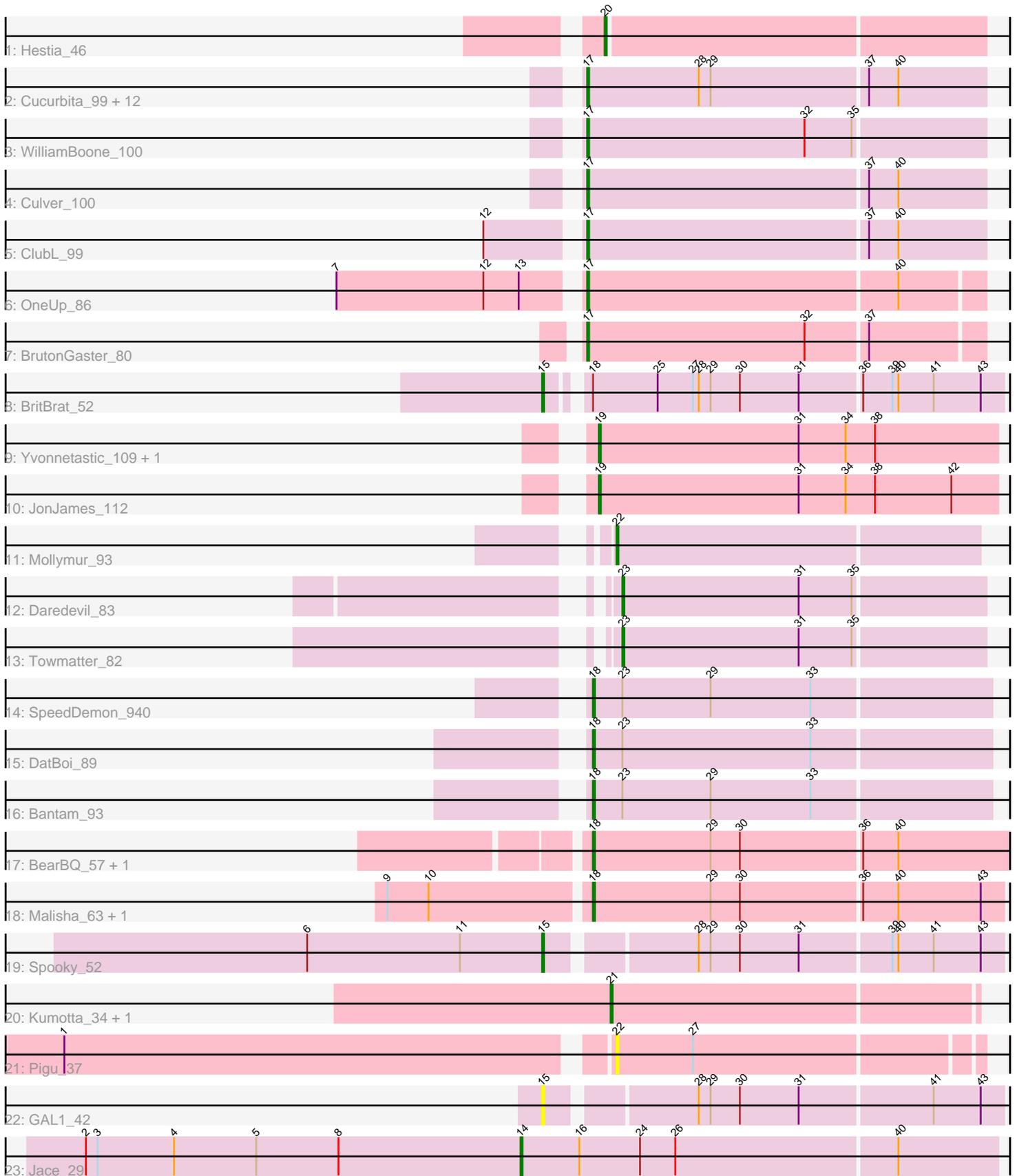# Pham 283981

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 283981 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283981 has 39 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Hestia_46
• Track 2 : Cucurbita_99, Toniann_100, Aphelion_99, Abscondus_97, Miskis_92, Bachita_100, PhinkBoden_97, Geeche_97, Lozinak_98, Engineer_99, Smoothie_99, Norvs_100, Dusty_96
• Track 3 : WilliamBoone_100
• Track 4 : Culver_100
• Track 5 : ClubL_99
• Track 6 : OneUp_86
• Track 7 : BrutonGaster_80
• Track 8 : BritBrat_52
• Track 9 : Yvonnetastic_109, Cardigan_113
• Track 10 : JonJames_112
• Track 11 : Mollymur_93
• Track 12 : Daredevil_83
• Track 13 : Towmatter_82
• Track 14 : SpeedDemon_940
• Track 15 : DatBoi_89
• Track 16 : Bantam_93
• Track 17 : BearBQ_57, MortyNRick_55
• Track 18 : Malisha_63, Squiddly_59
• Track 19 : Spooky_52
• Track 20 : Kumotta_34, MargaretKali_34
• Track 21 : Pigu_37
• Track 22 : GAL1_42
• Track 23 : Jace_29

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

The start number called the most often in the published annotations is 17, it was called in 17 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abscondus_97, Aphelion_99, Bachita_100, BrutonGaster_80, ClubL_99, Cucurbita_99, Culver_100, Dusty_96, Engineer_99, Geeche_97, Lozinak_98,

Miskis_92, Norvs_100, OneUp_86, PhinkBoden_97, Smoothie_99, Toniann_100, WilliamBoone_100,

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

Genes that do not have the "Most Annotated" start:
• Bantam_93, BearBQ_57, BritBrat_52, Cardigan_113, Daredevil_83, DatBoi_89, GAL1_42, Hestia_46, Jace_29, JonJames_112, Kumotta_34, Malisha_63, MargaretKali_34, Mollymur_93, MortyNRick_55, Pigu_37, SpeedDemon_940, Spooky_52, Squiddly_59, Towmatter_82, Yvonnetastic_109,

Summary by start number:

Start 14:
• Found in 1 of 39 (2.6%) of genes in pham
• Manual Annotations of this start: 1 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jace_29 (singleton),

Start 15:
• Found in 3 of 39 (7.7%) of genes in pham
• Manual Annotations of this start: 2 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BritBrat_52 (CY2), GAL1_42 (singleton), Spooky_52 (DN2),

Start 17:
• Found in 18 of 39 (46.2%) of genes in pham
• Manual Annotations of this start: 17 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abscondus_97 (CQ1), Aphelion_99 (CQ1), Bachita_100 (CQ1), BrutonGaster_80 (CQ2), ClubL_99 (CQ1), Cucurbita_99 (CQ1), Culver_100 (CQ1), Dusty_96 (CQ1), Engineer_99 (CQ1), Geeche_97 (CQ1), Lozinak_98 (CQ1), Miskis_92 (CQ1), Norvs_100 (CQ1), OneUp_86 (CQ2), PhinkBoden_97 (CQ1), Smoothie_99 (CQ1), Toniann_100 (CQ1), WilliamBoone_100 (CQ1),

Start 18:
• Found in 8 of 39 (20.5%) of genes in pham
• Manual Annotations of this start: 7 of 35
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Bantam_93 (DL), BearBQ_57 (DN), DatBoi_89 (DL), Malisha_63 (DN), MortyNRick_55 (DN), SpeedDemon_940 (DL), Squiddly_59 (DN2),

Start 19:
• Found in 3 of 39 (7.7%) of genes in pham
• Manual Annotations of this start: 2 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cardigan_113 (DD), JonJames_112 (DD), Yvonnetastic_109 (DD),

Start 20:
• Found in 1 of 39 (2.6%) of genes in pham
• Manual Annotations of this start: 1 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hestia_46 (AY),

Start 21:
• Found in 2 of 39 (5.1%) of genes in pham
• Manual Annotations of this start: 2 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kumotta_34 (FB), MargaretKali_34 (FB),

Start 22:
• Found in 2 of 39 (5.1%) of genes in pham
• Manual Annotations of this start: 1 of 35
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mollymur_93 (DL), Pigu_37 (FB),

Start 23:
• Found in 5 of 39 (12.8%) of genes in pham
• Manual Annotations of this start: 2 of 35
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Daredevil_83 (DL), Towmatter_82 (DL),

Summary by clusters:

There are 10 clusters represented in this pham: DN, CY2, DL, DD, singleton, FB, DN2, AY, CQ2, CQ1,

Info for manual annotations of cluster AY:
•Start number 20 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster CQ1:
•Start number 17 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster CQ2:
•Start number 17 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster CY2:
•Start number 15 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster DD:
•Start number 19 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DL:
•Start number 18 was manually annotated 3 times for cluster DL.
•Start number 22 was manually annotated 1 time for cluster DL.
•Start number 23 was manually annotated 2 times for cluster DL.

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

Info for manual annotations of cluster DN2:

•Start number 15 was manually annotated 1 time for cluster DN2.
•Start number 18 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster FB:
•Start number 21 was manually annotated 2 times for cluster FB.

Gene Information:

Gene: Abscondus_97 Start: 58989, Stop: 59189, Start Num: 17
Candidate Starts for Abscondus_97:
(Start: 17 @58989 has 17 MA's), (28, 59046), (29, 59052), (37, 59130), (40, 59145),

Gene: Aphelion_99 Start: 60542, Stop: 60742, Start Num: 17
Candidate Starts for Aphelion_99:
(Start: 17 @60542 has 17 MA's), (28, 60599), (29, 60605), (37, 60683), (40, 60698),

Gene: Bachita_100 Start: 60200, Stop: 60400, Start Num: 17
Candidate Starts for Bachita_100:
(Start: 17 @60200 has 17 MA's), (28, 60257), (29, 60263), (37, 60341), (40, 60356),

Gene: Bantam_93 Start: 62206, Stop: 62006, Start Num: 18
Candidate Starts for Bantam_93:
(Start: 18 @62206 has 7 MA's), (Start: 23 @62191 has 2 MA's), (29, 62146), (33, 62095),

Gene: BearBQ_57 Start: 39707, Stop: 39916, Start Num: 18
Candidate Starts for BearBQ_57:
(Start: 18 @39707 has 7 MA's), (29, 39767), (30, 39782), (36, 39842), (40, 39860),

Gene: BritBrat_52 Start: 37915, Stop: 38136, Start Num: 15
Candidate Starts for BritBrat_52:
(Start: 15 @37915 has 2 MA's), (Start: 18 @37930 has 7 MA's), (25, 37963), (27, 37981), (28, 37984), (29, 37990), (30, 38005), (31, 38035), (36, 38065), (39, 38080), (40, 38083), (41, 38101), (43, 38125),

Gene: BrutonGaster_80 Start: 54552, Stop: 54749, Start Num: 17
Candidate Starts for BrutonGaster_80:
(Start: 17 @54552 has 17 MA's), (32, 54663), (37, 54693),

Gene: Cardigan_113 Start: 64662, Stop: 64865, Start Num: 19
Candidate Starts for Cardigan_113:
(Start: 19 @64662 has 2 MA's), (31, 64764), (34, 64788), (38, 64803),

Gene: ClubL_99 Start: 59132, Stop: 59332, Start Num: 17
Candidate Starts for ClubL_99:
(12, 59090), (Start: 17 @59132 has 17 MA's), (37, 59273), (40, 59288),

Gene: Cucurbita_99 Start: 60707, Stop: 60907, Start Num: 17
Candidate Starts for Cucurbita_99:
(Start: 17 @60707 has 17 MA's), (28, 60764), (29, 60770), (37, 60848), (40, 60863),

Gene: Culver_100 Start: 59032, Stop: 59232, Start Num: 17
Candidate Starts for Culver_100:

(Start: 17 @59032 has 17 MA's), (37, 59173), (40, 59188),

Gene: Daredevil_83 Start: 57872, Stop: 57690, Start Num: 23
Candidate Starts for Daredevil_83:
(Start: 23 @57872 has 2 MA's), (31, 57782), (35, 57755),

Gene: DatBoi_89 Start: 61354, Stop: 61154, Start Num: 18
Candidate Starts for DatBoi_89:
(Start: 18 @61354 has 7 MA's), (Start: 23 @61339 has 2 MA's), (33, 61243),

Gene: Dusty_96 Start: 59048, Stop: 59248, Start Num: 17
Candidate Starts for Dusty_96:
(Start: 17 @59048 has 17 MA's), (28, 59105), (29, 59111), (37, 59189), (40, 59204),

Gene: Engineer_99 Start: 60173, Stop: 60373, Start Num: 17
Candidate Starts for Engineer_99:
(Start: 17 @60173 has 17 MA's), (28, 60230), (29, 60236), (37, 60314), (40, 60329),

Gene: GAL1_42 Start: 33753, Stop: 33974, Start Num: 15
Candidate Starts for GAL1_42:
(Start: 15 @33753 has 2 MA's), (28, 33822), (29, 33828), (30, 33843), (31, 33873), (41, 33939), (43, 33963),

Gene: Geeche_97 Start: 59271, Stop: 59471, Start Num: 17
Candidate Starts for Geeche_97:
(Start: 17 @59271 has 17 MA's), (28, 59328), (29, 59334), (37, 59412), (40, 59427),

Gene: Hestia_46 Start: 29789, Stop: 29977, Start Num: 20
Candidate Starts for Hestia_46:
(Start: 20 @29789 has 1 MA's),

Gene: Jace_29 Start: 24871, Stop: 25110, Start Num: 14
Candidate Starts for Jace_29:
(2, 24649), (3, 24655), (4, 24694), (5, 24736), (8, 24778), (Start: 14 @24871 has 1 MA's), (16, 24901), (24, 24931), (26, 24949), (40, 25060),

Gene: JonJames_112 Start: 65173, Stop: 65376, Start Num: 19
Candidate Starts for JonJames_112:
(Start: 19 @65173 has 2 MA's), (31, 65275), (34, 65299), (38, 65314), (42, 65353),

Gene: Kumotta_34 Start: 26417, Stop: 26599, Start Num: 21
Candidate Starts for Kumotta_34:
(Start: 21 @26417 has 2 MA's),

Gene: Lozinak_98 Start: 60011, Stop: 60211, Start Num: 17
Candidate Starts for Lozinak_98:
(Start: 17 @60011 has 17 MA's), (28, 60068), (29, 60074), (37, 60152), (40, 60167),

Gene: Malisha_63 Start: 40533, Stop: 40739, Start Num: 18
Candidate Starts for Malisha_63:
(9, 40434), (10, 40455), (Start: 18 @40533 has 7 MA's), (29, 40593), (30, 40608), (36, 40668), (40, 40686), (43, 40728),

Gene: MargaretKali_34 Start: 26052, Stop: 26234, Start Num: 21
Candidate Starts for MargaretKali_34:
(Start: 21 @26052 has 2 MA's),

Gene: Miskis_92 Start: 58711, Stop: 58911, Start Num: 17
Candidate Starts for Miskis_92:
(Start: 17 @58711 has 17 MA's), (28, 58768), (29, 58774), (37, 58852), (40, 58867),

Gene: Mollymur_93 Start: 63027, Stop: 62845, Start Num: 22
Candidate Starts for Mollymur_93:
(Start: 22 @63027 has 1 MA's),

Gene: MortyNRick_55 Start: 39746, Stop: 39955, Start Num: 18
Candidate Starts for MortyNRick_55:
(Start: 18 @39746 has 7 MA's), (29, 39806), (30, 39821), (36, 39881), (40, 39899),

Gene: Norvs_100 Start: 60040, Stop: 60240, Start Num: 17
Candidate Starts for Norvs_100:
(Start: 17 @60040 has 17 MA's), (28, 60097), (29, 60103), (37, 60181), (40, 60196),

Gene: OneUp_86 Start: 56418, Stop: 56615, Start Num: 17
Candidate Starts for OneUp_86:
(7, 56301), (12, 56376), (13, 56394), (Start: 17 @56418 has 17 MA's), (40, 56574),

Gene: PhinkBoden_97 Start: 59801, Stop: 60001, Start Num: 17
Candidate Starts for PhinkBoden_97:
(Start: 17 @59801 has 17 MA's), (28, 59858), (29, 59864), (37, 59942), (40, 59957),

Gene: Pigu_37 Start: 25613, Stop: 25792, Start Num: 22
Candidate Starts for Pigu_37:
(1, 25346), (Start: 22 @25613 has 1 MA's), (27, 25652),

Gene: Smoothie_99 Start: 60011, Stop: 60211, Start Num: 17
Candidate Starts for Smoothie_99:
(Start: 17 @60011 has 17 MA's), (28, 60068), (29, 60074), (37, 60152), (40, 60167),

Gene: SpeedDemon_940 Start: 64127, Stop: 63927, Start Num: 18
Candidate Starts for SpeedDemon_940:
(Start: 18 @64127 has 7 MA's), (Start: 23 @64112 has 2 MA's), (29, 64067), (33, 64016),

Gene: Spooky_52 Start: 37230, Stop: 37451, Start Num: 15
Candidate Starts for Spooky_52:
(6, 37110), (11, 37188), (Start: 15 @37230 has 2 MA's), (28, 37299), (29, 37305), (30, 37320), (31, 37350), (39, 37395), (40, 37398), (41, 37416), (43, 37440),

Gene: Squiddly_59 Start: 40046, Stop: 40252, Start Num: 18
Candidate Starts for Squiddly_59:
(9, 39947), (10, 39968), (Start: 18 @40046 has 7 MA's), (29, 40106), (30, 40121), (36, 40181), (40, 40199), (43, 40241),

Gene: Toniann_100 Start: 59980, Stop: 60180, Start Num: 17
Candidate Starts for Toniann_100:
(Start: 17 @59980 has 17 MA's), (28, 60037), (29, 60043), (37, 60121), (40, 60136),

Gene: Towmatter_82 Start: 57951, Stop: 57769, Start Num: 23
Candidate Starts for Towmatter_82:
(Start: 23 @57951 has 2 MA's), (31, 57861), (35, 57834),

Gene: WilliamBoone_100 Start: 58743, Stop: 58943, Start Num: 17
Candidate Starts for WilliamBoone_100:
(Start: 17 @58743 has 17 MA's), (32, 58854), (35, 58878),

Gene: Yvonnetastic_109 Start: 62358, Stop: 62561, Start Num: 19
Candidate Starts for Yvonnetastic_109:
(Start: 19 @62358 has 2 MA's), (31, 62460), (34, 62484), (38, 62499),