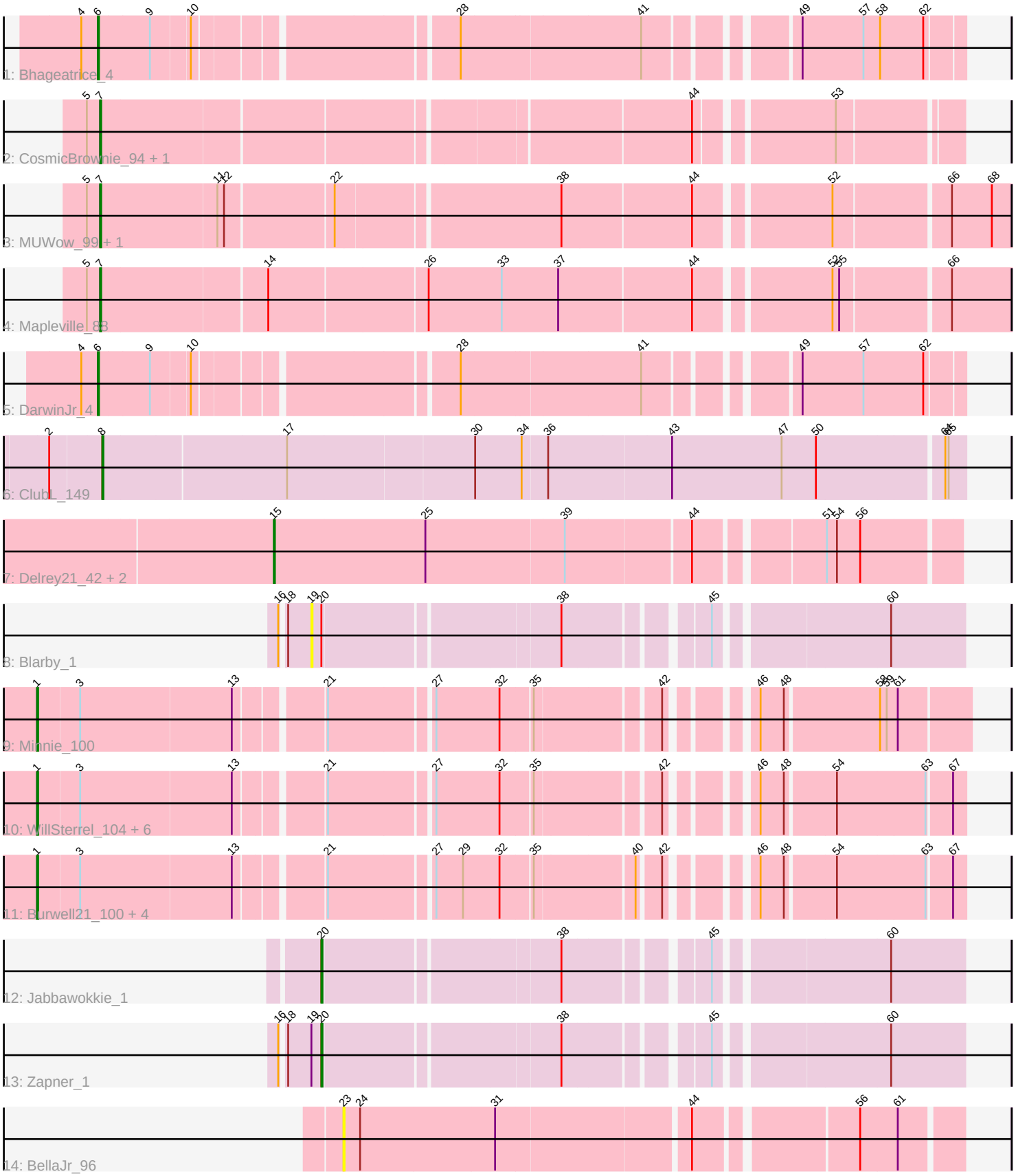
Pham 311905


1: Bhageatrice_4
2: CosmicBrownie_94 + 1
3: MUWow_99 + 1
4: Mapleville_83
5: DarwinJr_4
6: ClubL_149
7: Delrey21_42 + 2
8: Blarby_1
9: Minnie_100
10: WillSterrel_104 + 6
11: Burwell21_100 + 4
12: Jabbawokkie_1
13: Zapner_1
14: BellaJr_96

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 311905 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311905 has 28 members, 3 are drafts.

Phages represented in each track:
• Track 1 : Bhageatrice_4
• Track 2 : CosmicBrownie_94, Phrank15_101
• Track 3 : MUWow_99, Anekin_96
• Track 4 : Mapleville_88
• Track 5 : DarwinJr_4
• Track 6 : ClubL_149
• Track 7 : Delrey21_42, Verity_42, DoctorFroggo_42
• Track 8 : Blarby_1
• Track 9 : Minnie_100
• Track 10 : WillSterrel_104, Sandalphon_104, Royals2015_109, IrishSherpFalk_106, Juniper1_99, Dante_105, Mahavrat_99
• Track 11 : Burwell21_100, Llij_100, Phanphagia_110, Shauna1_107, Whatsapiecost_100
• Track 12 : Jabbawokkie_1
• Track 13 : Zapner_1
• Track 14 : BellaJr_96

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

The start number called the most often in the published annotations is 1, it was called in 13 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Burwell21_100, Dante_105, IrishSherpFalk_106, Juniper1_99, Llij_100, Mahavrat_99, Minnie_100, Phanphagia_110, Royals2015_109, Sandalphon_104, Shauna1_107, Whatsapiecost_100, WillSterrel_104,

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

Genes that do not have the "Most Annotated" start:
• Anekin_96, BellaJr_96, Bhageatrice_4, Blarby_1, ClubL_149, CosmicBrownie_94, DarwinJr_4, Delrey21_42, DoctorFroggo_42, Jabbawokkie_1, MUWow_99, Mapleville_88, Phrank15_101, Verity_42, Zapner_1,

Summary by start number:

Start 1:
• Found in 13 of 28 (46.4%) of genes in pham
• Manual Annotations of this start: 13 of 25
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Burwell21_100 (F1), Dante_105 (F1), IrishSherpFalk_106 (F1), Juniper1_99 (F1), Llij_100 (F1), Mahavrat_99 (F1), Minnie_100 (F1), Phanphagia_110 (F1), Royals2015_109 (F1), Sandalphon_104 (F1), Shauna1_107 (F1), Whatsapiecost_100 (F1), WillSterrel_104 (F1),

Start 6:
• Found in 2 of 28 (7.1%) 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: Bhageatrice_4 (AY), DarwinJr_4 (AY),

Start 7:
• Found in 5 of 28 (17.9%) of genes in pham
• Manual Annotations of this start: 4 of 25
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Anekin_96 (AY), CosmicBrownie_94 (AY), MUWow_99 (AY), Mapleville_88 (AY), Phrank15_101 (AY),

Start 8:
• Found in 1 of 28 (3.6%) 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: ClubL_149 (CQ1),

Start 15:
• Found in 3 of 28 (10.7%) of genes in pham
• Manual Annotations of this start: 3 of 25
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Delrey21_42 (DE4), DoctorFroggo_42 (DE4), Verity_42 (DE4),

Start 19:
• Found in 2 of 28 (7.1%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Blarby_1 (F),

Start 20:
• Found in 3 of 28 (10.7%) of genes in pham
• Manual Annotations of this start: 2 of 25
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Jabbawokkie_1 (F2), Zapner_1 (F2),

Start 23:
• Found in 1 of 28 (3.6%) of genes in pham
• No Manual Annotations of this start.

• Called 100.0% of time when present
• Phage (with cluster) where this start called: BellaJr_96 (FN),

Summary by clusters:

There are 7 clusters represented in this pham: F1, F2, F, DE4, AY, CQ1, FN,

Info for manual annotations of cluster AY:
•Start number 6 was manually annotated 2 times for cluster AY.
•Start number 7 was manually annotated 4 times for cluster AY.

Info for manual annotations of cluster CQ1:
•Start number 8 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster DE4:
•Start number 15 was manually annotated 3 times for cluster DE4.

Info for manual annotations of cluster F1:
•Start number 1 was manually annotated 13 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 20 was manually annotated 2 times for cluster F2.

Gene Information:

Gene: Anekin_96 Start: 52648, Stop: 53418, Start Num: 7
Candidate Starts for Anekin_96:
(5, 52636), (Start: 7 @52648 has 4 MA's), (11, 52750), (12, 52756), (22, 52849), (38, 53041), (44, 53155), (52, 53266), (66, 53365), (68, 53401),

Gene: BellaJr_96 Start: 52094, Stop: 52612, Start Num: 23
Candidate Starts for BellaJr_96:
(23, 52094), (24, 52109), (31, 52229), (44, 52394), (56, 52526), (61, 52559),

Gene: Bhageatrice_4 Start: 2128, Stop: 2829, Start Num: 6
Candidate Starts for Bhageatrice_4:
(4, 2113), (Start: 6 @2128 has 2 MA's), (9, 2173), (10, 2206), (28, 2419), (41, 2575), (49, 2689), (57, 2743), (58, 2758), (62, 2797),

Gene: Blarby_1 Start: 35, Stop: 562, Start Num: 19
Candidate Starts for Blarby_1:
(16, 11), (18, 14), (19, 35), (Start: 20 @44 has 2 MA's), (38, 245), (45, 356), (60, 497),

Gene: Burwell21_100 Start: 57289, Stop: 58032, Start Num: 1
Candidate Starts for Burwell21_100:
(Start: 1 @57289 has 13 MA's), (3, 57325), (13, 57460), (21, 57529), (27, 57616), (29, 57640), (32, 57673), (35, 57700), (40, 57784), (42, 57802), (46, 57859), (48, 57880), (54, 57922), (63, 58000), (67, 58021),

Gene: ClubL_149 Start: 79995, Stop: 80744, Start Num: 8
Candidate Starts for ClubL_149:
(2, 79950), (Start: 8 @79995 has 1 MA's), (17, 80154), (30, 80319), (34, 80361), (36, 80382), (43, 80490), (47, 80589), (50, 80619), (64, 80727), (65, 80730),

Gene: CosmicBrownie_94 Start: 50910, Stop: 51626, Start Num: 7
Candidate Starts for CosmicBrownie_94:
(5, 50898), (Start: 7 @50910 has 4 MA's), (44, 51411), (53, 51522),

Gene: Dante_105 Start: 58836, Stop: 59579, Start Num: 1
Candidate Starts for Dante_105:
(Start: 1 @58836 has 13 MA's), (3, 58872), (13, 59007), (21, 59076), (27, 59163), (32, 59220), (35, 59247), (42, 59349), (46, 59406), (48, 59427), (54, 59469), (63, 59547), (67, 59568),

Gene: DarwinJr_4 Start: 2066, Stop: 2767, Start Num: 6
Candidate Starts for DarwinJr_4:
(4, 2051), (Start: 6 @2066 has 2 MA's), (9, 2111), (10, 2144), (28, 2357), (41, 2513), (49, 2627), (57, 2681), (62, 2735),

Gene: Delrey21_42 Start: 39489, Stop: 40070, Start Num: 15
Candidate Starts for Delrey21_42:
(Start: 15 @39489 has 3 MA's), (25, 39624), (39, 39747), (44, 39855), (51, 39957), (54, 39966), (56, 39987),

Gene: DoctorFroggo_42 Start: 39489, Stop: 40070, Start Num: 15
Candidate Starts for DoctorFroggo_42:
(Start: 15 @39489 has 3 MA's), (25, 39624), (39, 39747), (44, 39855), (51, 39957), (54, 39966), (56, 39987),

Gene: IrishSherpFalk_106 Start: 57759, Stop: 58502, Start Num: 1
Candidate Starts for IrishSherpFalk_106:
(Start: 1 @57759 has 13 MA's), (3, 57795), (13, 57930), (21, 57999), (27, 58086), (32, 58143), (35, 58170), (42, 58272), (46, 58329), (48, 58350), (54, 58392), (63, 58470), (67, 58491),

Gene: Jabbawokkie_1 Start: 43, Stop: 561, Start Num: 20
Candidate Starts for Jabbawokkie_1:
(Start: 20 @43 has 2 MA's), (38, 244), (45, 355), (60, 496),

Gene: Juniper1_99 Start: 56460, Stop: 57203, Start Num: 1
Candidate Starts for Juniper1_99:
(Start: 1 @56460 has 13 MA's), (3, 56496), (13, 56631), (21, 56700), (27, 56787), (32, 56844), (35, 56871), (42, 56973), (46, 57030), (48, 57051), (54, 57093), (63, 57171), (67, 57192),

Gene: Llij_100 Start: 56053, Stop: 56796, Start Num: 1
Candidate Starts for Llij_100:
(Start: 1 @56053 has 13 MA's), (3, 56089), (13, 56224), (21, 56293), (27, 56380), (29, 56404), (32, 56437), (35, 56464), (40, 56548), (42, 56566), (46, 56623), (48, 56644), (54, 56686), (63, 56764), (67, 56785),

Gene: MUWow_99 Start: 54213, Stop: 54983, Start Num: 7
Candidate Starts for MUWow_99:
(5, 54201), (Start: 7 @54213 has 4 MA's), (11, 54315), (12, 54321), (22, 54414), (38, 54606), (44, 54720), (52, 54831), (66, 54930), (68, 54966),

Gene: Mahavrat_99 Start: 55132, Stop: 55875, Start Num: 1
Candidate Starts for Mahavrat_99:
(Start: 1 @55132 has 13 MA's), (3, 55168), (13, 55303), (21, 55372), (27, 55459), (32, 55516), (35, 55543), (42, 55645), (46, 55702), (48, 55723), (54, 55765), (63, 55843), (67, 55864),

Gene: Mapleville_88 Start: 50610, Stop: 51389, Start Num: 7
Candidate Starts for Mapleville_88:
(5, 50598), (Start: 7 @50610 has 4 MA's), (14, 50754), (26, 50892), (33, 50958), (37, 51009), (44, 51126), (52, 51237), (55, 51243), (66, 51336),

Gene: Minnie_100 Start: 58451, Stop: 59200, Start Num: 1
Candidate Starts for Minnie_100:
(Start: 1 @58451 has 13 MA's), (3, 58487), (13, 58622), (21, 58691), (27, 58778), (32, 58835), (35, 58862), (42, 58964), (46, 59021), (48, 59042), (58, 59123), (59, 59129), (61, 59138),

Gene: Phanphagia_110 Start: 58890, Stop: 59633, Start Num: 1
Candidate Starts for Phanphagia_110:
(Start: 1 @58890 has 13 MA's), (3, 58926), (13, 59061), (21, 59130), (27, 59217), (29, 59241), (32, 59274), (35, 59301), (40, 59385), (42, 59403), (46, 59460), (48, 59481), (54, 59523), (63, 59601), (67, 59622),

Gene: Phrank15_101 Start: 52549, Stop: 53265, Start Num: 7
Candidate Starts for Phrank15_101:
(5, 52537), (Start: 7 @52549 has 4 MA's), (44, 53050), (53, 53161),

Gene: Royals2015_109 Start: 56541, Stop: 57284, Start Num: 1
Candidate Starts for Royals2015_109:
(Start: 1 @56541 has 13 MA's), (3, 56577), (13, 56712), (21, 56781), (27, 56868), (32, 56925), (35, 56952), (42, 57054), (46, 57111), (48, 57132), (54, 57174), (63, 57252), (67, 57273),

Gene: Sandalphon_104 Start: 58724, Stop: 59467, Start Num: 1
Candidate Starts for Sandalphon_104:
(Start: 1 @58724 has 13 MA's), (3, 58760), (13, 58895), (21, 58964), (27, 59051), (32, 59108), (35, 59135), (42, 59237), (46, 59294), (48, 59315), (54, 59357), (63, 59435), (67, 59456),

Gene: Shauna1_107 Start: 58506, Stop: 59249, Start Num: 1
Candidate Starts for Shauna1_107:
(Start: 1 @58506 has 13 MA's), (3, 58542), (13, 58677), (21, 58746), (27, 58833), (29, 58857), (32, 58890), (35, 58917), (40, 59001), (42, 59019), (46, 59076), (48, 59097), (54, 59139), (63, 59217), (67, 59238),

Gene: Verity_42 Start: 39489, Stop: 40070, Start Num: 15
Candidate Starts for Verity_42:
(Start: 15 @39489 has 3 MA's), (25, 39624), (39, 39747), (44, 39855), (51, 39957), (54, 39966), (56, 39987),

Gene: Whatsapiecost_100 Start: 52789, Stop: 53532, Start Num: 1
Candidate Starts for Whatsapiecost_100:
(Start: 1 @52789 has 13 MA's), (3, 52825), (13, 52960), (21, 53029), (27, 53116), (29, 53140), (32, 53173), (35, 53200), (40, 53284), (42, 53302), (46, 53359), (48, 53380), (54, 53422), (63, 53500), (67, 53521),

Gene: WillSterrel_104 Start: 57792, Stop: 58535, Start Num: 1
Candidate Starts for WillSterrel_104:
(Start: 1 @57792 has 13 MA's), (3, 57828), (13, 57963), (21, 58032), (27, 58119), (32, 58176), (35, 58203), (42, 58305), (46, 58362), (48, 58383), (54, 58425), (63, 58503), (67, 58524),

Gene: Zapner_1 Start: 44, Stop: 562, Start Num: 20
Candidate Starts for Zapner_1:
(16, 11), (18, 14), (19, 35), (Start: 20 @44 has 2 MA's), (38, 245), (45, 356), (60, 497),