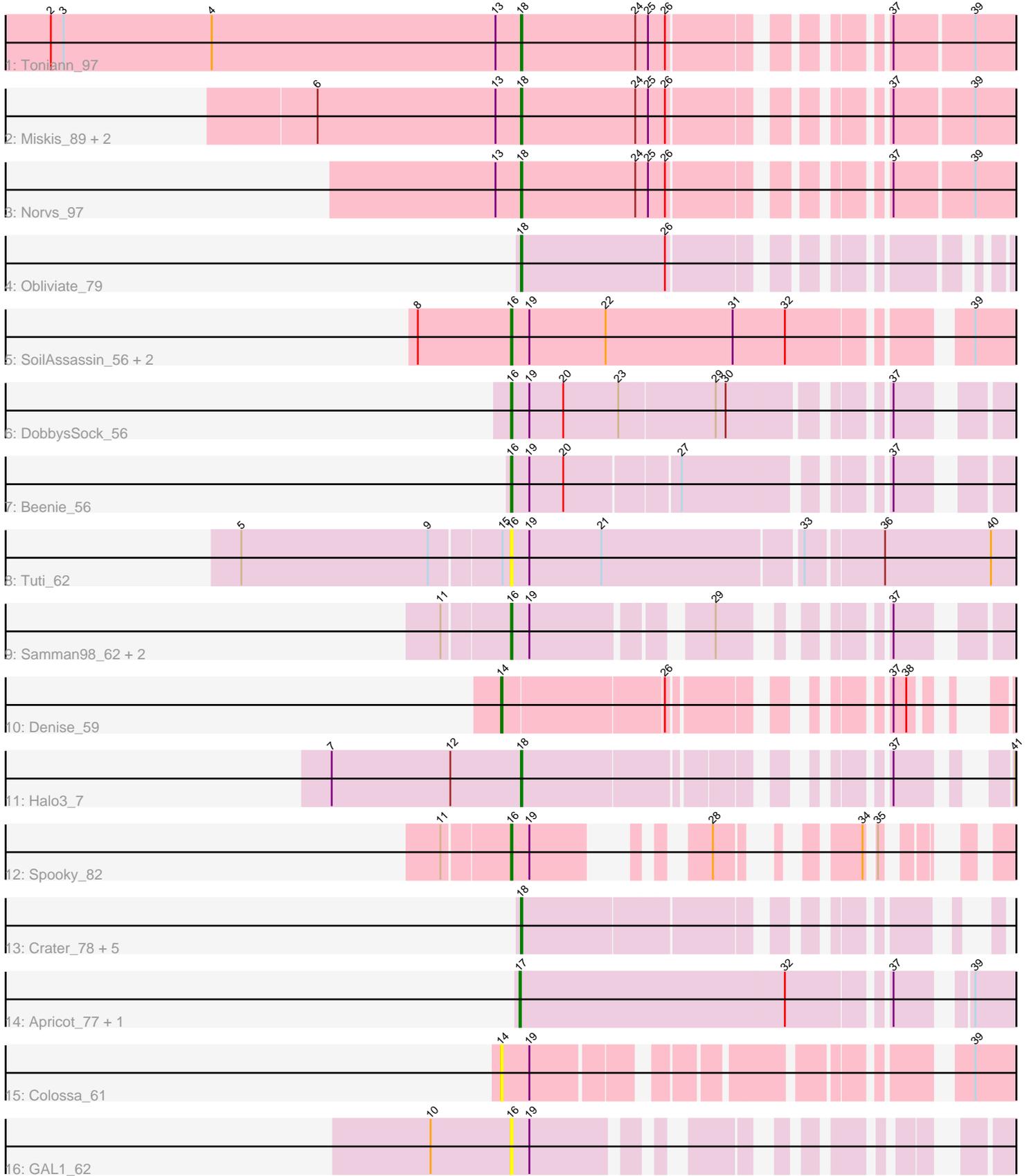# Zoomed Pham 291432

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 291432 Report

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

Pham number 291432 has 28 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Toniann_97
• Track 2 : Miskis_89, Dusty_93, Aphelion_96
• Track 3 : Norvs_97
• Track 4 : Obliviate_79
• Track 5 : SoilAssassin_56, Attis_56, LordFarquaad_58
• Track 6 : DobbysSock_56
• Track 7 : Beenie_56
• Track 8 : Tuti_62
• Track 9 : Samman98_62, Invectra_64, Clark_61
• Track 10 : Denise_59
• Track 11 : Halo3_7
• Track 12 : Spooky_82
• Track 13 : Crater_78, Leroy_79, Pepperoni_56, Horus_80, Ecliptus_84, Phistory_77
• Track 14 : Apricot_77, Lton_57
• Track 15 : Colossa_61
• Track 16 : GAL1_62

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

The start number called the most often in the published annotations is 18, it was called in 12 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aphelion_96, Crater_78, Dusty_93, Ecliptus_84, Halo3_7, Horus_80, Leroy_79, Miskis_89, Norvs_97, Obliviate_79, Pepperoni_56, Phistory_77, Toniann_97,

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

Genes that do not have the "Most Annotated" start:
• Apricot_77, Attis_56, Beenie_56, Clark_61, Colossa_61, Denise_59, DobbysSock_56, GAL1_62, Invectra_64, LordFarquaad_58, Lton_57, Samman98_62, SoilAssassin_56, Spooky_82, Tuti_62,

Summary by start number:

Start 14:
• Found in 2 of 28 (7.1%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Colossa_61 (KA), Denise_59 (CZ5),

Start 16:
• Found in 11 of 28 (39.3%) of genes in pham
• Manual Annotations of this start: 9 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Attis_56 (CZ2), Beenie_56 (CZ4), Clark_61 (CZ4), DobbysSock_56 (CZ4), GAL1_62 (singleton), Invectra_64 (CZ4), LordFarquaad_58 (CZ2), Samman98_62 (CZ4), SoilAssassin_56 (CZ2), Spooky_82 (DN2), Tuti_62 (CZ4),

Start 17:
• Found in 2 of 28 (7.1%) of genes in pham
• Manual Annotations of this start: 2 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Apricot_77 (DN3), Lton_57 (CZ),

Start 18:
• Found in 13 of 28 (46.4%) of genes in pham
• Manual Annotations of this start: 12 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aphelion_96 (CQ1), Crater_78 (DN3), Dusty_93 (CQ1), Ecliptus_84 (DN), Halo3_7 (DC1), Horus_80 (DN1), Leroy_79 (DN1), Miskis_89 (CQ1), Norvs_97 (CQ1), Obliviate_79 (CV), Pepperoni_56 (CZ), Phistory_77 (DN1), Toniann_97 (CQ1),

Summary by clusters:

There are 13 clusters represented in this pham: DN, KA, CZ2, singleton, CZ4, CZ5, CZ, DN1, DN3, DN2, CQ1, CV, DC1,

Info for manual annotations of cluster CQ1:
•Start number 18 was manually annotated 5 times for cluster CQ1.

Info for manual annotations of cluster CV:
•Start number 18 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CZ:
•Start number 17 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ2:
•Start number 16 was manually annotated 3 times for cluster CZ2.

Info for manual annotations of cluster CZ4:
•Start number 16 was manually annotated 5 times for cluster CZ4.

Info for manual annotations of cluster CZ5:

•Start number 14 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster DC1:
•Start number 18 was manually annotated 1 time for cluster DC1.

Info for manual annotations of cluster DN:
•Start number 18 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:
•Start number 18 was manually annotated 3 times for cluster DN1.

Info for manual annotations of cluster DN2:
•Start number 16 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster DN3:
•Start number 17 was manually annotated 1 time for cluster DN3.
•Start number 18 was manually annotated 1 time for cluster DN3.

Gene Information:

Gene: Aphelion_96 Start: 59234, Stop: 59845, Start Num: 18
Candidate Starts for Aphelion_96:
(6, 59090), (13, 59216), (Start: 18 @59234 has 12 MA's), (24, 59315), (25, 59324), (26, 59336), (37, 59450), (39, 59504), (53, 59645), (60, 59714), (66, 59789), (67, 59807),

Gene: Apricot_77 Start: 44433, Stop: 44912, Start Num: 17
Candidate Starts for Apricot_77:
(Start: 17 @44433 has 2 MA's), (32, 44619), (37, 44682), (39, 44721), (49, 44811),

Gene: Attis_56 Start: 39408, Stop: 40010, Start Num: 16
Candidate Starts for Attis_56:
(8, 39342), (Start: 16 @39408 has 9 MA's), (19, 39420), (22, 39474), (31, 39564), (32, 39600), (39, 39705), (49, 39807), (53, 39846), (63, 39954), (65, 39975),

Gene: Beenie_56 Start: 40503, Stop: 41057, Start Num: 16
Candidate Starts for Beenie_56:
(Start: 16 @40503 has 9 MA's), (19, 40515), (20, 40539), (27, 40614), (37, 40731), (42, 40797), (50, 40860), (60, 40923), (68, 41037),

Gene: Clark_61 Start: 40299, Stop: 40820, Start Num: 16
Candidate Starts for Clark_61:
(11, 40254), (Start: 16 @40299 has 9 MA's), (19, 40311), (29, 40419), (37, 40494), (42, 40560), (50, 40623), (60, 40686), (68, 40800),

Gene: Colossa_61 Start: 39877, Stop: 40413, Start Num: 14
Candidate Starts for Colossa_61:
(Start: 14 @39877 has 1 MA's), (19, 39895), (39, 40135), (53, 40276), (59, 40324), (62, 40354),

Gene: Crater_78 Start: 45182, Stop: 45649, Start Num: 18
Candidate Starts for Crater_78:

(Start: 18 @45182 has 12 MA's), (43, 45437), (48, 45449),

Gene: Denise_59 Start: 37230, Stop: 37658, Start Num: 14
Candidate Starts for Denise_59:
(Start: 14 @37230 has 1 MA's), (26, 37338), (37, 37440), (38, 37449),

Gene: DobbysSock_56 Start: 39905, Stop: 40468, Start Num: 16
Candidate Starts for DobbysSock_56:
(Start: 16 @39905 has 9 MA's), (19, 39917), (20, 39941), (23, 39980), (29, 40046), (30, 40052), (37, 40142), (42, 40208), (50, 40271), (60, 40334), (68, 40448),

Gene: Dusty_93 Start: 57740, Stop: 58351, Start Num: 18
Candidate Starts for Dusty_93:
(6, 57596), (13, 57722), (Start: 18 @57740 has 12 MA's), (24, 57821), (25, 57830), (26, 57842), (37, 57956), (39, 58010), (53, 58151), (60, 58220), (66, 58295), (67, 58313),

Gene: Ecliptus_84 Start: 48151, Stop: 48618, Start Num: 18
Candidate Starts for Ecliptus_84:
(Start: 18 @48151 has 12 MA's), (43, 48406), (48, 48418),

Gene: GAL1_62 Start: 40466, Stop: 40969, Start Num: 16
Candidate Starts for GAL1_62:
(10, 40409), (Start: 16 @40466 has 9 MA's), (19, 40478), (47, 40727), (60, 40850),

Gene: Halo3_7 Start: 3546, Stop: 4028, Start Num: 18
Candidate Starts for Halo3_7:
(7, 3414), (12, 3498), (Start: 18 @3546 has 12 MA's), (37, 3744), (41, 3795), (55, 3879), (57, 3888), (58, 3891), (60, 3930), (61, 3939), (64, 3987),

Gene: Horus_80 Start: 47249, Stop: 47716, Start Num: 18
Candidate Starts for Horus_80:
(Start: 18 @47249 has 12 MA's), (43, 47504), (48, 47516),

Gene: Invectra_64 Start: 41872, Stop: 42393, Start Num: 16
Candidate Starts for Invectra_64:
(11, 41827), (Start: 16 @41872 has 9 MA's), (19, 41884), (29, 41992), (37, 42067), (42, 42133), (50, 42196), (60, 42259), (68, 42373),

Gene: Leroy_79 Start: 45444, Stop: 45911, Start Num: 18
Candidate Starts for Leroy_79:
(Start: 18 @45444 has 12 MA's), (43, 45699), (48, 45711),

Gene: LordFarquaad_58 Start: 39389, Stop: 39991, Start Num: 16
Candidate Starts for LordFarquaad_58:
(8, 39323), (Start: 16 @39389 has 9 MA's), (19, 39401), (22, 39455), (31, 39545), (32, 39581), (39, 39686), (49, 39788), (53, 39827), (63, 39935), (65, 39956),

Gene: Lton_57 Start: 34468, Stop: 34947, Start Num: 17
Candidate Starts for Lton_57:
(Start: 17 @34468 has 2 MA's), (32, 34654), (37, 34717), (39, 34756), (49, 34846),

Gene: Miskis_89 Start: 57403, Stop: 58014, Start Num: 18
Candidate Starts for Miskis_89:

(6, 57259), (13, 57385), (Start: 18 @57403 has 12 MA's), (24, 57484), (25, 57493), (26, 57505), (37, 57619), (39, 57673), (53, 57814), (60, 57883), (66, 57958), (67, 57976),

Gene: Norvs_97 Start: 58732, Stop: 59343, Start Num: 18
Candidate Starts for Norvs_97:
(13, 58714), (Start: 18 @58732 has 12 MA's), (24, 58813), (25, 58822), (26, 58834), (37, 58948), (39, 59002), (53, 59143), (60, 59212), (66, 59287), (67, 59305),

Gene: Obliviate_79 Start: 48067, Stop: 48606, Start Num: 18
Candidate Starts for Obliviate_79:
(Start: 18 @48067 has 12 MA's), (26, 48169), (54, 48421), (60, 48478),

Gene: Pepperoni_56 Start: 35924, Stop: 36391, Start Num: 18
Candidate Starts for Pepperoni_56:
(Start: 18 @35924 has 12 MA's), (43, 36179), (48, 36191),

Gene: Phistory_77 Start: 44347, Stop: 44814, Start Num: 18
Candidate Starts for Phistory_77:
(Start: 18 @44347 has 12 MA's), (43, 44602), (48, 44614),

Gene: Samman98_62 Start: 40402, Stop: 40923, Start Num: 16
Candidate Starts for Samman98_62:
(11, 40357), (Start: 16 @40402 has 9 MA's), (19, 40414), (29, 40522), (37, 40597), (42, 40663), (50, 40726), (60, 40789), (68, 40903),

Gene: SoilAssassin_56 Start: 39407, Stop: 40009, Start Num: 16
Candidate Starts for SoilAssassin_56:
(8, 39341), (Start: 16 @39407 has 9 MA's), (19, 39419), (22, 39473), (31, 39563), (32, 39599), (39, 39704), (49, 39806), (53, 39845), (63, 39953), (65, 39974),

Gene: Spooky_82 Start: 46716, Stop: 47147, Start Num: 16
Candidate Starts for Spooky_82:
(11, 46671), (Start: 16 @46716 has 9 MA's), (19, 46728), (28, 46800), (34, 46857), (35, 46860), (47, 46929), (60, 47052),

Gene: Toniann_97 Start: 58672, Stop: 59283, Start Num: 18
Candidate Starts for Toniann_97:
(1, 57979), (2, 58339), (3, 58348), (4, 58453), (13, 58654), (Start: 18 @58672 has 12 MA's), (24, 58753), (25, 58762), (26, 58774), (37, 58888), (39, 58942), (53, 59083), (66, 59227), (67, 59245),

Gene: Tuti_62 Start: 41262, Stop: 41939, Start Num: 16
Candidate Starts for Tuti_62:
(5, 41076), (9, 41208), (15, 41256), (Start: 16 @41262 has 9 MA's), (19, 41274), (21, 41325), (33, 41460), (36, 41511), (40, 41586), (44, 41616), (45, 41625), (46, 41637), (51, 41706), (52, 41712), (56, 41751), (60, 41805), (68, 41919),