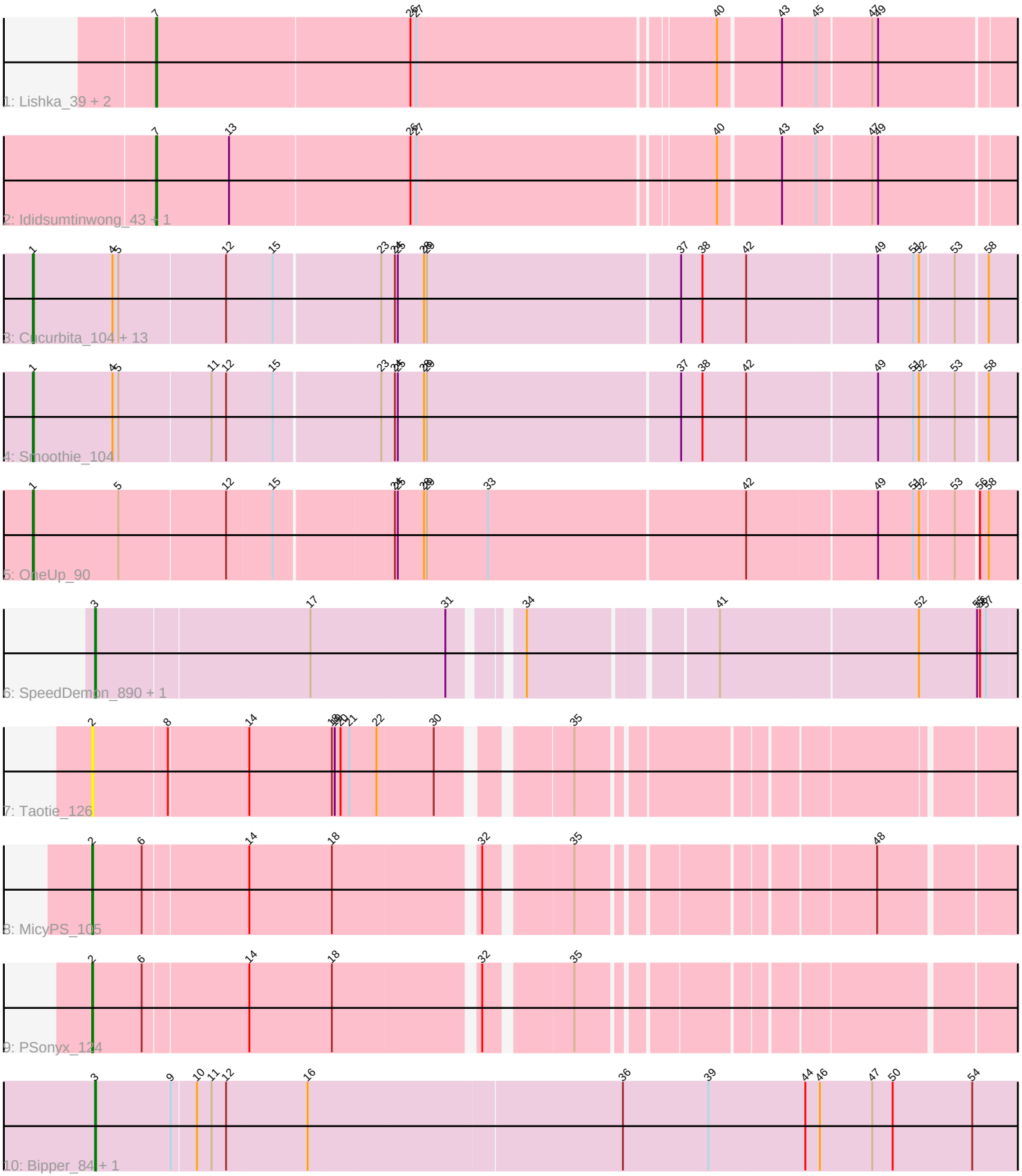
# Pham 311906


1: Lishka_39 + 2
2: Ididsumtinwong_43 + 1
3: Cucurbita_104 + 13
4: Smoothie_104
5: OneUp_90
6: SpeedDemon_890 + 1
7: Taotie_126
8: MicyPS_105
9: PSonyx_124
10: Bipper_84 + 1

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 311906 Report

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

Pham number 311906 has 28 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Lishka_39, Austintatious_39, PapayaSalad_41
• Track 2 : Ididsumtinwong_43, Bioscum_42
• Track 3 : Cucurbita_104, Miskis_97, Aphelion_104, Toniann_105, Lozinak_103, Dusty_101, Abscondus_102, Bachita_105, PhinkBoden_102, Norvs_105, Geeche_102, Engineer_104, Culver_105, ClubL_104
• Track 4 : Smoothie_104
• Track 5 : OneUp_90
• Track 6 : SpeedDemon_890, Bantam_88
• Track 7 : Taotie_126
• Track 8 : MicyPS_105
• Track 9 : PSonyx_124
• Track 10 : Bipper_84, Cracklewink_84

***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 15 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abscondus_102, Aphelion_104, Bachita_105, ClubL_104, Cucurbita_104, Culver_105, Dusty_101, Engineer_104, Geeche_102, Lozinak_103, Miskis_97, Norvs_105, OneUp_90, PhinkBoden_102, Smoothie_104, Toniann_105,

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

Genes that do not have the "Most Annotated" start:
• Austintatious_39, Bantam_88, Bioscum_42, Bipper_84, Cracklewink_84, Ididsumtinwong_43, Lishka_39, MicyPS_105, PSonyx_124, PapayaSalad_41, SpeedDemon_890, Taotie_126,

**Summary by start number:**

Start 1:

• Found in 16 of 28 ( 57.1% ) of genes in pham
• Manual Annotations of this start: 15 of 26
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abscondus_102 (CQ1), Aphelion_104 (CQ1), Bachita_105 (CQ1), ClubL_104 (CQ1), Cucurbita_104 (CQ1), Culver_105 (CQ1), Dusty_101 (CQ1), Engineer_104 (CQ1), Geeche_102 (CQ1), Lozinak_103 (CQ1), Miskis_97 (CQ1), Norvs_105 (CQ1), OneUp_90 (CQ2), PhinkBoden_102 (CQ1), Smoothie_104 (CQ1), Toniann_105 (CQ1),

Start 2:
• Found in 3 of 28 ( 10.7% ) of genes in pham
• Manual Annotations of this start: 2 of 26
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MicyPS_105 (EQ), PSonyx_124 (EQ), Taotie_126 (EQ),

Start 3:
• Found in 4 of 28 ( 14.3% ) of genes in pham
• Manual Annotations of this start: 4 of 26
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bantam_88 (DL), Bipper_84 (Y), Cracklewink_84 (Y), SpeedDemon_890 (DL),

Start 7:
• Found in 5 of 28 ( 17.9% ) of genes in pham
• Manual Annotations of this start: 5 of 26
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Austintatious_39 (BC3), Bioscum_42 (BC3), Ididsumtinwong_43 (BC3), Lishka_39 (BC3), PapayaSalad_41 (BC3),

**Summary by clusters:**

There are 6 clusters represented in this pham: DL, Y, CQ2, CQ1, EQ, BC3,

Info for manual annotations of cluster BC3:
•Start number 7 was manually annotated 5 times for cluster BC3.

Info for manual annotations of cluster CQ1:
•Start number 1 was manually annotated 14 times for cluster CQ1.

Info for manual annotations of cluster CQ2:
•Start number 1 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster DL:
•Start number 3 was manually annotated 2 times for cluster DL.

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

Info for manual annotations of cluster Y:
•Start number 3 was manually annotated 2 times for cluster Y.

### *Gene Information:*

Gene: Abscondus_102 Start: 61028, Stop: 62017, Start Num: 1
Candidate Starts for Abscondus_102:
(Start: 1 @61028 has 15 MA's), (4, 61109), (5, 61115), (12, 61223), (15, 61268), (23, 61373), (24, 61385), (25, 61388), (28, 61415), (29, 61418), (37, 61673), (38, 61694), (42, 61739), (49, 61868), (51, 61904), (52, 61910), (53, 61943), (58, 61973),

Gene: Aphelion_104 Start: 62581, Stop: 63570, Start Num: 1
Candidate Starts for Aphelion_104:
(Start: 1 @62581 has 15 MA's), (4, 62662), (5, 62668), (12, 62776), (15, 62821), (23, 62926), (24, 62938), (25, 62941), (28, 62968), (29, 62971), (37, 63226), (38, 63247), (42, 63292), (49, 63421), (51, 63457), (52, 63463), (53, 63496), (58, 63526),

Gene: Austintatious_39 Start: 25850, Stop: 26728, Start Num: 7
Candidate Starts for Austintatious_39:
(Start: 7 @25850 has 5 MA's), (26, 26108), (27, 26114), (40, 26405), (43, 26465), (45, 26498), (47, 26552), (49, 26558),

Gene: Bachita_105 Start: 62239, Stop: 63228, Start Num: 1
Candidate Starts for Bachita_105:
(Start: 1 @62239 has 15 MA's), (4, 62320), (5, 62326), (12, 62434), (15, 62479), (23, 62584), (24, 62596), (25, 62599), (28, 62626), (29, 62629), (37, 62884), (38, 62905), (42, 62950), (49, 63079), (51, 63115), (52, 63121), (53, 63154), (58, 63184),

Gene: Bantam_88 Start: 60544, Stop: 59627, Start Num: 3
Candidate Starts for Bantam_88:
(Start: 3 @60544 has 4 MA's), (17, 60331), (31, 60196), (34, 60139), (41, 59965), (52, 59767), (55, 59707), (56, 59704), (57, 59698),

Gene: Bioscum_42 Start: 28146, Stop: 29024, Start Num: 7
Candidate Starts for Bioscum_42:
(Start: 7 @28146 has 5 MA's), (13, 28221), (26, 28404), (27, 28410), (40, 28701), (43, 28761), (45, 28794), (47, 28848), (49, 28854),

Gene: Bipper_84 Start: 54628, Stop: 55608, Start Num: 3
Candidate Starts for Bipper_84:
(Start: 3 @54628 has 4 MA's), (9, 54706), (10, 54730), (11, 54745), (12, 54760), (16, 54841), (36, 55156), (39, 55243), (44, 55342), (46, 55357), (47, 55411), (50, 55432), (54, 55513),

Gene: ClubL_104 Start: 61169, Stop: 62158, Start Num: 1
Candidate Starts for ClubL_104:
(Start: 1 @61169 has 15 MA's), (4, 61250), (5, 61256), (12, 61364), (15, 61409), (23, 61514), (24, 61526), (25, 61529), (28, 61556), (29, 61559), (37, 61814), (38, 61835), (42, 61880), (49, 62009), (51, 62045), (52, 62051), (53, 62084), (58, 62114),

Gene: Cracklewink_84 Start: 53668, Stop: 54648, Start Num: 3
Candidate Starts for Cracklewink_84:
(Start: 3 @53668 has 4 MA's), (9, 53746), (10, 53770), (11, 53785), (12, 53800), (16, 53881), (36, 54196), (39, 54283), (44, 54382), (46, 54397), (47, 54451), (50, 54472), (54, 54553),

Gene: Cucurbita_104 Start: 62746, Stop: 63735, Start Num: 1
Candidate Starts for Cucurbita_104:

(Start: 1 @62746 has 15 MA's), (4, 62827), (5, 62833), (12, 62941), (15, 62986), (23, 63091), (24, 63103), (25, 63106), (28, 63133), (29, 63136), (37, 63391), (38, 63412), (42, 63457), (49, 63586), (51, 63622), (52, 63628), (53, 63661), (58, 63691),

Gene: Culver_105 Start: 61068, Stop: 62057, Start Num: 1
Candidate Starts for Culver_105:
(Start: 1 @61068 has 15 MA's), (4, 61149), (5, 61155), (12, 61263), (15, 61308), (23, 61413), (24, 61425), (25, 61428), (28, 61455), (29, 61458), (37, 61713), (38, 61734), (42, 61779), (49, 61908), (51, 61944), (52, 61950), (53, 61983), (58, 62013),

Gene: Dusty_101 Start: 61087, Stop: 62076, Start Num: 1
Candidate Starts for Dusty_101:
(Start: 1 @61087 has 15 MA's), (4, 61168), (5, 61174), (12, 61282), (15, 61327), (23, 61432), (24, 61444), (25, 61447), (28, 61474), (29, 61477), (37, 61732), (38, 61753), (42, 61798), (49, 61927), (51, 61963), (52, 61969), (53, 62002), (58, 62032),

Gene: Engineer_104 Start: 62212, Stop: 63201, Start Num: 1
Candidate Starts for Engineer_104:
(Start: 1 @62212 has 15 MA's), (4, 62293), (5, 62299), (12, 62407), (15, 62452), (23, 62557), (24, 62569), (25, 62572), (28, 62599), (29, 62602), (37, 62857), (38, 62878), (42, 62923), (49, 63052), (51, 63088), (52, 63094), (53, 63127), (58, 63157),

Gene: Geeche_102 Start: 61310, Stop: 62299, Start Num: 1
Candidate Starts for Geeche_102:
(Start: 1 @61310 has 15 MA's), (4, 61391), (5, 61397), (12, 61505), (15, 61550), (23, 61655), (24, 61667), (25, 61670), (28, 61697), (29, 61700), (37, 61955), (38, 61976), (42, 62021), (49, 62150), (51, 62186), (52, 62192), (53, 62225), (58, 62255),

Gene: Ididsumtinwong_43 Start: 28146, Stop: 29024, Start Num: 7
Candidate Starts for Ididsumtinwong_43:
(Start: 7 @28146 has 5 MA's), (13, 28221), (26, 28404), (27, 28410), (40, 28701), (43, 28761), (45, 28794), (47, 28848), (49, 28854),

Gene: Lishka_39 Start: 25850, Stop: 26728, Start Num: 7
Candidate Starts for Lishka_39:
(Start: 7 @25850 has 5 MA's), (26, 26108), (27, 26114), (40, 26405), (43, 26465), (45, 26498), (47, 26552), (49, 26558),

Gene: Lozinak_103 Start: 62050, Stop: 63039, Start Num: 1
Candidate Starts for Lozinak_103:
(Start: 1 @62050 has 15 MA's), (4, 62131), (5, 62137), (12, 62245), (15, 62290), (23, 62395), (24, 62407), (25, 62410), (28, 62437), (29, 62440), (37, 62695), (38, 62716), (42, 62761), (49, 62890), (51, 62926), (52, 62932), (53, 62965), (58, 62995),

Gene: MicyPS_105 Start: 61596, Stop: 62462, Start Num: 2
Candidate Starts for MicyPS_105:
(Start: 2 @61596 has 2 MA's), (6, 61647), (14, 61749), (18, 61833), (32, 61971), (35, 62049), (48, 62316),

Gene: Miskis_97 Start: 60750, Stop: 61739, Start Num: 1
Candidate Starts for Miskis_97:
(Start: 1 @60750 has 15 MA's), (4, 60831), (5, 60837), (12, 60945), (15, 60990), (23, 61095), (24, 61107), (25, 61110), (28, 61137), (29, 61140), (37, 61395), (38, 61416), (42, 61461), (49, 61590), (51,

61626), (52, 61632), (53, 61665), (58, 61695),

Gene: Norvs_105 Start: 62077, Stop: 63066, Start Num: 1
Candidate Starts for Norvs_105:
(Start: 1 @62077 has 15 MA's), (4, 62158), (5, 62164), (12, 62272), (15, 62317), (23, 62422), (24, 62434), (25, 62437), (28, 62464), (29, 62467), (37, 62722), (38, 62743), (42, 62788), (49, 62917), (51, 62953), (52, 62959), (53, 62992), (58, 63022),

Gene: OneUp_90 Start: 58250, Stop: 59242, Start Num: 1
Candidate Starts for OneUp_90:
(Start: 1 @58250 has 15 MA's), (5, 58337), (12, 58445), (15, 58490), (24, 58607), (25, 58610), (28, 58637), (29, 58640), (33, 58703), (42, 58961), (49, 59090), (51, 59126), (52, 59132), (53, 59165), (56, 59186), (58, 59195),

Gene: PSonyx_124 Start: 65104, Stop: 65970, Start Num: 2
Candidate Starts for PSonyx_124:
(Start: 2 @65104 has 2 MA's), (6, 65155), (14, 65257), (18, 65341), (32, 65479), (35, 65557),

Gene: PapayaSalad_41 Start: 28436, Stop: 29314, Start Num: 7
Candidate Starts for PapayaSalad_41:
(Start: 7 @28436 has 5 MA's), (26, 28694), (27, 28700), (40, 28991), (43, 29051), (45, 29084), (47, 29138), (49, 29144),

Gene: PhinkBoden_102 Start: 61840, Stop: 62829, Start Num: 1
Candidate Starts for PhinkBoden_102:
(Start: 1 @61840 has 15 MA's), (4, 61921), (5, 61927), (12, 62035), (15, 62080), (23, 62185), (24, 62197), (25, 62200), (28, 62227), (29, 62230), (37, 62485), (38, 62506), (42, 62551), (49, 62680), (51, 62716), (52, 62722), (53, 62755), (58, 62785),

Gene: Smoothie_104 Start: 62050, Stop: 63039, Start Num: 1
Candidate Starts for Smoothie_104:
(Start: 1 @62050 has 15 MA's), (4, 62131), (5, 62137), (11, 62230), (12, 62245), (15, 62290), (23, 62395), (24, 62407), (25, 62410), (28, 62437), (29, 62440), (37, 62695), (38, 62716), (42, 62761), (49, 62890), (51, 62926), (52, 62932), (53, 62965), (58, 62995),

Gene: SpeedDemon_890 Start: 62465, Stop: 61548, Start Num: 3
Candidate Starts for SpeedDemon_890:
(Start: 3 @62465 has 4 MA's), (17, 62252), (31, 62117), (34, 62060), (41, 61886), (52, 61688), (55, 61628), (56, 61625), (57, 61619),

Gene: Taotie_126 Start: 64036, Stop: 64902, Start Num: 2
Candidate Starts for Taotie_126:
(Start: 2 @64036 has 2 MA's), (8, 64111), (14, 64189), (18, 64273), (19, 64276), (20, 64282), (21, 64291), (22, 64318), (30, 64375), (35, 64486),

Gene: Toniann_105 Start: 62020, Stop: 63009, Start Num: 1
Candidate Starts for Toniann_105:
(Start: 1 @62020 has 15 MA's), (4, 62101), (5, 62107), (12, 62215), (15, 62260), (23, 62365), (24, 62377), (25, 62380), (28, 62407), (29, 62410), (37, 62665), (38, 62686), (42, 62731), (49, 62860), (51, 62896), (52, 62902), (53, 62935), (58, 62965),