Pham 347746


1: Xenomorph_45
2: Elsa_49 + 2
3: KeaneyLin_48 + 5
4: NapoleonB_49 + 2
5: Tribby_49
6: YoshiYama_49
7: Circum_51
8: Cheesy_49 + 1
9: Correa_47
10: Benllo_48
11: Mooshroom_51
12: JEGGS_48
13: Kardesai_50
14: Egad_45 + 1
15: ProfFrink_45 + 2
16: Salk_45 + 5
17: Sporto_46
18: Sprinkle_43
19: Raunak_45 + 5
20: HerbBucket_45
21: Onestar_45
22: Natasha_46 + 1
23: Powelldog_49

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 347746 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347746 has 47 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Xenomorph_45
• Track 2 : Elsa_49, Arcadia_49, Nason_49
• Track 3 : KeaneyLin_48, GoCrazy_48, Stardom_46, Mudcat_46, Hankly_48, Heisenberger_48
• Track 4 : NapoleonB_49, Dynamite_49, BenitoAntonio_49
• Track 5 : Tribby_49
• Track 6 : YoshiYama_49
• Track 7 : Circum_51
• Track 8 : Cheesy_49, Bowling_49
• Track 9 : Correa_47
• Track 10 : Benllo_48
• Track 11 : Mooshroom_51
• Track 12 : JEGGS_48
• Track 13 : Kardesai_50
• Track 14 : Egad_45, DoctorPepper_44
• Track 15 : ProfFrink_45, Boog_44, Jeremy4pt0_44
• Track 16 : Salk_45, Sloopyjoe_45, Michelle_45, Stayer_45, StarLord_45, Shiba_44
• Track 17 : Sporto_46
• Track 18 : Sprinkle_43
• Track 19 : Raunak_45, BronxBay_45, MrAaronian_45, Linda_45, Djungelskog_45, Spain_48
• Track 20 : HerbBucket_45
• Track 21 : Onestar_45
• Track 22 : Natasha_46, RustyBoy_46
• Track 23 : Powelldog_49

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

The start number called the most often in the published annotations is 10, it was called in 18 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arcadia_49, BenitoAntonio_49, Benllo_48, Bowling_49, Cheesy_49, Dynamite_49, Elsa_49, GoCrazy_48, Hankly_48, Heisenberger_48, JEGGS_48, Kardesai_50,

KeaneyLin_48, Mooshroom_51, Mudcat_46, NapoleonB_49, Nason_49, Stardom_46, Xenomorph_45, YoshiYama_49,

Genes that have the "Most Annotated" start but do not call it:
• Circum_51, Correa_47, Tribby_49,

Genes that do not have the "Most Annotated" start:
• Boog_44, BronxBay_45, Djungelskog_45, DoctorPepper_44, Egad_45, HerbBucket_45, Jeremy4pt0_44, Linda_45, Michelle_45, MrAaronian_45, Natasha_46, Onestar_45, Powelldog_49, ProfFrink_45, Raunak_45, RustyBoy_46, Salk_45, Shiba_44, Sloopyjoe_45, Spain_48, Sporto_46, Sprinkle_43, StarLord_45, Stayer_45,

Summary by start number:

Start 3:
• Found in 12 of 47 (25.5%) of genes in pham
• Manual Annotations of this start: 6 of 41
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Michelle_45 (AW), Salk_45 (AW), Shiba_44 (AW), Sloopyjoe_45 (AW), StarLord_45 (AW), Stayer_45 (AW),

Start 4:
• Found in 18 of 47 (38.3%) of genes in pham
• Manual Annotations of this start: 2 of 41
• Called 11.1% of time when present
• Phage (with cluster) where this start called: DoctorPepper_44 (AW), Egad_45 (AW),

Start 7:
• Found in 1 of 47 (2.1%) of genes in pham
• Manual Annotations of this start: 1 of 41
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sporto_46 (AW),

Start 8:
• Found in 41 of 47 (87.2%) of genes in pham
• Manual Annotations of this start: 11 of 41
• Called 31.7% of time when present
• Phage (with cluster) where this start called: Boog_44 (AW), BronxBay_45 (AW), Circum_51 (AM), Correa_47 (AM), Djungelskog_45 (AW), HerbBucket_45 (AW), Jeremy4pt0_44 (AW), Linda_45 (AW), MrAaronian_45 (AW), ProfFrink_45 (AW), Raunak_45 (AW), Spain_48 (AW), Tribby_49 (AM),

Start 9:
• Found in 5 of 47 (10.6%) of genes in pham
• Manual Annotations of this start: 3 of 41
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Natasha_46 (AW), Onestar_45 (AW), Powelldog_49 (AW), RustyBoy_46 (AW), Sprinkle_43 (AW),

Start 10:
• Found in 23 of 47 (48.9%) of genes in pham
• Manual Annotations of this start: 18 of 41

• Called 87.0% of time when present
• Phage (with cluster) where this start called: Arcadia_49 (AM), BenitoAntonio_49 (AM), Benllo_48 (AM), Bowling_49 (AM), Cheesy_49 (AM), Dynamite_49 (AM), Elsa_49 (AM), GoCrazy_48 (AM), Hankly_48 (AM), Heisenberger_48 (AM), JEGGS_48 (AM), Kardesai_50 (AM), KeaneyLin_48 (AM), Mooshroom_51 (AM), Mudcat_46 (AM), NapoleonB_49 (AM), Nason_49 (AM), Stardom_46 (AM), Xenomorph_45 (AM), YoshiYama_49 (AM),

Summary by clusters:

There are 2 clusters represented in this pham: AM, AW,

Info for manual annotations of cluster AM:
•Start number 8 was manually annotated 3 times for cluster AM.
•Start number 10 was manually annotated 18 times for cluster AM.

Info for manual annotations of cluster AW:
•Start number 3 was manually annotated 6 times for cluster AW.
•Start number 4 was manually annotated 2 times for cluster AW.
•Start number 7 was manually annotated 1 time for cluster AW.
•Start number 8 was manually annotated 8 times for cluster AW.
•Start number 9 was manually annotated 3 times for cluster AW.

Gene Information:

Gene: Arcadia_49 Start: 32580, Stop: 32888, Start Num: 10
Candidate Starts for Arcadia_49:
(Start: 8 @32565 has 11 MA's), (Start: 10 @32580 has 18 MA's), (14, 32637), (17, 32685), (19, 32718), (20, 32733), (24, 32793), (25, 32799), (31, 32844),

Gene: BenitoAntonio_49 Start: 32116, Stop: 32424, Start Num: 10
Candidate Starts for BenitoAntonio_49:
(Start: 8 @32101 has 11 MA's), (Start: 10 @32116 has 18 MA's), (14, 32173), (17, 32221), (19, 32254), (20, 32269), (24, 32329), (25, 32335), (31, 32380),

Gene: Benllo_48 Start: 32800, Stop: 33102, Start Num: 10
Candidate Starts for Benllo_48:
(Start: 8 @32785 has 11 MA's), (Start: 10 @32800 has 18 MA's), (11, 32821), (14, 32857), (15, 32860), (20, 32953), (21, 32992), (26, 33022),

Gene: Boog_44 Start: 31539, Stop: 31829, Start Num: 8
Candidate Starts for Boog_44:
(Start: 4 @31455 has 2 MA's), (6, 31512), (Start: 8 @31539 has 11 MA's), (13, 31593), (18, 31665), (22, 31758), (28, 31791),

Gene: Bowling_49 Start: 32325, Stop: 32633, Start Num: 10
Candidate Starts for Bowling_49:
(Start: 8 @32310 has 11 MA's), (Start: 10 @32325 has 18 MA's), (11, 32346), (12, 32352), (14, 32382), (20, 32478), (21, 32517), (26, 32547), (27, 32556), (29, 32568), (30, 32580),

Gene: BronxBay_45 Start: 31837, Stop: 32127, Start Num: 8

Candidate Starts for BronxBay_45:
(Start: 3 @31747 has 6 MA's), (Start: 4 @31753 has 2 MA's), (6, 31810), (Start: 8 @31837 has 11 MA's), (13, 31891), (18, 31963), (22, 32056), (28, 32089),

Gene: Cheesy_49 Start: 32301, Stop: 32609, Start Num: 10
Candidate Starts for Cheesy_49:
(Start: 8 @32286 has 11 MA's), (Start: 10 @32301 has 18 MA's), (11, 32322), (12, 32328), (14, 32358), (20, 32454), (21, 32493), (26, 32523), (27, 32532), (29, 32544), (30, 32556),

Gene: Circum_51 Start: 32976, Stop: 33293, Start Num: 8
Candidate Starts for Circum_51:
(Start: 8 @32976 has 11 MA's), (Start: 10 @32991 has 18 MA's), (11, 33012), (14, 33048), (15, 33051), (20, 33144), (21, 33183), (26, 33213),

Gene: Correa_47 Start: 31432, Stop: 31755, Start Num: 8
Candidate Starts for Correa_47:
(Start: 8 @31432 has 11 MA's), (Start: 10 @31447 has 18 MA's), (11, 31468), (12, 31474), (14, 31504), (20, 31600), (21, 31639), (26, 31669), (27, 31678), (29, 31690), (30, 31702),

Gene: Djungelskog_45 Start: 31836, Stop: 32126, Start Num: 8
Candidate Starts for Djungelskog_45:
(Start: 3 @31746 has 6 MA's), (Start: 4 @31752 has 2 MA's), (6, 31809), (Start: 8 @31836 has 11 MA's), (13, 31890), (18, 31962), (22, 32055), (28, 32088),

Gene: DoctorPepper_44 Start: 31457, Stop: 31831, Start Num: 4
Candidate Starts for DoctorPepper_44:
(Start: 4 @31457 has 2 MA's), (6, 31514), (Start: 8 @31541 has 11 MA's), (13, 31595), (18, 31667), (22, 31760), (28, 31793),

Gene: Dynamite_49 Start: 32516, Stop: 32824, Start Num: 10
Candidate Starts for Dynamite_49:
(Start: 8 @32501 has 11 MA's), (Start: 10 @32516 has 18 MA's), (14, 32573), (17, 32621), (19, 32654), (20, 32669), (24, 32729), (25, 32735), (31, 32780),

Gene: Egad_45 Start: 31754, Stop: 32128, Start Num: 4
Candidate Starts for Egad_45:
(Start: 4 @31754 has 2 MA's), (6, 31811), (Start: 8 @31838 has 11 MA's), (13, 31892), (18, 31964), (22, 32057), (28, 32090),

Gene: Elsa_49 Start: 32580, Stop: 32888, Start Num: 10
Candidate Starts for Elsa_49:
(Start: 8 @32565 has 11 MA's), (Start: 10 @32580 has 18 MA's), (14, 32637), (17, 32685), (19, 32718), (20, 32733), (24, 32793), (25, 32799), (31, 32844),

Gene: GoCrazy_48 Start: 32456, Stop: 32758, Start Num: 10
Candidate Starts for GoCrazy_48:
(Start: 8 @32441 has 11 MA's), (Start: 10 @32456 has 18 MA's), (11, 32477), (14, 32513), (15, 32516), (20, 32609), (21, 32648), (26, 32678),

Gene: Hankly_48 Start: 31730, Stop: 32032, Start Num: 10
Candidate Starts for Hankly_48:
(Start: 8 @31715 has 11 MA's), (Start: 10 @31730 has 18 MA's), (11, 31751), (14, 31787), (15, 31790), (20, 31883), (21, 31922), (26, 31952),

Gene: Heisenberger_48 Start: 32020, Stop: 32313, Start Num: 10
Candidate Starts for Heisenberger_48:
(Start: 8 @32005 has 11 MA's), (Start: 10 @32020 has 18 MA's), (11, 32041), (14, 32077), (15, 32080), (20, 32173), (21, 32212), (26, 32242),

Gene: HerbBucket_45 Start: 31539, Stop: 31826, Start Num: 8
Candidate Starts for HerbBucket_45:
(2, 31449), (Start: 4 @31455 has 2 MA's), (6, 31512), (Start: 8 @31539 has 11 MA's), (13, 31590), (18, 31662), (22, 31755), (28, 31788),

Gene: JEGGS_48 Start: 32075, Stop: 32368, Start Num: 10
Candidate Starts for JEGGS_48:
(Start: 8 @32060 has 11 MA's), (Start: 10 @32075 has 18 MA's), (11, 32096), (14, 32132), (15, 32135), (20, 32228), (21, 32267), (26, 32297),

Gene: Jeremy4pt0_44 Start: 31536, Stop: 31826, Start Num: 8
Candidate Starts for Jeremy4pt0_44:
(Start: 4 @31452 has 2 MA's), (6, 31509), (Start: 8 @31536 has 11 MA's), (13, 31590), (18, 31662), (22, 31755), (28, 31788),

Gene: Kardesai_50 Start: 32700, Stop: 33002, Start Num: 10
Candidate Starts for Kardesai_50:
(Start: 8 @32685 has 11 MA's), (Start: 10 @32700 has 18 MA's), (14, 32757), (17, 32805), (19, 32838), (20, 32853), (21, 32892), (26, 32922),

Gene: KeaneyLin_48 Start: 32456, Stop: 32758, Start Num: 10
Candidate Starts for KeaneyLin_48:
(Start: 8 @32441 has 11 MA's), (Start: 10 @32456 has 18 MA's), (11, 32477), (14, 32513), (15, 32516), (20, 32609), (21, 32648), (26, 32678),

Gene: Linda_45 Start: 31834, Stop: 32124, Start Num: 8
Candidate Starts for Linda_45:
(Start: 3 @31744 has 6 MA's), (Start: 4 @31750 has 2 MA's), (6, 31807), (Start: 8 @31834 has 11 MA's), (13, 31888), (18, 31960), (22, 32053), (28, 32086),

Gene: Michelle_45 Start: 31746, Stop: 32126, Start Num: 3
Candidate Starts for Michelle_45:
(Start: 3 @31746 has 6 MA's), (Start: 4 @31752 has 2 MA's), (6, 31809), (Start: 8 @31836 has 11 MA's), (13, 31890), (18, 31962), (22, 32055), (28, 32088),

Gene: Mooshroom_51 Start: 32700, Stop: 33002, Start Num: 10
Candidate Starts for Mooshroom_51:
(Start: 8 @32685 has 11 MA's), (Start: 10 @32700 has 18 MA's), (14, 32757), (17, 32805), (20, 32853), (21, 32892), (26, 32922),

Gene: MrAaronian_45 Start: 31836, Stop: 32126, Start Num: 8
Candidate Starts for MrAaronian_45:
(Start: 3 @31746 has 6 MA's), (Start: 4 @31752 has 2 MA's), (6, 31809), (Start: 8 @31836 has 11 MA's), (13, 31890), (18, 31962), (22, 32055), (28, 32088),

Gene: Mudcat_46 Start: 33433, Stop: 33726, Start Num: 10
Candidate Starts for Mudcat_46:

(Start: 8 @33418 has 11 MA's), (Start: 10 @33433 has 18 MA's), (11, 33454), (14, 33490), (15, 33493), (20, 33586), (21, 33625), (26, 33655),

Gene: NapoleonB_49 Start: 32516, Stop: 32824, Start Num: 10
Candidate Starts for NapoleonB_49:
(Start: 8 @32501 has 11 MA's), (Start: 10 @32516 has 18 MA's), (14, 32573), (17, 32621), (19, 32654), (20, 32669), (24, 32729), (25, 32735), (31, 32780),

Gene: Nason_49 Start: 32580, Stop: 32888, Start Num: 10
Candidate Starts for Nason_49:
(Start: 8 @32565 has 11 MA's), (Start: 10 @32580 has 18 MA's), (14, 32637), (17, 32685), (19, 32718), (20, 32733), (24, 32793), (25, 32799), (31, 32844),

Gene: Natasha_46 Start: 31568, Stop: 31843, Start Num: 9
Candidate Starts for Natasha_46:
(Start: 9 @31568 has 3 MA's), (13, 31613),

Gene: Onestar_45 Start: 31560, Stop: 31850, Start Num: 9
Candidate Starts for Onestar_45:
(Start: 9 @31560 has 3 MA's), (13, 31611), (18, 31683),

Gene: Powelldog_49 Start: 32567, Stop: 32842, Start Num: 9
Candidate Starts for Powelldog_49:
(Start: 9 @32567 has 3 MA's), (16, 32657),

Gene: ProfFrink_45 Start: 31837, Stop: 32127, Start Num: 8
Candidate Starts for ProfFrink_45:
(Start: 4 @31753 has 2 MA's), (6, 31810), (Start: 8 @31837 has 11 MA's), (13, 31891), (18, 31963), (22, 32056), (28, 32089),

Gene: Raunak_45 Start: 31534, Stop: 31824, Start Num: 8
Candidate Starts for Raunak_45:
(Start: 3 @31444 has 6 MA's), (Start: 4 @31450 has 2 MA's), (6, 31507), (Start: 8 @31534 has 11 MA's), (13, 31588), (18, 31660), (22, 31753), (28, 31786),

Gene: RustyBoy_46 Start: 31549, Stop: 31824, Start Num: 9
Candidate Starts for RustyBoy_46:
(Start: 9 @31549 has 3 MA's), (13, 31594),

Gene: Salk_45 Start: 31744, Stop: 32124, Start Num: 3
Candidate Starts for Salk_45:
(Start: 3 @31744 has 6 MA's), (Start: 4 @31750 has 2 MA's), (6, 31807), (Start: 8 @31834 has 11 MA's), (13, 31888), (18, 31960), (22, 32053), (28, 32086),

Gene: Shiba_44 Start: 31444, Stop: 31824, Start Num: 3
Candidate Starts for Shiba_44:
(Start: 3 @31444 has 6 MA's), (Start: 4 @31450 has 2 MA's), (6, 31507), (Start: 8 @31534 has 11 MA's), (13, 31588), (18, 31660), (22, 31753), (28, 31786),

Gene: Sloopyjoe_45 Start: 31748, Stop: 32128, Start Num: 3
Candidate Starts for Sloopyjoe_45:
(Start: 3 @31748 has 6 MA's), (Start: 4 @31754 has 2 MA's), (6, 31811), (Start: 8 @31838 has 11 MA's), (13, 31892), (18, 31964), (22, 32057), (28, 32090),

Gene: Spain_48 Start: 31836, Stop: 32126, Start Num: 8
Candidate Starts for Spain_48:
(Start: 3 @31746 has 6 MA's), (Start: 4 @31752 has 2 MA's), (6, 31809), (Start: 8 @31836 has 11 MA's), (13, 31890), (18, 31962), (22, 32055), (28, 32088),

Gene: Sporto_46 Start: 33334, Stop: 33609, Start Num: 7
Candidate Starts for Sporto_46:
(Start: 7 @33334 has 1 MA's), (13, 33379), (23, 33547),

Gene: Sprinkle_43 Start: 31683, Stop: 31958, Start Num: 9
Candidate Starts for Sprinkle_43:
(5, 31653), (Start: 9 @31683 has 3 MA's), (31, 31950),

Gene: StarLord_45 Start: 31747, Stop: 32127, Start Num: 3
Candidate Starts for StarLord_45:
(Start: 3 @31747 has 6 MA's), (Start: 4 @31753 has 2 MA's), (6, 31810), (Start: 8 @31837 has 11 MA's), (13, 31891), (18, 31963), (22, 32056), (28, 32089),

Gene: Stardom_46 Start: 31192, Stop: 31494, Start Num: 10
Candidate Starts for Stardom_46:
(Start: 8 @31177 has 11 MA's), (Start: 10 @31192 has 18 MA's), (11, 31213), (14, 31249), (15, 31252), (20, 31345), (21, 31384), (26, 31414),

Gene: Stayer_45 Start: 31744, Stop: 32124, Start Num: 3
Candidate Starts for Stayer_45:
(Start: 3 @31744 has 6 MA's), (Start: 4 @31750 has 2 MA's), (6, 31807), (Start: 8 @31834 has 11 MA's), (13, 31888), (18, 31960), (22, 32053), (28, 32086),

Gene: Tribby_49 Start: 32243, Stop: 32566, Start Num: 8
Candidate Starts for Tribby_49:
(Start: 8 @32243 has 11 MA's), (Start: 10 @32258 has 18 MA's), (11, 32279), (14, 32315), (20, 32411), (21, 32450), (26, 32480), (27, 32489), (29, 32501), (30, 32513),

Gene: Xenomorph_45 Start: 31991, Stop: 32299, Start Num: 10
Candidate Starts for Xenomorph_45:
(1, 31826), (Start: 8 @31976 has 11 MA's), (Start: 10 @31991 has 18 MA's), (11, 32012), (14, 32048), (20, 32144), (21, 32183), (26, 32213), (27, 32222), (29, 32234), (30, 32246),

Gene: YoshiYama_49 Start: 32575, Stop: 32883, Start Num: 10
Candidate Starts for YoshiYama_49:
(Start: 8 @32560 has 11 MA's), (Start: 10 @32575 has 18 MA's), (11, 32596), (14, 32632), (20, 32728), (21, 32767), (26, 32797), (27, 32806), (29, 32818), (30, 32830),