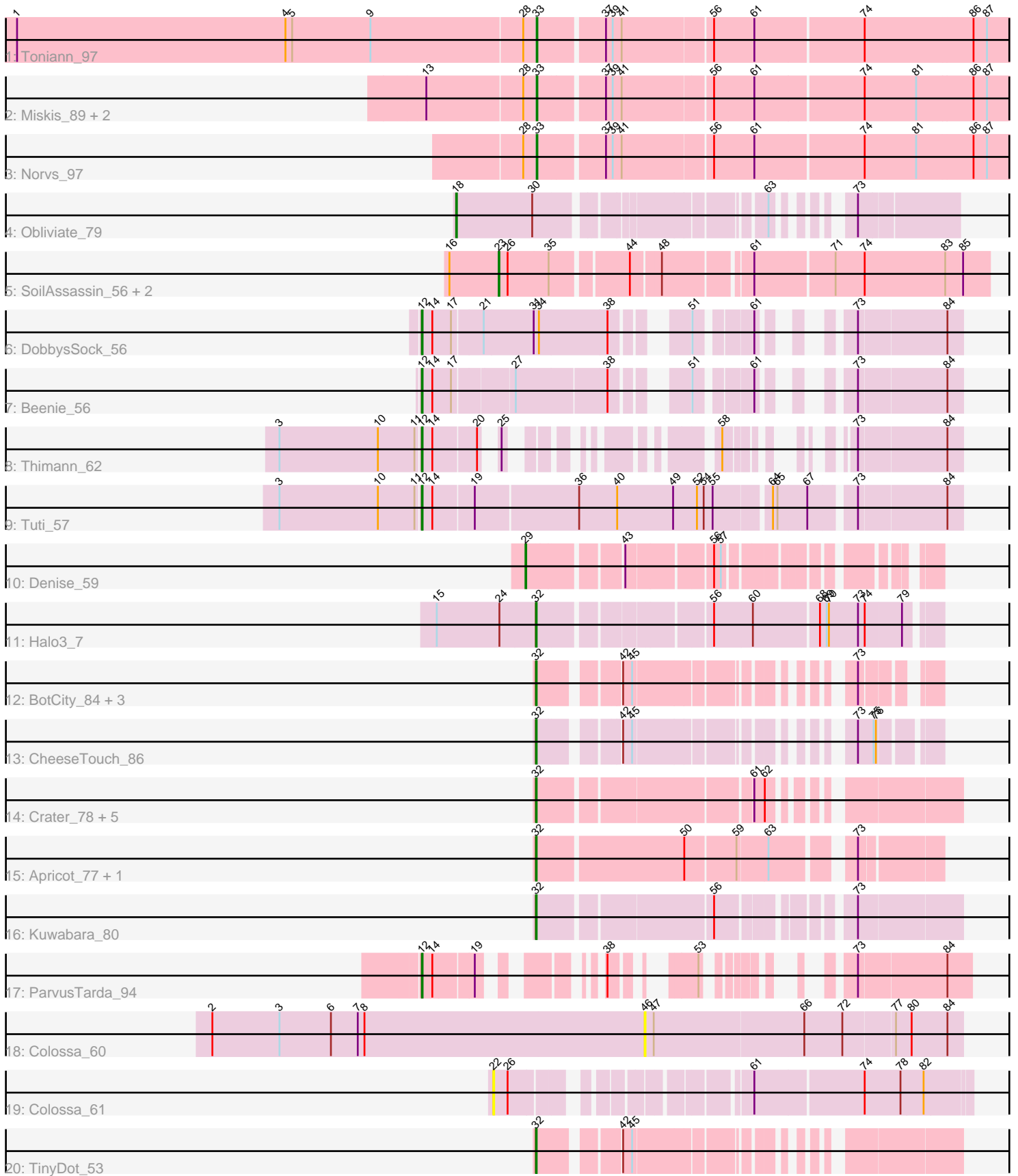


Pham 305188



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 305188 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305188 has 33 members, 2 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 : Thimann_62
- Track 9 : Tuti_57
- Track 10 : Denise_59
- Track 11 : Halo3_7
- Track 12 : BotCity_84, Kenna_77, Lutum_83, BENtherdunthat_82
- Track 13 : CheeseTouch_86
- Track 14 : Crater_78, Leroy_79, Pepperoni_56, Horus_80, Ecliptus_84, Phistory_77
- Track 15 : Apricot_77, Lton_57
- Track 16 : Kuwabara_80
- Track 17 : ParvusTarda_94
- Track 18 : Colossa_60
- Track 19 : Colossa_61
- Track 20 : TinyDot_53

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

The start number called the most often in the published annotations is 32, it was called in 16 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apricot_77, BENtherdunthat_82, BotCity_84, CheeseTouch_86, Crater_78, Ecliptus_84, Halo3_7, Horus_80, Kenna_77, Kuwabara_80, Leroy_79, Lton_57, Lutum_83, Pepperoni_56, Phistory_77, TinyDot_53,

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

-

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

- Aphelion_96, Attis_56, Beenie_56, Colossa_60, Colossa_61, Denise_59, DobbysSock_56, Dusty_93, LordFarquaad_58, Miskis_89, Norvs_97, Obliviate_79, ParvusTarda_94, SoilAssassin_56, Thimann_62, Toniann_97, Tuti_57,

Summary by start number:

Start 12:

- Found in 5 of 33 (15.2%) of genes in pham
- Manual Annotations of this start: 5 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beenie_56 (CZ4), DobbysSock_56 (CZ4), ParvusTarda_94 (DV), Thimann_62 (CZ4), Tuti_57 (CZ4),

Start 18:

- Found in 1 of 33 (3.0%) 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: Obliviate_79 (CV),

Start 22:

- Found in 1 of 33 (3.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Colossa_61 (KA),

Start 23:

- Found in 3 of 33 (9.1%) of genes in pham
- Manual Annotations of this start: 3 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Attis_56 (CZ2), LordFarquaad_58 (CZ2), SoilAssassin_56 (CZ2),

Start 29:

- Found in 1 of 33 (3.0%) 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: Denise_59 (CZ5),

Start 32:

- Found in 16 of 33 (48.5%) of genes in pham
- Manual Annotations of this start: 16 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apricot_77 (DN3), BENtherdunthat_82 (DN1), BotCity_84 (DN), CheeseTouch_86 (DN1), Crater_78 (DN3), Ecliptus_84 (DN), Halo3_7 (DC1), Horus_80 (DN1), Kenna_77 (DN1), Kuwabara_80 (DN4), Leroy_79 (DN1), Lton_57 (CZ), Lutum_83 (DN1), Pepperoni_56 (CZ), Phistory_77 (DN1), TinyDot_53 (singleton),

Start 33:

- Found in 5 of 33 (15.2%) of genes in pham
- Manual Annotations of this start: 5 of 31
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Aphelion_96 (CQ1), Dusty_93 (CQ1), Miskis_89 (CQ1), Norvs_97 (CQ1), Toniann_97 (CQ1),

Start 46:

- Found in 1 of 33 (3.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Colossa_60 (KA),

Summary by clusters:

There are 14 clusters represented in this pham: DN, KA, DN4, CZ2, singleton, CZ4, CZ5, CZ, DN1, DN3, DV, CQ1, CV, DC1,

Info for manual annotations of cluster CQ1:

- Start number 33 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 32 was manually annotated 2 times for cluster CZ.

Info for manual annotations of cluster CZ2:

- Start number 23 was manually annotated 3 times for cluster CZ2.

Info for manual annotations of cluster CZ4:

- Start number 12 was manually annotated 4 times for cluster CZ4.

Info for manual annotations of cluster CZ5:

- Start number 29 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster DC1:

- Start number 32 was manually annotated 1 time for cluster DC1.

Info for manual annotations of cluster DN:

- Start number 32 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 32 was manually annotated 7 times for cluster DN1.

Info for manual annotations of cluster DN3:

- Start number 32 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 32 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DV:

- Start number 12 was manually annotated 1 time for cluster DV.

Gene Information:

Gene: Aphelion_96 Start: 59234, Stop: 59845, Start Num: 33

Candidate Starts for Aphelion_96:

(13, 59090), (28, 59216), (Start: 33 @59234 has 5 MA's), (37, 59315), (39, 59324), (41, 59336), (56, 59450), (61, 59504), (74, 59645), (81, 59714), (86, 59789), (87, 59807),

Gene: Apricot_77 Start: 44433, Stop: 44912, Start Num: 32

Candidate Starts for Apricot_77:

(Start: 32 @44433 has 16 MA's), (50, 44619), (59, 44682), (63, 44721), (73, 44811),

Gene: Attis_56 Start: 39408, Stop: 40010, Start Num: 23

Candidate Starts for Attis_56:

(16, 39342), (Start: 23 @39408 has 3 MA's), (26, 39420), (35, 39474), (44, 39564), (48, 39600), (61, 39705), (71, 39807), (74, 39846), (83, 39954), (85, 39975),

Gene: BENtherdunthat_82 Start: 46359, Stop: 46736, Start Num: 32

Candidate Starts for BENtherdunthat_82:

(Start: 32 @46359 has 16 MA's), (42, 46440), (45, 46452), (73, 46659),

Gene: Beenie_56 Start: 40503, Stop: 41057, Start Num: 12

Candidate Starts for Beenie_56:

(Start: 12 @40503 has 5 MA's), (14, 40515), (17, 40539), (27, 40614), (38, 40731), (51, 40797), (61, 40860), (73, 40923), (84, 41037),

Gene: BotCity_84 Start: 47888, Stop: 48265, Start Num: 32

Candidate Starts for BotCity_84:

(Start: 32 @47888 has 16 MA's), (42, 47969), (45, 47981), (73, 48188),

Gene: CheeseTouch_86 Start: 42950, Stop: 43342, Start Num: 32

Candidate Starts for CheeseTouch_86:

(Start: 32 @42950 has 16 MA's), (42, 43031), (45, 43043), (73, 43250), (75, 43271), (76, 43274),

Gene: Colossa_60 Start: 39464, Stop: 39880, Start Num: 46

Candidate Starts for Colossa_60:

(2, 38885), (3, 38975), (6, 39044), (7, 39080), (8, 39089), (46, 39464), (47, 39476), (66, 39674), (72, 39725), (77, 39791), (80, 39812), (84, 39860),

Gene: Colossa_61 Start: 39877, Stop: 40413, Start Num: 22

Candidate Starts for Colossa_61:

(22, 39877), (26, 39895), (61, 40135), (74, 40276), (78, 40324), (82, 40354),

Gene: Crater_78 Start: 45182, Stop: 45649, Start Num: 32

Candidate Starts for Crater_78:

(Start: 32 @45182 has 16 MA's), (61, 45437), (62, 45449),

Gene: Denise_59 Start: 37230, Stop: 37658, Start Num: 29

Candidate Starts for Denise_59:

(Start: 29 @37230 has 1 MA's), (43, 37338), (56, 37440), (57, 37449),

Gene: DobbysSock_56 Start: 39905, Stop: 40468, Start Num: 12

Candidate Starts for DobbysSock_56:

(Start: 12 @39905 has 5 MA's), (14, 39917), (17, 39941), (21, 39980), (31, 40046), (34, 40052), (38, 40142), (51, 40208), (61, 40271), (73, 40334), (84, 40448),

Gene: Dusty_93 Start: 57740, Stop: 58351, Start Num: 33

Candidate Starts for Dusty_93:

(13, 57596), (28, 57722), (Start: 33 @57740 has 5 MA's), (37, 57821), (39, 57830), (41, 57842), (56, 57956), (61, 58010), (74, 58151), (81, 58220), (86, 58295), (87, 58313),

Gene: Ecliptus_84 Start: 48151, Stop: 48618, Start Num: 32

Candidate Starts for Ecliptus_84:

(Start: 32 @48151 has 16 MA's), (61, 48406), (62, 48418),

Gene: Halo3_7 Start: 3546, Stop: 4028, Start Num: 32

Candidate Starts for Halo3_7:

(15, 3414), (24, 3498), (Start: 32 @3546 has 16 MA's), (56, 3744), (60, 3795), (68, 3879), (69, 3888), (70, 3891), (73, 3930), (74, 3939), (79, 3987),

Gene: Horus_80 Start: 47249, Stop: 47716, Start Num: 32

Candidate Starts for Horus_80:

(Start: 32 @47249 has 16 MA's), (61, 47504), (62, 47516),

Gene: Kenna_77 Start: 45632, Stop: 46009, Start Num: 32

Candidate Starts for Kenna_77:

(Start: 32 @45632 has 16 MA's), (42, 45713), (45, 45725), (73, 45932),

Gene: Kuwabara_80 Start: 47595, Stop: 48080, Start Num: 32

Candidate Starts for Kuwabara_80:

(Start: 32 @47595 has 16 MA's), (56, 47805), (73, 47946),

Gene: Leroy_79 Start: 45444, Stop: 45911, Start Num: 32

Candidate Starts for Leroy_79:

(Start: 32 @45444 has 16 MA's), (61, 45699), (62, 45711),

Gene: LordFarquaad_58 Start: 39389, Stop: 39991, Start Num: 23

Candidate Starts for LordFarquaad_58:

(16, 39323), (Start: 23 @39389 has 3 MA's), (26, 39401), (35, 39455), (44, 39545), (48, 39581), (61, 39686), (71, 39788), (74, 39827), (83, 39935), (85, 39956),

Gene: Lton_57 Start: 34468, Stop: 34947, Start Num: 32

Candidate Starts for Lton_57:

(Start: 32 @34468 has 16 MA's), (50, 34654), (59, 34717), (63, 34756), (73, 34846),

Gene: Lutum_83 Start: 46794, Stop: 47171, Start Num: 32

Candidate Starts for Lutum_83:

(Start: 32 @46794 has 16 MA's), (42, 46875), (45, 46887), (73, 47094),

Gene: Miskis_89 Start: 57403, Stop: 58014, Start Num: 33

Candidate Starts for Miskis_89:

(13, 57259), (28, 57385), (Start: 33 @57403 has 5 MA's), (37, 57484), (39, 57493), (41, 57505), (56, 57619), (61, 57673), (74, 57814), (81, 57883), (86, 57958), (87, 57976),

Gene: Norvs_97 Start: 58732, Stop: 59343, Start Num: 33

Candidate Starts for Norvs_97:

(28, 58714), (Start: 33 @58732 has 5 MA's), (37, 58813), (39, 58822), (41, 58834), (56, 58948), (61, 59002), (74, 59143), (81, 59212), (86, 59287), (87, 59305),

Gene: Obliviate_79 Start: 48067, Stop: 48606, Start Num: 18

Candidate Starts for Obliviate_79:

(Start: 18 @48067 has 1 MA's), (30, 48169), (63, 48421), (73, 48478),

Gene: ParvusTarda_94 Start: 64352, Stop: 64807, Start Num: 12

Candidate Starts for ParvusTarda_94:

(Start: 12 @64352 has 5 MA's), (14, 64364), (19, 64415), (38, 64505), (53, 64568), (73, 64661), (84, 64775),

Gene: Pepperoni_56 Start: 35924, Stop: 36391, Start Num: 32

Candidate Starts for Pepperoni_56:

(Start: 32 @35924 has 16 MA's), (61, 36179), (62, 36191),

Gene: Phistory_77 Start: 44347, Stop: 44814, Start Num: 32

Candidate Starts for Phistory_77:

(Start: 32 @44347 has 16 MA's), (61, 44602), (62, 44614),

Gene: SoilAssassin_56 Start: 39407, Stop: 40009, Start Num: 23

Candidate Starts for SoilAssassin_56:

(16, 39341), (Start: 23 @39407 has 3 MA's), (26, 39419), (35, 39473), (44, 39563), (48, 39599), (61, 39704), (71, 39806), (74, 39845), (83, 39953), (85, 39974),

Gene: Thimann_62 Start: 40740, Stop: 41195, Start Num: 12

Candidate Starts for Thimann_62:

(3, 40554), (10, 40686), (11, 40734), (Start: 12 @40740 has 5 MA's), (14, 40752), (20, 40806), (25, 40815), (58, 40983), (73, 41061), (84, 41175),

Gene: TinyDot_53 Start: 33756, Stop: 34190, Start Num: 32

Candidate Starts for TinyDot_53:

(Start: 32 @33756 has 16 MA's), (42, 33837), (45, 33849),

Gene: Toniann_97 Start: 58672, Stop: 59283, Start Num: 33

Candidate Starts for Toniann_97:

(1, 57979), (4, 58339), (5, 58348), (9, 58453), (28, 58654), (Start: 33 @58672 has 5 MA's), (37, 58753), (39, 58762), (41, 58774), (56, 58888), (61, 58942), (74, 59083), (86, 59227), (87, 59245),

Gene: Tuti_57 Start: 41262, Stop: 41939, Start Num: 12

Candidate Starts for Tuti_57:

(3, 41076), (10, 41208), (11, 41256), (Start: 12 @41262 has 5 MA's), (14, 41274), (19, 41325), (36, 41460), (40, 41511), (49, 41586), (52, 41616), (54, 41625), (55, 41637), (64, 41706), (65, 41712), (67, 41751), (73, 41805), (84, 41919),