Pham 308815


1: Nergal_3
2: Chris_99
3: LastHope_101 + 1
4: Oscar_102 + 3
5: Guanica15_101 + 1
6: Nibb_101
7: MarkPhew_101
8: Yunkel11_99
9: Chavito_97
10: Validus_104
11: Pharb_95
12: Hurricane_96 + 4
13: Keshu_99
14: MacnCheese_97
15: TribleTrouble_95
16: Amohnition_93 + 1
17: Cain_100 + 1
18: PhelpsODU_90 + 1
19: TClif_98
20: Marshawn_94
21: Krueger_99 + 1
22: Shadow1_98 + 1
23: November_92
24: Lavahound_94
25: Yuna_98
26: Syra333_97
27: Ekdilam_90
28: Ximenita_101
29: Tierra_100
30: Phrank_101
31: Hammy_93

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 308815 Report

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

Pham number 308815 has 45 members, 2 are drafts.

Phages represented in each track:
- Track 1 : Nergal_3
- Track 2 : Chris_99
- Track 3 : LastHope_101, TingHuaYa_99
- Track 4 : Oscar_102, LeMond_101, KiSi_102, Scarlett_101
- Track 5 : Guanica15_101, Efra2_102
- Track 6 : Nibb_101
- Track 7 : MarkPhew_101
- Track 8 : Yunkel11_99
- Track 9 : Chavito_97
- Track 10 : Validus_104
- Track 11 : Pharb_95
- Track 12 : Hurricane_96, ShedlockHolmes_98, TBond007_95, Pixie_98, Lea83_96
- Track 13 : Keshu_99
- Track 14 : MacnCheese_97
- Track 15 : TribleTrouble_95
- Track 16 : Amohnition_93, DarthP_93
- Track 17 : Cain_100, Bryler_92
- Track 18 : PhelpsODU_90, Unicorn_100
- Track 19 : TClif_98
- Track 20 : Marshawn_94
- Track 21 : Krueger_99, Tigress9_98
- Track 22 : Shadow1_98, Sunflower1121_98
- Track 23 : November_92
- Track 24 : Lavahound_94
- Track 25 : Yuna_98
- Track 26 : Syra333_97
- Track 27 : Ekdilam_90
- Track 28 : Ximenita_101
- Track 29 : Tierra_100
- Track 30 : Phrank_101
- Track 31 : Hammy_93

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

The start number called the most often in the published annotations is 38, it was called in 9 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Bryler_92, Cain_100, Marshawn_94, Phrank_101, Shadow1_98, Sunflower1121_98, Syra333_97, Tierra_100, Ximenita_101,

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

Genes that do not have the "Most Annotated" start:
• Amohnition_93, Chavito_97, Chris_99, DarthP_93, Efra2_102, Ekdilam_90, Guanica15_101, Hammy_93, Hurricane_96, Keshu_99, KiSi_102, Krueger_99, LastHope_101, Lavahound_94, LeMond_101, Lea83_96, MacnCheese_97, MarkPhew_101, Nergal_3, Nibb_101, November_92, Oscar_102, Pharb_95, PhelpsODU_90, Pixie_98, Scarlett_101, ShedlockHolmes_98, TBond007_95, TClif_98, Tigress9_98, TingHuaYa_99, TribleTrouble_95, Unicorn_100, Validus_104, Yuna_98, Yunkel11_99,

Summary by start number:

Start 29:
• Found in 1 of 45 (2.2%) of genes in pham
• Manual Annotations of this start: 1 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Yuna_98 (K6),

Start 32:
• Found in 1 of 45 (2.2%) of genes in pham
• Manual Annotations of this start: 1 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: TClif_98 (K6),

Start 33:
• Found in 7 of 45 (15.6%) of genes in pham
• Manual Annotations of this start: 5 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chavito_97 (K1), Efra2_102 (K1), Guanica15_101 (K1), LastHope_101 (K1), TingHuaYa_99 (K1), Validus_104 (K1), Yunkel11_99 (K1),

Start 34:
• Found in 6 of 45 (13.3%) of genes in pham
• Manual Annotations of this start: 6 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Amohnition_93 (K6), DarthP_93 (K6), Ekdilam_90 (K6), Hammy_93 (K6), Lavahound_94 (K6), November_92 (K6),

Start 35:
• Found in 1 of 45 (2.2%) of genes in pham
• Manual Annotations of this start: 1 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Nergal_3 (AG),

Start 36:
• Found in 2 of 45 (4.4%) of genes in pham
• Manual Annotations of this start: 2 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Pharb_95 (K3), TribleTrouble_95 (K3),

Start 37:
• Found in 4 of 45 (8.9%) of genes in pham
• Manual Annotations of this start: 4 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Krueger_99 (K6), PhelpsODU_90 (K6), Tigress9_98 (K6), Unicorn_100 (K6),

Start 38:
• Found in 9 of 45 (20.0%) of genes in pham
• Manual Annotations of this start: 9 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bryler_92 (K6), Cain_100 (K6), Marshawn_94 (K6), Phrank_101 (K6), Shadow1_98 (K6), Sunflower1121_98 (K6), Syra333_97 (K6), Tierra_100 (K6), Ximenita_101 (K6),

Start 39:
• Found in 7 of 45 (15.6%) of genes in pham
• Manual Annotations of this start: 7 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hurricane_96 (K3), Keshu_99 (K3), Lea83_96 (K3), MacnCheese_97 (K3), Pixie_98 (K3), ShedlockHolmes_98 (K3), TBond007_95 (K3),

Start 41:
• Found in 8 of 45 (17.8%) of genes in pham
• Manual Annotations of this start: 7 of 43
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Chris_99 (K1), KiSi_102 (K1), LeMond_101 (K1), MarkPhew_101 (K1), Nibb_101 (K1), Oscar_102 (K1), Scarlett_101 (K1),

Summary by clusters:

There are 4 clusters represented in this pham: K3, K1, K6, AG,

Info for manual annotations of cluster AG:
•Start number 35 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster K1:
•Start number 33 was manually annotated 5 times for cluster K1.
•Start number 41 was manually annotated 7 times for cluster K1.

Info for manual annotations of cluster K3:
•Start number 36 was manually annotated 2 times for cluster K3.
•Start number 39 was manually annotated 7 times for cluster K3.

Info for manual annotations of cluster K6:
•Start number 29 was manually annotated 1 time for cluster K6.
•Start number 32 was manually annotated 1 time for cluster K6.
•Start number 34 was manually annotated 6 times for cluster K6.
•Start number 37 was manually annotated 4 times for cluster K6.
•Start number 38 was manually annotated 9 times for cluster K6.

Gene Information:

Gene: Amohnition_93 Start: 60821, Stop: 61135, Start Num: 34
Candidate Starts for Amohnition_93:
(1, 60410), (5, 60494), (18, 60692), (Start: 34 @60821 has 6 MA's), (44, 60878), (55, 61025), (63, 61088), (65, 61100), (66, 61112),

Gene: Bryler_92 Start: 56696, Stop: 57031, Start Num: 38
Candidate Starts for Bryler_92:
(Start: 38 @56696 has 9 MA's), (44, 56747), (49, 56816), (55, 56879), (60, 56921), (67, 56972),

Gene: Cain_100 Start: 59843, Stop: 60178, Start Num: 38
Candidate Starts for Cain_100:
(Start: 38 @59843 has 9 MA's), (44, 59894), (49, 59963), (55, 60026), (60, 60068), (67, 60119),

Gene: Chavito_97 Start: 61188, Stop: 61508, Start Num: 33
Candidate Starts for Chavito_97:
(6, 60867), (9, 60948), (12, 60987), (Start: 33 @61188 has 5 MA's), (40, 61218), (44, 61263), (48, 61320), (49, 61332), (51, 61356), (53, 61398), (54, 61401),

Gene: Chris_99 Start: 61172, Stop: 61450, Start Num: 41
Candidate Starts for Chris_99:
(21, 61040), (Start: 41 @61172 has 7 MA's), (42, 61175), (47, 61244),

Gene: DarthP_93 Start: 60654, Stop: 60968, Start Num: 34
Candidate Starts for DarthP_93:
(1, 60243), (5, 60327), (18, 60525), (Start: 34 @60654 has 6 MA's), (44, 60711), (55, 60858), (63, 60921), (65, 60933), (66, 60945),

Gene: Efra2_102 Start: 60360, Stop: 60668, Start Num: 33
Candidate Starts for Efra2_102:
(24, 60264), (27, 60306), (Start: 33 @60360 has 5 MA's), (44, 60435), (47, 60471), (53, 60558), (56, 60582),

Gene: Ekdilam_90 Start: 60833, Stop: 61147, Start Num: 34
Candidate Starts for Ekdilam_90:
(Start: 34 @60833 has 6 MA's), (44, 60890), (63, 61100), (65, 61112), (66, 61124),

Gene: Guanica15_101 Start: 60049, Stop: 60357, Start Num: 33
Candidate Starts for Guanica15_101:
(24, 59953), (27, 59995), (Start: 33 @60049 has 5 MA's), (44, 60124), (47, 60160), (53, 60247), (56, 60271),

Gene: Hammy_93 Start: 60872, Stop: 61186, Start Num: 34

Candidate Starts for Hammy_93:
(18, 60743), (Start: 34 @60872 has 6 MA's), (44, 60929), (55, 61076), (63, 61139), (65, 61151), (66, 61163),

Gene: Hurricane_96 Start: 60266, Stop: 60493, Start Num: 39
Candidate Starts for Hurricane_96:
(Start: 39 @60266 has 7 MA's), (45, 60323), (49, 60383),

Gene: Keshu_99 Start: 60197, Stop: 60424, Start Num: 39
Candidate Starts for Keshu_99:
(Start: 39 @60197 has 7 MA's), (45, 60254),

Gene: KiSi_102 Start: 61643, Stop: 61921, Start Num: 41
Candidate Starts for KiSi_102:
(13, 61439), (20, 61517), (Start: 41 @61643 has 7 MA's), (47, 61715), (50, 61760), (65, 61877),

Gene: Krueger_99 Start: 59350, Stop: 59685, Start Num: 37
Candidate Starts for Krueger_99:
(Start: 37 @59350 has 4 MA's), (44, 59401), (47, 59437), (48, 59458), (49, 59470), (54, 59527), (60, 59575), (67, 59626),

Gene: LastHope_101 Start: 60006, Stop: 60314, Start Num: 33
Candidate Starts for LastHope_101:
(27, 59952), (Start: 33 @60006 has 5 MA's), (44, 60081), (47, 60117), (53, 60204), (61, 60258),

Gene: Lavahound_94 Start: 61437, Stop: 61751, Start Num: 34
Candidate Starts for Lavahound_94:
(3, 61098), (4, 61104), (6, 61116), (7, 61125), (Start: 34 @61437 has 6 MA's), (44, 61494), (47, 61530), (50, 61575), (51, 61587), (53, 61629), (63, 61704), (64, 61707), (65, 61716),

Gene: LeMond_101 Start: 61600, Stop: 61878, Start Num: 41
Candidate Starts for LeMond_101:
(13, 61396), (20, 61474), (Start: 41 @61600 has 7 MA's), (47, 61672), (50, 61717), (65, 61834),

Gene: Lea83_96 Start: 60025, Stop: 60252, Start Num: 39
Candidate Starts for Lea83_96:
(Start: 39 @60025 has 7 MA's), (45, 60082), (49, 60142),

Gene: MacnCheese_97 Start: 60456, Stop: 60683, Start Num: 39
Candidate Starts for MacnCheese_97:
(24, 60351), (30, 60423), (Start: 39 @60456 has 7 MA's), (45, 60513),

Gene: MarkPhew_101 Start: 61243, Stop: 61521, Start Num: 41
Candidate Starts for MarkPhew_101:
(8, 60964), (11, 60991), (16, 61078), (22, 61114), (28, 61171), (31, 61204), (Start: 41 @61243 has 7 MA's), (42, 61246), (47, 61315), (58, 61441), (65, 61477),

Gene: Marshawn_94 Start: 60534, Stop: 60815, Start Num: 38
Candidate Starts for Marshawn_94:
(22, 60429), (Start: 38 @60534 has 9 MA's), (60, 60759), (62, 60765),

Gene: Nergal_3 Start: 1079, Stop: 1348, Start Num: 35
Candidate Starts for Nergal_3:

(26, 1004), (Start: 35 @1079 has 1 MA's), (44, 1133), (46, 1157), (50, 1214), (55, 1277), (57, 1298),

Gene: Nibb_101 Start: 61386, Stop: 61664, Start Num: 41
Candidate Starts for Nibb_101:
(19, 61233), (Start: 41 @61386 has 7 MA's), (47, 61458), (59, 61587),

Gene: November_92 Start: 60578, Stop: 60892, Start Num: 34
Candidate Starts for November_92:
(2, 60224), (3, 60236), (4, 60242), (18, 60449), (Start: 34 @60578 has 6 MA's), (44, 60635), (55, 60782), (63, 60845), (65, 60857), (66, 60869),

Gene: Oscar_102 Start: 61522, Stop: 61800, Start Num: 41
Candidate Starts for Oscar_102:
(13, 61318), (20, 61396), (Start: 41 @61522 has 7 MA's), (47, 61594), (50, 61639), (65, 61756),

Gene: Pharb_95 Start: 59832, Stop: 60062, Start Num: 36
Candidate Starts for Pharb_95:
(Start: 36 @59832 has 2 MA's), (43, 59871), (49, 59952),

Gene: PhelpsODU_90 Start: 55597, Stop: 55932, Start Num: 37
Candidate Starts for PhelpsODU_90:
(24, 55504), (Start: 37 @55597 has 4 MA's), (44, 55648), (49, 55717), (54, 55774), (60, 55822), (67, 55873),

Gene: Phrank_101 Start: 60141, Stop: 60476, Start Num: 38
Candidate Starts for Phrank_101:
(Start: 38 @60141 has 9 MA's), (44, 60192), (48, 60249), (49, 60261), (52, 60285), (55, 60324), (60, 60366), (67, 60417),

Gene: Pixie_98 Start: 60107, Stop: 60334, Start Num: 39
Candidate Starts for Pixie_98:
(Start: 39 @60107 has 7 MA's), (45, 60164), (49, 60224),

Gene: Scarlett_101 Start: 61391, Stop: 61669, Start Num: 41
Candidate Starts for Scarlett_101:
(13, 61187), (20, 61265), (Start: 41 @61391 has 7 MA's), (47, 61463), (50, 61508), (65, 61625),

Gene: Shadow1_98 Start: 59487, Stop: 59822, Start Num: 38
Candidate Starts for Shadow1_98:
(Start: 38 @59487 has 9 MA's), (44, 59538), (48, 59595), (49, 59607), (55, 59670), (60, 59712), (67, 59763),

Gene: ShedlockHolmes_98 Start: 60030, Stop: 60257, Start Num: 39
Candidate Starts for ShedlockHolmes_98:
(Start: 39 @60030 has 7 MA's), (45, 60087), (49, 60147),

Gene: Sunflower1121_98 Start: 59245, Stop: 59580, Start Num: 38
Candidate Starts for Sunflower1121_98:
(Start: 38 @59245 has 9 MA's), (44, 59296), (48, 59353), (49, 59365), (55, 59428), (60, 59470), (67, 59521),

Gene: Syra333_97 Start: 59326, Stop: 59661, Start Num: 38
Candidate Starts for Syra333_97:

(24, 59233), (Start: 38 @59326 has 9 MA's), (44, 59377), (48, 59434), (49, 59446), (55, 59509), (60, 59551), (67, 59602),

Gene: TBond007_95 Start: 60105, Stop: 60332, Start Num: 39
Candidate Starts for TBond007_95:
(Start: 39 @60105 has 7 MA's), (45, 60162), (49, 60222),

Gene: TClif_98 Start: 60473, Stop: 60799, Start Num: 32
Candidate Starts for TClif_98:
(7, 60170), (10, 60257), (Start: 32 @60473 has 1 MA's), (44, 60557), (50, 60638),

Gene: Tierra_100 Start: 60448, Stop: 60783, Start Num: 38
Candidate Starts for Tierra_100:
(Start: 38 @60448 has 9 MA's), (44, 60499), (49, 60568), (54, 60625), (60, 60673), (67, 60724),

Gene: Tigress9_98 Start: 59678, Stop: 60013, Start Num: 37
Candidate Starts for Tigress9_98:
(Start: 37 @59678 has 4 MA's), (44, 59729), (47, 59765), (48, 59786), (49, 59798), (54, 59855), (60, 59903), (67, 59954),

Gene: TingHuaYa_99 Start: 60335, Stop: 60643, Start Num: 33
Candidate Starts for TingHuaYa_99:
(27, 60281), (Start: 33 @60335 has 5 MA's), (44, 60410), (47, 60446), (53, 60533), (61, 60587),

Gene: TribleTrouble_95 Start: 60595, Stop: 60825, Start Num: 36
Candidate Starts for TribleTrouble_95:
(Start: 36 @60595 has 2 MA's), (49, 60715),

Gene: Unicorn_100 Start: 60225, Stop: 60560, Start Num: 37
Candidate Starts for Unicorn_100:
(24, 60132), (Start: 37 @60225 has 4 MA's), (44, 60276), (49, 60345), (54, 60402), (60, 60450), (67, 60501),

Gene: Validus_104 Start: 61559, Stop: 61879, Start Num: 33
Candidate Starts for Validus_104:
(25, 61484), (Start: 33 @61559 has 5 MA's), (40, 61589), (44, 61634), (48, 61691), (49, 61703), (51, 61727), (53, 61769), (54, 61772),

Gene: Ximenita_101 Start: 60060, Stop: 60395, Start Num: 38
Candidate Starts for Ximenita_101:
(18, 59928), (23, 59958), (Start: 38 @60060 has 9 MA's), (44, 60111), (47, 60147), (48, 60168), (49, 60180), (54, 60237), (55, 60243), (60, 60285), (67, 60336),

Gene: Yuna_98 Start: 61226, Stop: 61582, Start Num: 29
Candidate Starts for Yuna_98:
(Start: 29 @61226 has 1 MA's), (Start: 41 @61286 has 7 MA's), (44, 61322),

Gene: Yunkel11_99 Start: 59832, Stop: 60140, Start Num: 33
Candidate Starts for Yunkel11_99:
(7, 59514), (14, 59676), (15, 59688), (17, 59697), (Start: 33 @59832 has 5 MA's), (44, 59907), (47, 59943), (53, 60030), (56, 60054),