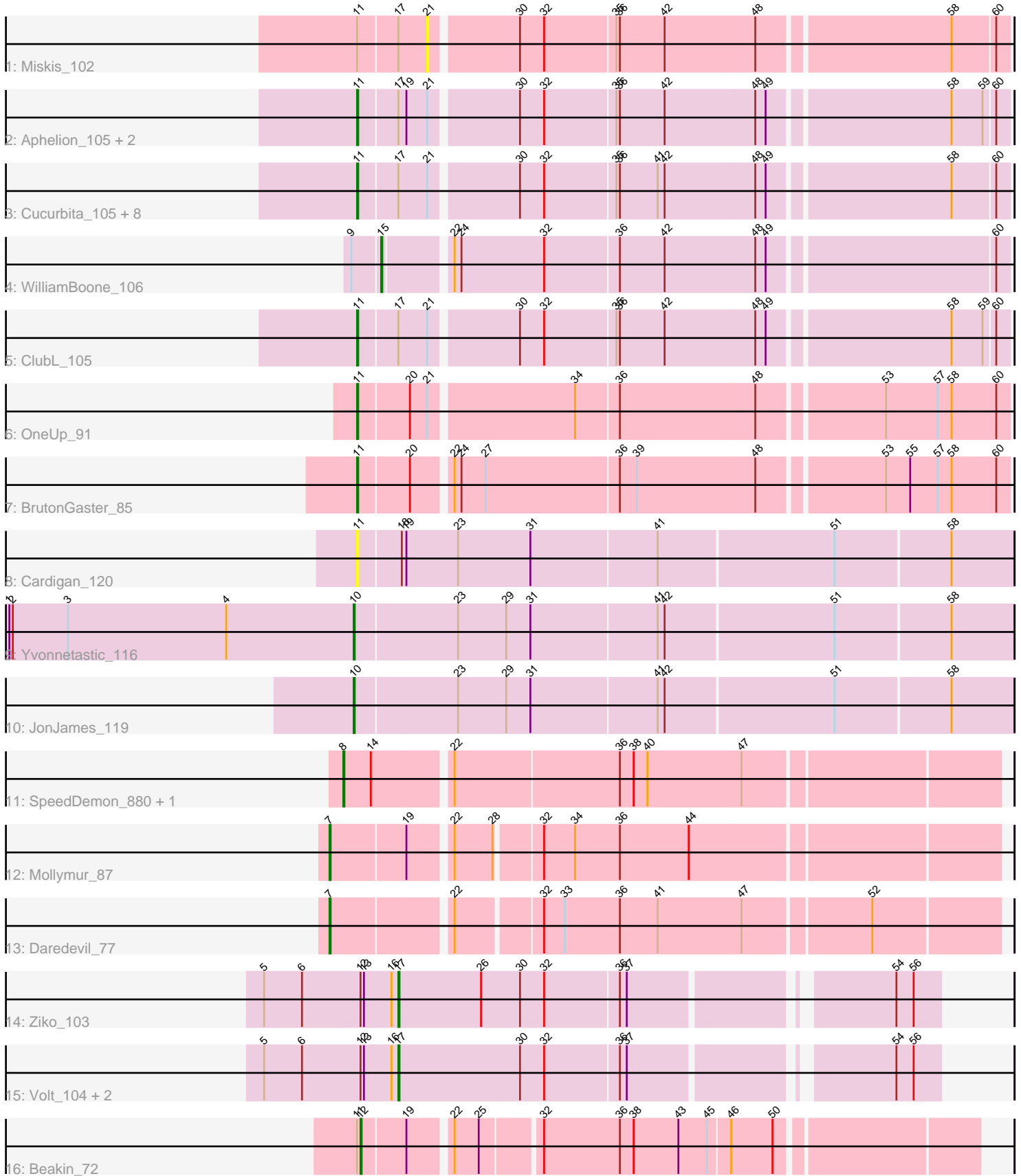


Pham 170221



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 170221 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170221 has 29 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Miskis_102
- Track 2 : Aphelion_105, Abscondus_103, Norvs_106
- Track 3 : Cucurbita_105, Toniann_106, Dusty_101, Bachita_106, PhinkBoden_103, Culver_106, Engineer_105, Smoothie_105, Lozinak_104
- Track 4 : WilliamBoone_106
- Track 5 : ClubL_105
- Track 6 : OneUp_91
- Track 7 : BrutonGaster_85
- Track 8 : Cardigan_120
- Track 9 : Yvonnestic_116
- Track 10 : JonJames_119
- Track 11 : SpeedDemon_880, Bantam_87
- Track 12 : Mollymur_87
- Track 13 : Daredevil_77
- Track 14 : Ziko_103
- Track 15 : Volt_104, Guey18_105, Ronaldo_102
- Track 16 : Beakin_72

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

The start number called the most often in the published annotations is 11, it was called in 13 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus_103, Aphelion_105, Bachita_106, BrutonGaster_85, Cardigan_120, ClubL_105, Cucurbita_105, Culver_106, Dusty_101, Engineer_105, Lozinak_104, Norvs_106, OneUp_91, PhinkBoden_103, Smoothie_105, Toniann_106,

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

- Beakin_72, Miskis_102,

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

- Bantam_87, Daredevil_77, Guey18_105, JonJames_119, Mollymur_87, Ronaldo_102, SpeedDemon_880, Volt_104, WilliamBoone_106, Yvonnestic_116,

Ziko_103,

Summary by start number:

Start 7:

- Found in 2 of 29 (6.9%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daredevil_77 (DL), Mollymur_87 (DL),

Start 8:

- Found in 2 of 29 (6.9%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bantam_87 (DL), SpeedDemon_880 (DL),

Start 10:

- Found in 2 of 29 (6.9%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JonJames_119 (DD), Yvonnetastic_116 (DD),

Start 11:

- Found in 18 of 29 (62.1%) of genes in pham
- Manual Annotations of this start: 13 of 25
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Abscondus_103 (CQ), Aphelion_105 (CQ1), Bachita_106 (CQ1), BrutonGaster_85 (CQ2), Cardigan_120 (DD), ClubL_105 (CQ1), Cucurbita_105 (CQ1), Culver_106 (CQ1), Dusty_101 (CQ), Engineer_105 (CQ1), Lozinak_104 (CQ1), Norvs_106 (CQ), OneUp_91 (CQ2), PhinkBoden_103 (CQ1), Smoothie_105 (CQ1), Toniann_106 (CQ1),

Start 12:

- Found in 5 of 29 (17.2%) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Beakin_72 (F1),

Start 15:

- Found in 1 of 29 (3.4%) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: WilliamBoone_106 (CQ1),

Start 17:

- Found in 18 of 29 (62.1%) of genes in pham
- Manual Annotations of this start: 4 of 25
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Guey18_105 (DP), Ronaldo_102 (DP), Volt_104 (DP), Ziko_103 (DP),

Start 21:

- Found in 15 of 29 (51.7%) of genes in pham
- No Manual Annotations of this start.
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Miskis_102 (CQ),

Summary by clusters:

There are 7 clusters represented in this pham: F1, DL, DD, CQ2, CQ1, CQ, DP,

Info for manual annotations of cluster CQ:

- Start number 11 was manually annotated 1 time for cluster CQ.

Info for manual annotations of cluster CQ1:

- Start number 11 was manually annotated 10 times for cluster CQ1.
- Start number 15 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 11 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster DD:

- Start number 10 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DL:

- Start number 7 was manually annotated 2 times for cluster DL.
- Start number 8 was manually annotated 2 times for cluster DL.

Info for manual annotations of cluster DP:

- Start number 17 was manually annotated 4 times for cluster DP.

Info for manual annotations of cluster F1:

- Start number 12 was manually annotated 1 time for cluster F1.

Gene Information:

Gene: Abscondus_103 Start: 62014, Stop: 62550, Start Num: 11

Candidate Starts for Abscondus_103:

(Start: 11 @62014 has 13 MA's), (Start: 17 @62047 has 4 MA's), (19, 62053), (21, 62071), (30, 62143), (32, 62164), (35, 62224), (36, 62227), (42, 62266), (48, 62344), (49, 62353), (58, 62503), (59, 62530), (60, 62539),

Gene: Aphelion_105 Start: 63567, Stop: 64103, Start Num: 11

Candidate Starts for Aphelion_105:

(Start: 11 @63567 has 13 MA's), (Start: 17 @63600 has 4 MA's), (19, 63606), (21, 63624), (30, 63696), (32, 63717), (35, 63777), (36, 63780), (42, 63819), (48, 63897), (49, 63906), (58, 64056), (59, 64083), (60, 64092),

Gene: Bachita_106 Start: 63225, Stop: 63761, Start Num: 11

Candidate Starts for Bachita_106:

(Start: 11 @63225 has 13 MA's), (Start: 17 @63258 has 4 MA's), (21, 63282), (30, 63354), (32, 63375), (35, 63435), (36, 63438), (41, 63471), (42, 63477), (48, 63555), (49, 63564), (58, 63714), (60,

63750),

Gene: Bantam_87 Start: 59627, Stop: 59082, Start Num: 8

Candidate Starts for Bantam_87:

(Start: 8 @59627 has 2 MA's), (14, 59603), (22, 59540), (36, 59399), (38, 59387), (40, 59375), (47, 59294),

Gene: Beakin_72 Start: 43119, Stop: 43616, Start Num: 12

Candidate Starts for Beakin_72:

(Start: 11 @43116 has 13 MA's), (Start: 12 @43119 has 1 MA's), (19, 43155), (22, 43188), (25, 43209), (32, 43257), (36, 43323), (38, 43335), (43, 43374), (45, 43398), (46, 43416), (50, 43452),

Gene: BrutonGaster_85 Start: 57332, Stop: 57871, Start Num: 11

Candidate Starts for BrutonGaster_85:

(Start: 11 @57332 has 13 MA's), (20, 57374), (22, 57404), (24, 57410), (27, 57431), (36, 57545), (39, 57560), (48, 57662), (53, 57764), (55, 57785), (57, 57809), (58, 57821), (60, 57860),

Gene: Cardigan_120 Start: 68409, Stop: 68963, Start Num: 11

Candidate Starts for Cardigan_120:

(Start: 11 @68409 has 13 MA's), (18, 68445), (19, 68448), (23, 68493), (31, 68556), (41, 68664), (51, 68814), (58, 68910),

Gene: ClubL_105 Start: 62155, Stop: 62691, Start Num: 11

Candidate Starts for ClubL_105:

(Start: 11 @62155 has 13 MA's), (Start: 17 @62188 has 4 MA's), (21, 62212), (30, 62284), (32, 62305), (35, 62365), (36, 62368), (42, 62407), (48, 62485), (49, 62494), (58, 62644), (59, 62671), (60, 62680),

Gene: Cucurbita_105 Start: 63732, Stop: 64268, Start Num: 11

Candidate Starts for Cucurbita_105:

(Start: 11 @63732 has 13 MA's), (Start: 17 @63765 has 4 MA's), (21, 63789), (30, 63861), (32, 63882), (35, 63942), (36, 63945), (41, 63978), (42, 63984), (48, 64062), (49, 64071), (58, 64221), (60, 64257),

Gene: Culver_106 Start: 62054, Stop: 62590, Start Num: 11

Candidate Starts for Culver_106:

(Start: 11 @62054 has 13 MA's), (Start: 17 @62087 has 4 MA's), (21, 62111), (30, 62183), (32, 62204), (35, 62264), (36, 62267), (41, 62300), (42, 62306), (48, 62384), (49, 62393), (58, 62543), (60, 62579),

Gene: Daredevil_77 Start: 55211, Stop: 54663, Start Num: 7

Candidate Starts for Daredevil_77:

(Start: 7 @55211 has 2 MA's), (22, 55115), (32, 55046), (33, 55028), (36, 54980), (41, 54947), (47, 54875), (52, 54770),

Gene: Dusty_101 Start: 62073, Stop: 62609, Start Num: 11

Candidate Starts for Dusty_101:

(Start: 11 @62073 has 13 MA's), (Start: 17 @62106 has 4 MA's), (21, 62130), (30, 62202), (32, 62223), (35, 62283), (36, 62286), (41, 62319), (42, 62325), (48, 62403), (49, 62412), (58, 62562), (60, 62598),

Gene: Engineer_105 Start: 63198, Stop: 63734, Start Num: 11

Candidate Starts for Engineer_105:

(Start: 11 @63198 has 13 MA's), (Start: 17 @63231 has 4 MA's), (21, 63255), (30, 63327), (32, 63348), (35, 63408), (36, 63411), (41, 63444), (42, 63450), (48, 63528), (49, 63537), (58, 63687), (60, 63723),

Gene: Guey18_105 Start: 50683, Stop: 51120, Start Num: 17

Candidate Starts for Guey18_105:

(5, 50566), (6, 50599), (Start: 12 @50650 has 1 MA's), (13, 50653), (16, 50677), (Start: 17 @50683 has 4 MA's), (30, 50788), (32, 50809), (36, 50872), (37, 50878), (54, 51082), (56, 51097),

Gene: JonJames_119 Start: 69097, Stop: 69654, Start Num: 10

Candidate Starts for JonJames_119:

(Start: 10 @69097 has 2 MA's), (23, 69184), (29, 69226), (31, 69247), (41, 69355), (42, 69361), (51, 69505), (58, 69601),

Gene: Lozinak_104 Start: 63036, Stop: 63572, Start Num: 11

Candidate Starts for Lozinak_104:

(Start: 11 @63036 has 13 MA's), (Start: 17 @63069 has 4 MA's), (21, 63093), (30, 63165), (32, 63186), (35, 63246), (36, 63249), (41, 63282), (42, 63288), (48, 63366), (49, 63375), (58, 63525), (60, 63561),

Gene: Miskis_102 Start: 61793, Stop: 62272, Start Num: 21

Candidate Starts for Miskis_102:

(Start: 11 @61736 has 13 MA's), (Start: 17 @61769 has 4 MA's), (21, 61793), (30, 61865), (32, 61886), (35, 61946), (36, 61949), (42, 61988), (48, 62066), (58, 62225), (60, 62261),

Gene: Mollymur_87 Start: 60351, Stop: 59803, Start Num: 7

Candidate Starts for Mollymur_87:

(Start: 7 @60351 has 2 MA's), (19, 60288), (22, 60255), (28, 60222), (32, 60186), (34, 60159), (36, 60120), (44, 60060),

Gene: Norvs_106 Start: 63063, Stop: 63599, Start Num: 11

Candidate Starts for Norvs_106:

(Start: 11 @63063 has 13 MA's), (Start: 17 @63096 has 4 MA's), (19, 63102), (21, 63120), (30, 63192), (32, 63213), (35, 63273), (36, 63276), (42, 63315), (48, 63393), (49, 63402), (58, 63552), (59, 63579), (60, 63588),

Gene: OneUp_91 Start: 59239, Stop: 59778, Start Num: 11

Candidate Starts for OneUp_91:

(Start: 11 @59239 has 13 MA's), (20, 59281), (21, 59296), (34, 59416), (36, 59452), (48, 59569), (53, 59671), (57, 59716), (58, 59728), (60, 59767),

Gene: PhinkBoden_103 Start: 62826, Stop: 63362, Start Num: 11

Candidate Starts for PhinkBoden_103:

(Start: 11 @62826 has 13 MA's), (Start: 17 @62859 has 4 MA's), (21, 62883), (30, 62955), (32, 62976), (35, 63036), (36, 63039), (41, 63072), (42, 63078), (48, 63156), (49, 63165), (58, 63315), (60, 63351),

Gene: Ronaldo_102 Start: 50265, Stop: 50702, Start Num: 17

Candidate Starts for Ronaldo_102:

(5, 50148), (6, 50181), (Start: 12 @50232 has 1 MA's), (13, 50235), (16, 50259), (Start: 17 @50265 has 4 MA's), (30, 50370), (32, 50391), (36, 50454), (37, 50460), (54, 50664), (56, 50679),

Gene: Smoothie_105 Start: 63036, Stop: 63572, Start Num: 11

Candidate Starts for Smoothie_105:

(Start: 11 @63036 has 13 MA's), (Start: 17 @63069 has 4 MA's), (21, 63093), (30, 63165), (32, 63186), (35, 63246), (36, 63249), (41, 63282), (42, 63288), (48, 63366), (49, 63375), (58, 63525), (60, 63561),

Gene: SpeedDemon_880 Start: 61548, Stop: 61003, Start Num: 8

Candidate Starts for SpeedDemon_880:

(Start: 8 @61548 has 2 MA's), (14, 61524), (22, 61461), (36, 61320), (38, 61308), (40, 61296), (47, 61215),

Gene: Toniann_106 Start: 63006, Stop: 63542, Start Num: 11

Candidate Starts for Toniann_106:

(Start: 11 @63006 has 13 MA's), (Start: 17 @63039 has 4 MA's), (21, 63063), (30, 63135), (32, 63156), (35, 63216), (36, 63219), (41, 63252), (42, 63258), (48, 63336), (49, 63345), (58, 63495), (60, 63531),

Gene: Volt_104 Start: 50429, Stop: 50866, Start Num: 17

Candidate Starts for Volt_104:

(5, 50312), (6, 50345), (Start: 12 @50396 has 1 MA's), (13, 50399), (16, 50423), (Start: 17 @50429 has 4 MA's), (30, 50534), (32, 50555), (36, 50618), (37, 50624), (54, 50828), (56, 50843),

Gene: WilliamBoone_106 Start: 61643, Stop: 62158, Start Num: 15

Candidate Starts for WilliamBoone_106:

(9, 61622), (Start: 15 @61643 has 1 MA's), (22, 61694), (24, 61700), (32, 61772), (36, 61835), (42, 61874), (48, 61952), (49, 61961), (60, 62147),

Gene: Yvonnetastic_116 Start: 65875, Stop: 66432, Start Num: 10

Candidate Starts for Yvonnetastic_116:

(1, 65575), (2, 65578), (3, 65626), (4, 65764), (Start: 10 @65875 has 2 MA's), (23, 65962), (29, 66004), (31, 66025), (41, 66133), (42, 66139), (51, 66283), (58, 66379),

Gene: Ziko_103 Start: 50271, Stop: 50708, Start Num: 17

Candidate Starts for Ziko_103:

(5, 50154), (6, 50187), (Start: 12 @50238 has 1 MA's), (13, 50241), (16, 50265), (Start: 17 @50271 has 4 MA's), (26, 50343), (30, 50376), (32, 50397), (36, 50460), (37, 50466), (54, 50670), (56, 50685),