryOW_23 Start: 15740, Stop: 16291, Start Num: 1
Candidate Starts for HarryOW_23:
(Start: 1 @15740 has 1 MA's), (Start: 7 @15815 has 24 MA's), (10, 15914), (16, 16043), (17, 16055), (23, 16145), (32, 16262),

Gene: HelDan_23 Start: 14637, Stop: 15134, Start Num: 2
Candidate Starts for HelDan_23:
(Start: 2 @14637 has 2 MA's), (8, 14685), (10, 14751), (13, 14844), (19, 14910), (20, 14919), (21, 14946), (24, 14991), (27, 15063), (29, 15075), (31, 15090),

Gene: HermioneGrange_22 Start: 15389, Stop: 15865, Start Num: 7
Candidate Starts for HermioneGrange_22:
(Start: 7 @15389 has 24 MA's), (10, 15488), (16, 15617), (17, 15629), (23, 15719), (32, 15836),

Gene: KBG_23 Start: 16352, Stop: 16831, Start Num: 5
Candidate Starts for KBG_23:
(Start: 5 @16352 has 1 MA's), (10, 16454), (11, 16523), (12, 16547), (14, 16562), (15, 16565), (25, 16733),

Gene: Kugel_23 Start: 15601, Stop: 16077, Start Num: 7
Candidate Starts for Kugel_23:
(Start: 7 @15601 has 24 MA's), (10, 15700), (16, 15829), (17, 15841), (23, 15931), (32, 16048),

Gene: Licorice_24 Start: 16441, Stop: 16932, Start Num: 4
Candidate Starts for Licorice_24:
(Start: 4 @16441 has 1 MA's), (Start: 7 @16456 has 24 MA's), (10, 16555), (11, 16624), (12, 16648), (14, 16663), (15, 16666), (25, 16834),

Gene: Lockley_22 Start: 15381, Stop: 15857, Start Num: 7
Candidate Starts for Lockley_22:
(Start: 7 @15381 has 24 MA's), (10, 15480), (16, 15609), (17, 15621), (32, 15828),

Gene: Lopton_23 Start: 16805, Stop: 17281, Start Num: 7
Candidate Starts for Lopton_23:
(Start: 7 @16805 has 24 MA's), (10, 16904), (16, 17033), (17, 17045), (23, 17135), (32, 17252),

Gene: Magnito_21 Start: 14926, Stop: 15402, Start Num: 7
Candidate Starts for Magnito_21:
(Start: 7 @14926 has 24 MA's), (10, 15025), (11, 15094), (12, 15118), (14, 15133), (15, 15136), (16, 15154), (25, 15304),

Gene: Marcell_22 Start: 15675, Stop: 16151, Start Num: 7
Candidate Starts for Marcell_22:
(Start: 7 @15675 has 24 MA's), (10, 15774), (16, 15903), (17, 15915), (18, 15918), (23, 16005), (32, 16122),

Gene: PattyP_24 Start: 15719, Stop: 16195, Start Num: 7
Candidate Starts for PattyP_24:
(Start: 7 @15719 has 24 MA's), (10, 15818), (11, 15887), (12, 15911), (14, 15926), (15, 15929), (16, 15947), (25, 16097),

Gene: Peterson_25 Start: 17165, Stop: 17635, Start Num: 7
Candidate Starts for Peterson_25:
(Start: 7 @17165 has 24 MA's), (10, 17264), (11, 17333), (15, 17375), (18, 17408), (26, 17558), (28, 17573), (29, 17576), (30, 17579),

Gene: PhrostyMug_22 Start: 15488, Stop: 15964, Start Num: 7
Candidate Starts for PhrostyMug_22:
(Start: 7 @15488 has 24 MA's), (10, 15587), (16, 15716), (17, 15728), (23, 15818), (32, 15935),

Gene: Rhynn_22 Start: 15497, Stop: 15973, Start Num: 7
Candidate Starts for Rhynn_22:
(Start: 7 @15497 has 24 MA's), (10, 15596), (16, 15725), (17, 15737), (32, 15944),

Gene: Rufus_23 Start: 15862, Stop: 16341, Start Num: 7
Candidate Starts for Rufus_23:
(Start: 7 @15862 has 24 MA's), (10, 15964), (11, 16033), (12, 16057), (14, 16072), (15, 16075), (16, 16093), (25, 16243), (32, 16312),

Gene: Sagefire_23 Start: 16302, Stop: 16781, Start Num: 7
Candidate Starts for Sagefire_23:
(Start: 7 @16302 has 24 MA's), (10, 16404), (11, 16473), (12, 16497), (14, 16512), (15, 16515), (16, 16533), (25, 16683),

Gene: SkiPole_24 Start: 15639, Stop: 16118, Start Num: 6
Candidate Starts for SkiPole_24:
(Start: 6 @15639 has 1 MA's), (9, 15705), (10, 15741), (15, 15852), (22, 15960), (23, 15972), (26, 16041),

Gene: Slagathor_23 Start: 15366, Stop: 15842, Start Num: 7
Candidate Starts for Slagathor_23:
(Start: 7 @15366 has 24 MA's), (10, 15465), (11, 15534), (12, 15558), (14, 15573), (15, 15576), (16, 15594), (25, 15744),

Gene: TNguyen7_23 Start: 14554, Stop: 15051, Start Num: 2
Candidate Starts for TNguyen7_23:
(Start: 2 @14554 has 2 MA's), (8, 14602), (10, 14668), (13, 14761), (19, 14827), (20, 14836), (21, 14863), (24, 14908), (27, 14980), (29, 14992), (31, 15007),

Gene: Treddle_24 Start: 16713, Stop: 17189, Start Num: 7
Candidate Starts for Treddle_24:
(Start: 7 @16713 has 24 MA's), (10, 16812), (11, 16881), (12, 16905), (14, 16920), (15, 16923), (25, 17091), (32, 17160),

Gene: Trouble_22 Start: 15760, Stop: 16236, Start Num: 7
Candidate Starts for Trouble_22:
(Start: 7 @15760 has 24 MA's), (10, 15859), (16, 15988), (17, 16000), (25, 16138), (32, 16207),

Gene: Turj99_21 Start: 15197, Stop: 15673, Start Num: 7
Candidate Starts for Turj99_21:
(Start: 7 @15197 has 24 MA's), (10, 15296), (11, 15365), (12, 15389), (14, 15404), (15, 15407), (16, 15425), (25, 15575),

Gene: Zephyr_22 Start: 15543, Stop: 16019, Start Num: 7
Candidate Starts for Zephyr_22:
(Start: 7 @15543 has 24 MA's), (10, 15642), (16, 15771), (17, 15783), (32, 15990),