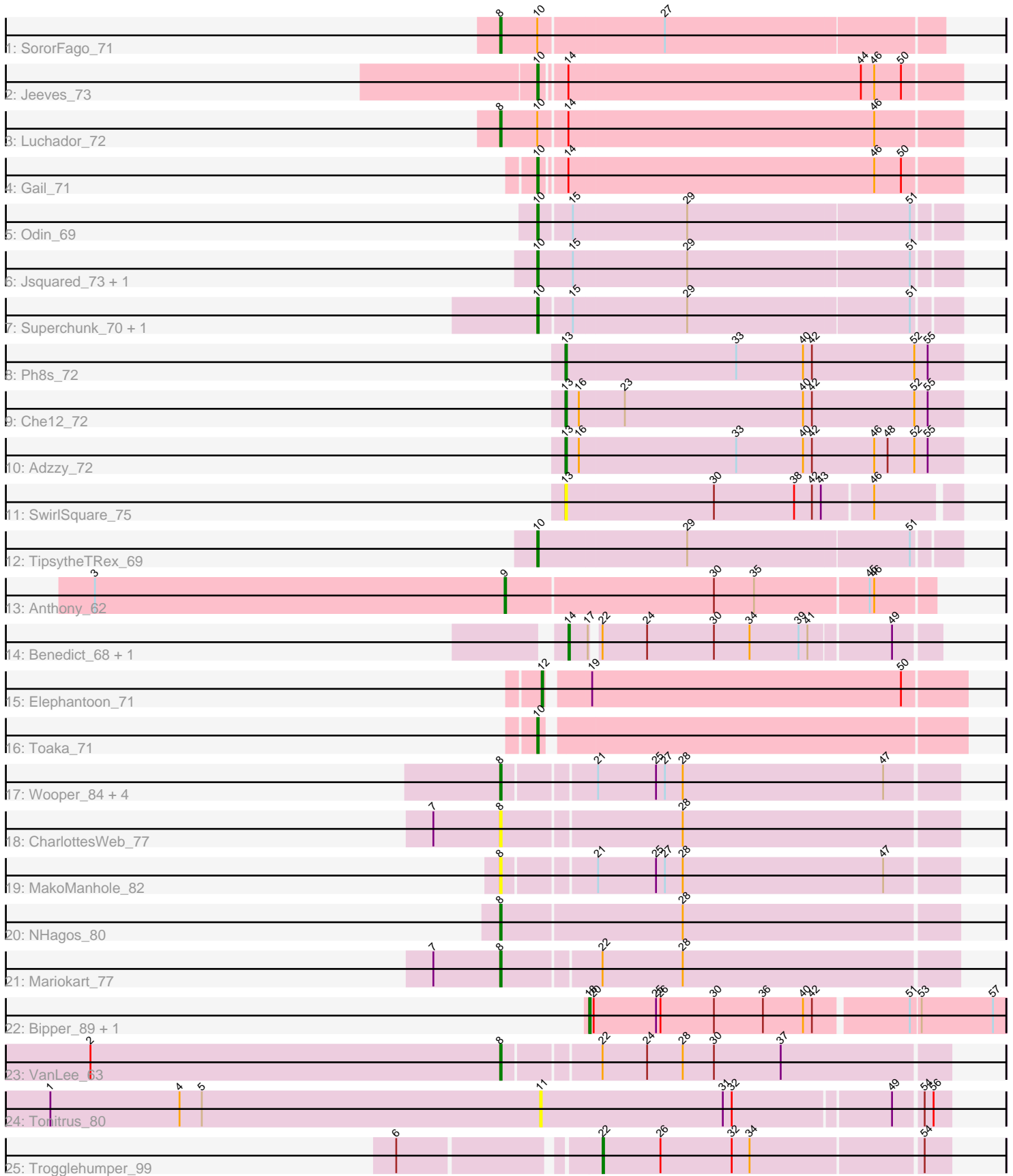# Pham 163797

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 163797 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163797 has 33 members, 5 are drafts.

Phages represented in each track:
• Track 1 : SororFago_71
• Track 2 : Jeeves_73
• Track 3 : Luchador_72
• Track 4 : Gail_71
• Track 5 : Odin_69
• Track 6 : Jsquared_73, Serenity_73
• Track 7 : Superchunk_70, Caraxes_71
• Track 8 : Ph8s_72
• Track 9 : Che12_72
• Track 10 : Adzzy_72
• Track 11 : SwirlSquare_75
• Track 12 : TipsytheTRex_69
• Track 13 : Anthony_62
• Track 14 : Benedict_68, Airmid_67
• Track 15 : Elephantoon_71
• Track 16 : Toaka_71
• Track 17 : Wooper_84, CaiB_83, AnarQue_84, CloverMinnie_82, MossRose_82
• Track 18 : CharlottesWeb_77
• Track 19 : MakoManhole_82
• Track 20 : NHagos_80
• Track 21 : Mariokart_77
• Track 22 : Bipper_89, Cracklewink_90
• Track 23 : VanLee_63
• Track 24 : Tonitrus_80
• Track 25 : Trogglehumper_99

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

The start number called the most often in the published annotations is 8, it was called in 10 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AnarQue_84, CaiB_83, CharlottesWeb_77, CloverMinnie_82, Luchador_72, MakoManhole_82, Mariokart_77, MossRose_82, NHagos_80, SororFago_71,

VanLee_63, Wooper_84,

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

Genes that do not have the "Most Annotated" start:
• Adzzy_72, Airmid_67, Anthony_62, Benedict_68, Bipper_89, Caraxes_71, Che12_72, Cracklewink_90, Elephantoon_71, Gail_71, Jeeves_73, Jsquared_73, Odin_69, Ph8s_72, Serenity_73, Superchunk_70, SwirlSquare_75, TipsytheTRex_69, Toaka_71, Tonitrus_80, Trogglehumper_99,

Summary by start number:

Start 8:
• Found in 12 of 33 (36.4%) of genes in pham
• Manual Annotations of this start: 10 of 28
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AnarQue_84 (DR), CaiB_83 (DR), CharlottesWeb_77 (DR), CloverMinnie_82 (DR), Luchador_72 (A14), MakoManhole_82 (DR), Mariokart_77 (DR), MossRose_82 (DR), NHagos_80 (DR), SororFago_71 (A14), VanLee_63 (singleton), Wooper_84 (DR),

Start 9:
• Found in 1 of 33 (3.0%) of genes in pham
• Manual Annotations of this start: 1 of 28
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Anthony_62 (A20),

Start 10:
• Found in 11 of 33 (33.3%) of genes in pham
• Manual Annotations of this start: 8 of 28
• Called 81.8% of time when present
• Phage (with cluster) where this start called: Caraxes_71 (A2), Gail_71 (A14), Jeeves_73 (A14), Jsquared_73 (A2), Odin_69 (A2), Serenity_73 (A2), Superchunk_70 (A2), TipsytheTRex_69 (A2), Toaka_71 (A9),

Start 11:
• 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: Tonitrus_80 (singleton),

Start 12:
• Found in 1 of 33 (3.0%) of genes in pham
• Manual Annotations of this start: 1 of 28
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Elephantoon_71 (A9),

Start 13:
• Found in 4 of 33 (12.1%) of genes in pham
• Manual Annotations of this start: 3 of 28
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Adzzy_72 (A2), Che12_72 (A2), Ph8s_72 (A2), SwirlSquare_75 (A2),

Start 14:
• Found in 5 of 33 (15.2%) of genes in pham
• Manual Annotations of this start: 2 of 28
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Airmid_67 (A5), Benedict_68 (A5),

Start 18:
• Found in 2 of 33 (6.1%) of genes in pham
• Manual Annotations of this start: 2 of 28
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bipper_89 (Y), Cracklewink_90 (Y),

Start 22:
• Found in 5 of 33 (15.2%) of genes in pham
• Manual Annotations of this start: 1 of 28
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Trogglehumper_99 (singleton),

Summary by clusters:

There are 8 clusters represented in this pham: A20, A14, singleton, Y, A2, A5, A9, DR,

Info for manual annotations of cluster A14:
•Start number 8 was manually annotated 2 times for cluster A14.
•Start number 10 was manually annotated 2 times for cluster A14.

Info for manual annotations of cluster A2:
•Start number 10 was manually annotated 5 times for cluster A2.
•Start number 13 was manually annotated 3 times for cluster A2.

Info for manual annotations of cluster A20:
•Start number 9 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A5:
•Start number 14 was manually annotated 2 times for cluster A5.

Info for manual annotations of cluster A9:
•Start number 10 was manually annotated 1 time for cluster A9.
•Start number 12 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster DR:
•Start number 8 was manually annotated 7 times for cluster DR.

Info for manual annotations of cluster Y:
•Start number 18 was manually annotated 2 times for cluster Y.

Gene Information:

Gene: Adzzy_72 Start: 41570, Stop: 41304, Start Num: 13
Candidate Starts for Adzzy_72:
(Start: 13 @41570 has 3 MA's), (16, 41561), (33, 41456), (40, 41411), (42, 41405), (46, 41363), (48, 41354), (52, 41336), (55, 41327),

Gene: Airmid_67 Start: 42203, Stop: 41970, Start Num: 14
Candidate Starts for Airmid_67:
(Start: 14 @42203 has 2 MA's), (17, 42191), (Start: 22 @42188 has 1 MA's), (24, 42158), (30, 42113), (34, 42089), (39, 42056), (41, 42050), (49, 41999),

Gene: AnarQue_84 Start: 61315, Stop: 61019, Start Num: 8
Candidate Starts for AnarQue_84:
(Start: 8 @61315 has 10 MA's), (21, 61258), (25, 61219), (27, 61213), (28, 61201), (47, 61066),

Gene: Anthony_62 Start: 39800, Stop: 39519, Start Num: 9
Candidate Starts for Anthony_62:
(3, 40076), (Start: 9 @39800 has 1 MA's), (30, 39662), (35, 39635), (45, 39560), (46, 39557),

Gene: Benedict_68 Start: 41935, Stop: 41702, Start Num: 14
Candidate Starts for Benedict_68:
(Start: 14 @41935 has 2 MA's), (17, 41923), (Start: 22 @41920 has 1 MA's), (24, 41890), (30, 41845), (34, 41821), (39, 41788), (41, 41782), (49, 41731),

Gene: Bipper_89 Start: 57383, Stop: 57655, Start Num: 18
Candidate Starts for Bipper_89:
(Start: 18 @57383 has 2 MA's), (20, 57386), (25, 57428), (26, 57431), (30, 57467), (36, 57500), (40, 57527), (42, 57533), (51, 57593), (53, 57599), (57, 57647),

Gene: CaiB_83 Start: 61113, Stop: 60817, Start Num: 8
Candidate Starts for CaiB_83:
(Start: 8 @61113 has 10 MA's), (21, 61056), (25, 61017), (27, 61011), (28, 60999), (47, 60864),

Gene: Caraxes_71 Start: 41338, Stop: 41066, Start Num: 10
Candidate Starts for Caraxes_71:
(Start: 10 @41338 has 8 MA's), (15, 41317), (29, 41242), (51, 41095),

Gene: CharlottesWeb_77 Start: 58341, Stop: 58042, Start Num: 8
Candidate Starts for CharlottesWeb_77:
(7, 58386), (Start: 8 @58341 has 10 MA's), (28, 58224),

Gene: Che12_72 Start: 41454, Stop: 41188, Start Num: 13
Candidate Starts for Che12_72:
(Start: 13 @41454 has 3 MA's), (16, 41445), (23, 41415), (40, 41295), (42, 41289), (52, 41220), (55, 41211),

Gene: CloverMinnie_82 Start: 60591, Stop: 60295, Start Num: 8
Candidate Starts for CloverMinnie_82:
(Start: 8 @60591 has 10 MA's), (21, 60534), (25, 60495), (27, 60489), (28, 60477), (47, 60342),

Gene: Cracklewink_90 Start: 56578, Stop: 56850, Start Num: 18
Candidate Starts for Cracklewink_90:
(Start: 18 @56578 has 2 MA's), (20, 56581), (25, 56623), (26, 56626), (30, 56662), (36, 56695), (40, 56722), (42, 56728), (51, 56788), (53, 56794), (57, 56842),

Gene: Elephantoon_71 Start: 42028, Stop: 41756, Start Num: 12
Candidate Starts for Elephantoon_71:
(Start: 12 @42028 has 1 MA's), (19, 42004), (50, 41797),

Gene: Gail_71 Start: 43173, Stop: 42898, Start Num: 10
Candidate Starts for Gail_71:
(Start: 10 @43173 has 8 MA's), (Start: 14 @43158 has 2 MA's), (46, 42954), (50, 42936),

Gene: Jeeves_73 Start: 42154, Stop: 41879, Start Num: 10
Candidate Starts for Jeeves_73:
(Start: 10 @42154 has 8 MA's), (Start: 14 @42139 has 2 MA's), (44, 41944), (46, 41935), (50, 41917),

Gene: Jsquared_73 Start: 42281, Stop: 42006, Start Num: 10
Candidate Starts for Jsquared_73:
(Start: 10 @42281 has 8 MA's), (15, 42257), (29, 42182), (51, 42035),

Gene: Luchador_72 Start: 43662, Stop: 43360, Start Num: 8
Candidate Starts for Luchador_72:
(Start: 8 @43662 has 10 MA's), (Start: 10 @43638 has 8 MA's), (Start: 14 @43620 has 2 MA's), (46, 43416),

Gene: MakoManhole_82 Start: 61086, Stop: 60790, Start Num: 8
Candidate Starts for MakoManhole_82:
(Start: 8 @61086 has 10 MA's), (21, 61029), (25, 60990), (27, 60984), (28, 60972), (47, 60837),

Gene: Mariokart_77 Start: 58579, Stop: 58280, Start Num: 8
Candidate Starts for Mariokart_77:
(7, 58624), (Start: 8 @58579 has 10 MA's), (Start: 22 @58516 has 1 MA's), (28, 58462),

Gene: MossRose_82 Start: 60565, Stop: 60269, Start Num: 8
Candidate Starts for MossRose_82:
(Start: 8 @60565 has 10 MA's), (21, 60508), (25, 60469), (27, 60463), (28, 60451), (47, 60316),

Gene: NHagos_80 Start: 59095, Stop: 58793, Start Num: 8
Candidate Starts for NHagos_80:
(Start: 8 @59095 has 10 MA's), (28, 58975),

Gene: Odin_69 Start: 41725, Stop: 41453, Start Num: 10
Candidate Starts for Odin_69:
(Start: 10 @41725 has 8 MA's), (15, 41704), (29, 41629), (51, 41482),

Gene: Ph8s_72 Start: 41787, Stop: 41521, Start Num: 13
Candidate Starts for Ph8s_72:
(Start: 13 @41787 has 3 MA's), (33, 41673), (40, 41628), (42, 41622), (52, 41553), (55, 41544),

Gene: Serenity_73 Start: 42348, Stop: 42073, Start Num: 10
Candidate Starts for Serenity_73:
(Start: 10 @42348 has 8 MA's), (15, 42324), (29, 42249), (51, 42102),

Gene: SororFago_71 Start: 43379, Stop: 43092, Start Num: 8
Candidate Starts for SororFago_71:
(Start: 8 @43379 has 10 MA's), (Start: 10 @43355 has 8 MA's), (27, 43274),

Gene: Superchunk_70 Start: 41338, Stop: 41066, Start Num: 10
Candidate Starts for Superchunk_70:
(Start: 10 @41338 has 8 MA's), (15, 41317), (29, 41242), (51, 41095),

Gene: SwirlSquare_75 Start: 42056, Stop: 41799, Start Num: 13
Candidate Starts for SwirlSquare_75:
(Start: 13 @42056 has 3 MA's), (30, 41957), (38, 41903), (42, 41891), (43, 41885), (46, 41852),

Gene: TipsytheTRex_69 Start: 42350, Stop: 42075, Start Num: 10
Candidate Starts for TipsytheTRex_69:
(Start: 10 @42350 has 8 MA's), (29, 42251), (51, 42104),

Gene: Toaka_71 Start: 42411, Stop: 42136, Start Num: 10
Candidate Starts for Toaka_71:
(Start: 10 @42411 has 8 MA's),

Gene: Tonitrus_80 Start: 55218, Stop: 55484, Start Num: 11
Candidate Starts for Tonitrus_80:
(1, 54888), (4, 54975), (5, 54990), (11, 55218), (31, 55341), (32, 55347), (49, 55449), (54, 55467), (56, 55473),

Gene: Trogglehumper_99 Start: 71065, Stop: 70838, Start Num: 22
Candidate Starts for Trogglehumper_99:
(6, 71179), (Start: 22 @71065 has 1 MA's), (26, 71026), (32, 70978), (34, 70966), (54, 70855),

Gene: VanLee_63 Start: 40991, Stop: 41281, Start Num: 8
Candidate Starts for VanLee_63:
(2, 40715), (Start: 8 @40991 has 10 MA's), (Start: 22 @41051 has 1 MA's), (24, 41081), (28, 41105), (30, 41126), (37, 41171),

Gene: Wooper_84 Start: 60648, Stop: 60352, Start Num: 8
Candidate Starts for Wooper_84:
(Start: 8 @60648 has 10 MA's), (21, 60591), (25, 60552), (27, 60546), (28, 60534), (47, 60399),