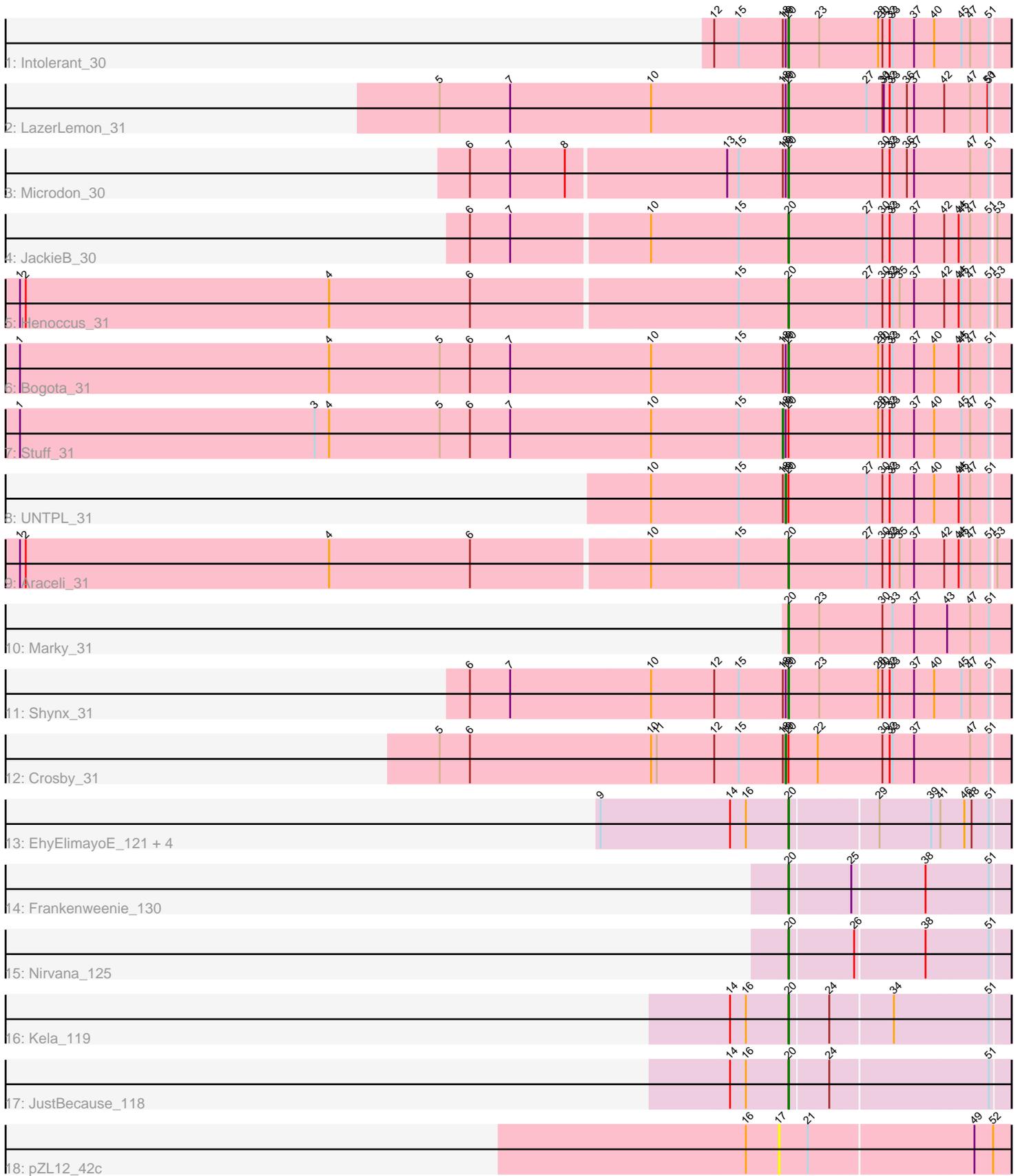# Pham 289725

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 289725 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 289725 has 22 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Intolerant_30
• Track 2 : LazerLemon_31
• Track 3 : Microdon_30
• Track 4 : JackieB_30
• Track 5 : Henoccus_31
• Track 6 : Bogota_31
• Track 7 : Stuff_31
• Track 8 : UNTPL_31
• Track 9 : Araceli_31
• Track 10 : Marky_31
• Track 11 : Shynx_31
• Track 12 : Crosby_31
• Track 13 : EhyElimayoE_121, Kradal_120, Quantum_119, Sarkar_128, Satis_120
• Track 14 : Frankenweenie_130
• Track 15 : Nirvana_125
• Track 16 : Kela_119
• Track 17 : JustBecause_118
• Track 18 : pZL12_42c

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

The start number called the most often in the published annotations is 20, it was called in 17 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Araceli_31, Bogota_31, EhyElimayoE_121, Frankenweenie_130, Henoccus_31, Intolerant_30, JackieB_30, JustBecause_118, Kela_119, Kradal_120, LazerLemon_31, Marky_31, Microdon_30, Nirvana_125, Quantum_119, Sarkar_128, Satis_120, Shynx_31,

Genes that have the "Most Annotated" start but do not call it:
• Crosby_31, Stuff_31, UNTPL_31,

Genes that do not have the "Most Annotated" start:
• pZL12_42c,

Summary by start number:

Start 17:
• Found in 1 of 22 (4.5%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: pZL12_42c (singleton),

Start 18:
• Found in 8 of 22 (36.4%) of genes in pham
• Manual Annotations of this start: 1 of 20
• Called 12.5% of time when present
• Phage (with cluster) where this start called: Stuff_31 (BH),

Start 19:
• Found in 8 of 22 (36.4%) of genes in pham
• Manual Annotations of this start: 2 of 20
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Crosby_31 (BH), UNTPL_31 (BH),

Start 20:
• Found in 21 of 22 (95.5%) of genes in pham
• Manual Annotations of this start: 17 of 20
• Called 85.7% of time when present
• Phage (with cluster) where this start called: Araceli_31 (BH), Bogota_31 (BH), EhyElimayoE_121 (BM), Frankenweenie_130 (BM), Henoccus_31 (BH), Intolerant_30 (BH), JackieB_30 (BH), JustBecause_118 (BM), Kela_119 (BM), Kradal_120 (BM), LazerLemon_31 (BH), Marky_31 (BH), Microdon_30 (BH), Nirvana_125 (BM), Quantum_119 (BM), Sarkar_128 (BM), Satis_120 (BM), Shynx_31 (BH),

Summary by clusters:

There are 3 clusters represented in this pham: BM, singleton, BH,

Info for manual annotations of cluster BH:
•Start number 18 was manually annotated 1 time for cluster BH.
•Start number 19 was manually annotated 2 times for cluster BH.
•Start number 20 was manually annotated 9 times for cluster BH.

Info for manual annotations of cluster BM:
•Start number 20 was manually annotated 8 times for cluster BM.

Gene Information:

Gene: Araceli_31 Start: 26097, Stop: 26549, Start Num: 20
Candidate Starts for Araceli_31:
(1, 24528), (2, 24540), (4, 25173), (6, 25461), (10, 25818), (15, 25998), (Start: 20 @26097 has 17 MA's), (27, 26259), (30, 26292), (32, 26307), (33, 26313), (35, 26328), (37, 26358), (42, 26421), (44, 26451), (45, 26457), (47, 26475), (51, 26514), (53, 26523),

Gene: Bogota_31 Start: 26235, Stop: 26687, Start Num: 20
Candidate Starts for Bogota_31:
(1, 24645), (4, 25290), (5, 25521), (6, 25578), (7, 25662), (10, 25953), (15, 26136), (Start: 18 @26226 has 1 MA's), (Start: 19 @26232 has 2 MA's), (Start: 20 @26235 has 17 MA's), (28, 26421), (30, 26430), (32, 26445), (33, 26451), (37, 26496), (40, 26538), (44, 26589), (45, 26595), (47, 26613), (51, 26652),

Gene: Crosby_31 Start: 26221, Stop: 26676, Start Num: 19
Candidate Starts for Crosby_31:
(5, 25510), (6, 25570), (10, 25942), (11, 25954), (12, 26074), (15, 26125), (Start: 18 @26215 has 1 MA's), (Start: 19 @26221 has 2 MA's), (Start: 20 @26224 has 17 MA's), (22, 26284), (30, 26419), (32, 26434), (33, 26440), (37, 26485), (47, 26602), (51, 26641),

Gene: EhyElimayoE_121 Start: 79011, Stop: 79445, Start Num: 20
Candidate Starts for EhyElimayoE_121:
(9, 78627), (14, 78894), (16, 78927), (Start: 20 @79011 has 17 MA's), (29, 79185), (39, 79293), (41, 79311), (46, 79359), (48, 79374), (51, 79410),

Gene: Frankenweenie_130 Start: 83927, Stop: 84361, Start Num: 20
Candidate Starts for Frankenweenie_130:
(Start: 20 @83927 has 17 MA's), (25, 84050), (38, 84197), (51, 84326),

Gene: Henoccus_31 Start: 26107, Stop: 26559, Start Num: 20
Candidate Starts for Henoccus_31:
(1, 24538), (2, 24550), (4, 25183), (6, 25471), (15, 26008), (Start: 20 @26107 has 17 MA's), (27, 26269), (30, 26302), (32, 26317), (33, 26323), (35, 26338), (37, 26368), (42, 26431), (44, 26461), (45, 26467), (47, 26485), (51, 26524), (53, 26533),

Gene: Intolerant_30 Start: 26098, Stop: 26550, Start Num: 20
Candidate Starts for Intolerant_30:
(12, 25948), (15, 25999), (Start: 18 @26089 has 1 MA's), (Start: 19 @26095 has 2 MA's), (Start: 20 @26098 has 17 MA's), (23, 26161), (28, 26284), (30, 26293), (32, 26308), (33, 26314), (37, 26359), (40, 26401), (45, 26458), (47, 26476), (51, 26515),

Gene: JackieB_30 Start: 25962, Stop: 26414, Start Num: 20
Candidate Starts for JackieB_30:
(6, 25326), (7, 25410), (10, 25683), (15, 25863), (Start: 20 @25962 has 17 MA's), (27, 26124), (30, 26157), (32, 26172), (33, 26178), (37, 26223), (42, 26286), (44, 26316), (45, 26322), (47, 26340), (51, 26379), (53, 26388),

Gene: JustBecause_118 Start: 78079, Stop: 78513, Start Num: 20
Candidate Starts for JustBecause_118:
(14, 77962), (16, 77995), (Start: 20 @78079 has 17 MA's), (24, 78157), (51, 78478),

Gene: Kela_119 Start: 77959, Stop: 78393, Start Num: 20
Candidate Starts for Kela_119:
(14, 77842), (16, 77875), (Start: 20 @77959 has 17 MA's), (24, 78037), (34, 78163), (51, 78358),

Gene: Kradal_120 Start: 79008, Stop: 79442, Start Num: 20
Candidate Starts for Kradal_120:
(9, 78624), (14, 78891), (16, 78924), (Start: 20 @79008 has 17 MA's), (29, 79182), (39, 79290), (41, 79308), (46, 79356), (48, 79371), (51, 79407),

Gene: LazerLemon_31 Start: 26614, Stop: 27063, Start Num: 20
Candidate Starts for LazerLemon_31:
(5, 25897), (7, 26041), (10, 26332), (Start: 18 @26605 has 1 MA's), (Start: 19 @26611 has 2 MA's), (Start: 20 @26614 has 17 MA's), (27, 26776), (30, 26809), (31, 26812), (32, 26824), (33, 26830), (36, 26860), (37, 26875), (42, 26938), (47, 26992), (50, 27028), (51, 27031),

Gene: Marky_31 Start: 25965, Stop: 26429, Start Num: 20
Candidate Starts for Marky_31:
(Start: 20 @25965 has 17 MA's), (23, 26028), (30, 26160), (33, 26181), (37, 26226), (43, 26295), (47, 26343), (51, 26382),

Gene: Microdon_30 Start: 25921, Stop: 26373, Start Num: 20
Candidate Starts for Microdon_30:
(6, 25276), (7, 25360), (8, 25474), (13, 25798), (15, 25822), (Start: 18 @25912 has 1 MA's), (Start: 19 @25918 has 2 MA's), (Start: 20 @25921 has 17 MA's), (30, 26116), (32, 26131), (33, 26137), (36, 26167), (37, 26182), (47, 26299), (51, 26338),

Gene: Nirvana_125 Start: 82324, Stop: 82758, Start Num: 20
Candidate Starts for Nirvana_125:
(Start: 20 @82324 has 17 MA's), (26, 82453), (38, 82594), (51, 82723),

Gene: Quantum_119 Start: 79008, Stop: 79442, Start Num: 20
Candidate Starts for Quantum_119:
(9, 78624), (14, 78891), (16, 78924), (Start: 20 @79008 has 17 MA's), (29, 79182), (39, 79290), (41, 79308), (46, 79356), (48, 79371), (51, 79407),

Gene: Sarkar_128 Start: 79008, Stop: 79442, Start Num: 20
Candidate Starts for Sarkar_128:
(9, 78624), (14, 78891), (16, 78924), (Start: 20 @79008 has 17 MA's), (29, 79182), (39, 79290), (41, 79308), (46, 79356), (48, 79371), (51, 79407),

Gene: Satis_120 Start: 79004, Stop: 79438, Start Num: 20
Candidate Starts for Satis_120:
(9, 78620), (14, 78887), (16, 78920), (Start: 20 @79004 has 17 MA's), (29, 79178), (39, 79286), (41, 79304), (46, 79352), (48, 79367), (51, 79403),

Gene: Shynx_31 Start: 26374, Stop: 26826, Start Num: 20
Candidate Starts for Shynx_31:
(6, 25720), (7, 25804), (10, 26092), (12, 26224), (15, 26275), (Start: 18 @26365 has 1 MA's), (Start: 19 @26371 has 2 MA's), (Start: 20 @26374 has 17 MA's), (23, 26437), (28, 26560), (30, 26569), (32, 26584), (33, 26590), (37, 26635), (40, 26677), (45, 26734), (47, 26752), (51, 26791),

Gene: Stuff_31 Start: 26387, Stop: 26848, Start Num: 18
Candidate Starts for Stuff_31:
(1, 24806), (3, 25421), (4, 25451), (5, 25682), (6, 25739), (7, 25823), (10, 26114), (15, 26297), (Start: 18 @26387 has 1 MA's), (Start: 19 @26393 has 2 MA's), (Start: 20 @26396 has 17 MA's), (28, 26582), (30, 26591), (32, 26606), (33, 26612), (37, 26657), (40, 26699), (45, 26756), (47, 26774), (51, 26813),

Gene: UNTPL_31 Start: 26213, Stop: 26668, Start Num: 19
Candidate Starts for UNTPL_31:
(10, 25934), (15, 26117), (Start: 18 @26207 has 1 MA's), (Start: 19 @26213 has 2 MA's), (Start: 20 @26216 has 17 MA's), (27, 26378), (30, 26411), (32, 26426), (33, 26432), (37, 26477), (40, 26519), (44, 26570), (45, 26576), (47, 26594), (51, 26633),

Gene: pZL12_42c Start: 31108, Stop: 30641, Start Num: 17
Candidate Starts for pZL12_42c:
(16, 31177), (17, 31108), (21, 31048), (49, 30715), (52, 30676),