# Pham 284072

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 284072 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284072 has 29 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Mask_52
• Track 2 : CheeseSpider_50
• Track 3 : JuJu_50
• Track 4 : Frokostdame_47
• Track 5 : Lysidious_44
• Track 6 : Angelique_48
• Track 7 : ThankyouJordi_47, WelcomeAyanna_47
• Track 8 : Maridalia_49, Bunnybear_41
• Track 9 : FroggyToad_47
• Track 10 : Sidious_48
• Track 11 : MakCheese_59
• Track 12 : Sprinklemunch_54
• Track 13 : Sabbb_52
• Track 14 : Alexphander_52
• Track 15 : Byougenkin_44
• Track 16 : Avani_55, Tchotchke_49
• Track 17 : Rose5_60, JoeDirt_59, Silverleaf_60, CicholasNage_59, Wyatt2_61, AvadaKedavra_60, Acquire49_60, Tyson_60, Poochiewood_60
• Track 18 : Enceladus_58


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

The start number called the most often in the published annotations is 17, it was called in 9 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Acquire49_60, AvadaKedavra_60, CicholasNage_59, Enceladus_58, JoeDirt_59, Poochiewood_60, Rose5_60, Silverleaf_60, Tyson_60, Wyatt2_61,

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

Genes that do not have the "Most Annotated" start:

• Alexphander_52, Angelique_48, Avani_55, Bunnybear_41, Byougenkin_44, CheeseSpider_50, FroggyToad_47, Frokostdame_47, JuJu_50, Lysidious_44, MakCheese_59, Maridalia_49, Mask_52, Sabbb_52, Sidious_48, Sprinklemunch_54, Tchotchke_49, ThankyouJordi_47, WelcomeAyanna_47,

**Summary by start number:**

Start 15:
• Found in 3 of 29 ( 10.3% ) of genes in pham
• Manual Annotations of this start: 3 of 23
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Angelique_48 (CY1), ThankyouJordi_47 (CZ1), WelcomeAyanna_47 (CZ1),

Start 17:
• Found in 10 of 29 ( 34.5% ) of genes in pham
• Manual Annotations of this start: 9 of 23
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Acquire49_60 (L1), AvadaKedavra_60 (L1), CicholasNage_59 (L1), Enceladus_58 (L1), JoeDirt_59 (L1), Poochiewood_60 (L1), Rose5_60 (L1), Silverleaf_60 (L1), Tyson_60 (L1), Wyatt2_61 (L1),

Start 20:
• Found in 6 of 29 ( 20.7% ) of genes in pham
• No Manual Annotations of this start.
• Called 33.3% of time when present
• Phage (with cluster) where this start called: FroggyToad_47 (CZ2), Sprinklemunch_54 (DW),

Start 21:
• Found in 10 of 29 ( 34.5% ) of genes in pham
• Manual Annotations of this start: 4 of 23
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Bunnybear_41 (CZ), MakCheese_59 (DW), Maridalia_49 (CZ1), Mask_52 (AD), Sidious_48 (CZ7),

Start 22:
• Found in 4 of 29 ( 13.8% ) of genes in pham
• Manual Annotations of this start: 3 of 23
• Called 100.0% of time when present
• Phage (with cluster) where this start called: CheeseSpider_50 (CV), Frokostdame_47 (CV), JuJu_50 (CV), Lysidious_44 (CV),

Start 23:
• Found in 5 of 29 ( 17.2% ) of genes in pham
• Manual Annotations of this start: 4 of 23
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alexphander_52 (F1), Avani_55 (F2), Byougenkin_44 (F1), Sabbb_52 (F1), Tchotchke_49 (F1),

**Summary by clusters:**

There are 11 clusters represented in this pham: CY1, F1, F2, AD, CZ2, CZ1, CZ7, CZ, L1, DW, CV,

Info for manual annotations of cluster AD:
•Start number 21 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster CV:
•Start number 22 was manually annotated 3 times for cluster CV.

Info for manual annotations of cluster CY1:
•Start number 15 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster CZ:
•Start number 21 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:
•Start number 15 was manually annotated 2 times for cluster CZ1.
•Start number 21 was manually annotated 1 time for cluster CZ1.


Info for manual annotations of cluster CZ7:
•Start number 21 was manually annotated 1 time for cluster CZ7.


Info for manual annotations of cluster F1:
•Start number 23 was manually annotated 3 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 23 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster L1:
•Start number 17 was manually annotated 9 times for cluster L1.


*Gene Information:*

Gene: Acquire49_60 Start: 42360, Stop: 43178, Start Num: 17
Candidate Starts for Acquire49_60:
(Start: 17 @42360 has 9 MA's), (19, 42387), (24, 42414), (25, 42426), (27, 42486), (32, 42561), (34, 42573), (40, 42663), (41, 42669), (50, 42774), (55, 42804), (70, 42909), (86, 43032), (96, 43107), (98, 43122),

Gene: Alexphander_52 Start: 35997, Stop: 36857, Start Num: 23
Candidate Starts for Alexphander_52:
(Start: 23 @35997 has 4 MA's), (27, 36093), (33, 36177), (37, 36210), (38, 36243), (41, 36288), (43, 36315), (46, 36363), (57, 36435), (58, 36453), (59, 36456), (80, 36603), (81, 36606), (82, 36630), (89, 36693), (91, 36714), (101, 36822),

Gene: Angelique_48 Start: 37247, Stop: 38128, Start Num: 15
Candidate Starts for Angelique_48:
(7, 37127), (11, 37157), (Start: 15 @37247 has 3 MA's), (18, 37259), (20, 37292), (Start: 21 @37304 has 4 MA's), (27, 37406), (34, 37493), (39, 37580), (44, 37640), (62, 37769), (76, 37865), (79, 37892),

(100, 38054), (103, 38114),

Gene: AvadaKedavra_60 Start: 42433, Stop: 43251, Start Num: 17
Candidate Starts for AvadaKedavra_60:
(Start: 17 @42433 has 9 MA's), (19, 42460), (24, 42487), (25, 42499), (27, 42559), (32, 42634), (34, 42646), (40, 42736), (41, 42742), (50, 42847), (55, 42877), (70, 42982), (86, 43105), (96, 43180), (98, 43195),

Gene: Avani_55 Start: 35200, Stop: 36060, Start Num: 23
Candidate Starts for Avani_55:
(Start: 23 @35200 has 4 MA's), (27, 35296), (33, 35380), (37, 35413), (38, 35446), (41, 35491), (43, 35518), (46, 35566), (57, 35638), (58, 35656), (59, 35659), (80, 35806), (82, 35833), (89, 35896), (91, 35917),

Gene: Bunnybear_41 Start: 33762, Stop: 34586, Start Num: 21
Candidate Starts for Bunnybear_41:
(1, 33405), (2, 33438), (9, 33606), (Start: 21 @33762 has 4 MA's), (27, 33864), (34, 33951), (62, 34227), (76, 34323), (99, 34509), (100, 34512), (103, 34572),

Gene: Byougenkin_44 Start: 34980, Stop: 35858, Start Num: 23
Candidate Starts for Byougenkin_44:
(5, 34740), (Start: 23 @34980 has 4 MA's), (27, 35079), (29, 35088), (41, 35259), (43, 35286), (45, 35313), (47, 35346), (51, 35370), (53, 35394), (64, 35487), (80, 35604), (81, 35607), (82, 35631), (89, 35694), (91, 35715), (95, 35742), (101, 35823),

Gene: CheeseSpider_50 Start: 33609, Stop: 34427, Start Num: 22
Candidate Starts for CheeseSpider_50:
(Start: 22 @33609 has 3 MA's), (27, 33705), (29, 33714), (44, 33939), (54, 34014), (67, 34119), (77, 34185), (78, 34194), (99, 34356), (100, 34359), (103, 34419),

Gene: CicholasNage_59 Start: 42396, Stop: 43214, Start Num: 17
Candidate Starts for CicholasNage_59:
(Start: 17 @42396 has 9 MA's), (19, 42423), (24, 42450), (25, 42462), (27, 42522), (32, 42597), (34, 42609), (40, 42699), (41, 42705), (50, 42810), (55, 42840), (70, 42945), (86, 43068), (96, 43143), (98, 43158),

Gene: Enceladus_58 Start: 42233, Stop: 43060, Start Num: 17
Candidate Starts for Enceladus_58:
(Start: 17 @42233 has 9 MA's), (19, 42260), (24, 42287), (25, 42299), (26, 42326), (27, 42371), (30, 42413), (31, 42428), (34, 42458), (35, 42473), (41, 42551), (50, 42656), (55, 42686), (70, 42791), (86, 42914), (96, 42989), (98, 43004),

Gene: FroggyToad_47 Start: 33512, Stop: 34357, Start Num: 20
Candidate Starts for FroggyToad_47:
(20, 33512), (Start: 21 @33524 has 4 MA's), (27, 33623), (34, 33710), (37, 33740), (77, 34115), (99, 34286), (100, 34289),

Gene: Frokostdame_47 Start: 34936, Stop: 35751, Start Num: 22
Candidate Starts for Frokostdame_47:
(14, 34861), (Start: 22 @34936 has 3 MA's), (27, 35032), (31, 35089), (41, 35212), (52, 35323), (56, 35356), (67, 35443), (69, 35458), (100, 35683), (103, 35743),

Gene: JoeDirt_59 Start: 42675, Stop: 43493, Start Num: 17

Candidate Starts for JoeDirt_59:
(Start: 17 @42675 has 9 MA's), (19, 42702), (24, 42729), (25, 42741), (27, 42801), (32, 42876), (34, 42888), (40, 42978), (41, 42984), (50, 43089), (55, 43119), (70, 43224), (86, 43347), (96, 43422), (98, 43437),

Gene: JuJu_50 Start: 36277, Stop: 37092, Start Num: 22
Candidate Starts for JuJu_50:
(14, 36202), (Start: 22 @36277 has 3 MA's), (27, 36373), (41, 36553), (52, 36664), (56, 36697), (67, 36784), (100, 37024),

Gene: Lysidious_44 Start: 34244, Stop: 35065, Start Num: 22
Candidate Starts for Lysidious_44:
(Start: 22 @34244 has 3 MA's), (29, 34352), (35, 34442), (41, 34520), (42, 34538), (43, 34547), (54, 34646), (63, 34709), (66, 34730), (67, 34751), (77, 34817), (78, 34826), (99, 34988), (100, 34991),

Gene: MakCheese_59 Start: 40021, Stop: 40845, Start Num: 21
Candidate Starts for MakCheese_59:
(3, 39715), (4, 39724), (10, 39862), (Start: 21 @40021 has 4 MA's), (27, 40123), (28, 40129), (52, 40429), (60, 40504), (67, 40558), (73, 40600), (83, 40672), (86, 40699), (87, 40714), (96, 40774),

Gene: Maridalia_49 Start: 35508, Stop: 36332, Start Num: 21
Candidate Starts for Maridalia_49:
(1, 35151), (2, 35184), (9, 35352), (Start: 21 @35508 has 4 MA's), (27, 35610), (34, 35697), (62, 35973), (76, 36069), (99, 36255), (100, 36258), (103, 36318),

Gene: Mask_52 Start: 46012, Stop: 46845, Start Num: 21
Candidate Starts for Mask_52:
(6, 45796), (7, 45826), (12, 45862), (13, 45886), (16, 45952), (Start: 21 @46012 has 4 MA's), (27, 46111), (31, 46168), (36, 46222), (37, 46225), (41, 46291), (48, 46387), (52, 46414), (65, 46519), (67, 46543), (68, 46546), (71, 46564), (72, 46567), (79, 46618), (88, 46705), (93, 46741), (94, 46747), (97, 46762), (102, 46831),

Gene: Poochiewood_60 Start: 42683, Stop: 43501, Start Num: 17
Candidate Starts for Poochiewood_60:
(Start: 17 @42683 has 9 MA's), (19, 42710), (24, 42737), (25, 42749), (27, 42809), (32, 42884), (34, 42896), (40, 42986), (41, 42992), (50, 43097), (55, 43127), (70, 43232), (86, 43355), (96, 43430), (98, 43445),

Gene: Rose5_60 Start: 42695, Stop: 43513, Start Num: 17
Candidate Starts for Rose5_60:
(Start: 17 @42695 has 9 MA's), (19, 42722), (24, 42749), (25, 42761), (27, 42821), (32, 42896), (34, 42908), (40, 42998), (41, 43004), (50, 43109), (55, 43139), (70, 43244), (86, 43367), (96, 43442), (98, 43457),

Gene: Sabbb_52 Start: 36611, Stop: 37489, Start Num: 23
Candidate Starts for Sabbb_52:
(5, 36371), (Start: 23 @36611 has 4 MA's), (27, 36710), (29, 36719), (41, 36890), (43, 36917), (45, 36944), (47, 36977), (51, 37001), (53, 37025), (64, 37118), (80, 37235), (82, 37262), (89, 37325), (91, 37346),

Gene: Sidious_48 Start: 36674, Stop: 37510, Start Num: 21
Candidate Starts for Sidious_48:

(20, 36662), (Start: 21 @36674 has 4 MA's), (27, 36776), (34, 36863), (37, 36893), (77, 37268), (99, 37439), (100, 37442),

Gene: Silverleaf_60 Start: 42430, Stop: 43248, Start Num: 17
Candidate Starts for Silverleaf_60:
(Start: 17 @42430 has 9 MA's), (19, 42457), (24, 42484), (25, 42496), (27, 42556), (32, 42631), (34, 42643), (40, 42733), (41, 42739), (50, 42844), (55, 42874), (70, 42979), (86, 43102), (96, 43177), (98, 43192),

Gene: Sprinklemunch_54 Start: 39274, Stop: 40071, Start Num: 20
Candidate Starts for Sprinklemunch_54:
(20, 39274), (Start: 21 @39286 has 4 MA's), (27, 39388), (36, 39499), (41, 39568), (49, 39664), (58, 39736), (61, 39757), (65, 39778), (68, 39802), (71, 39820), (75, 39844), (76, 39847), (78, 39871), (84, 39922), (85, 39925), (86, 39940), (90, 39964),

Gene: Tchotchke_49 Start: 34846, Stop: 35706, Start Num: 23
Candidate Starts for Tchotchke_49:
(Start: 23 @34846 has 4 MA's), (27, 34942), (33, 35026), (37, 35059), (38, 35092), (41, 35137), (43, 35164), (46, 35212), (57, 35284), (58, 35302), (59, 35305), (80, 35452), (82, 35479), (89, 35542), (91, 35563),

Gene: ThankyouJordi_47 Start: 37192, Stop: 38031, Start Num: 15
Candidate Starts for ThankyouJordi_47:
(8, 37096), (Start: 15 @37192 has 3 MA's), (18, 37204), (20, 37237), (Start: 21 @37249 has 4 MA's), (27, 37351), (29, 37360), (36, 37462), (41, 37531), (49, 37624), (65, 37738), (68, 37762), (71, 37780), (74, 37801), (75, 37804), (76, 37807), (78, 37831), (84, 37882), (85, 37885), (92, 37945),

Gene: Tyson_60 Start: 42697, Stop: 43515, Start Num: 17
Candidate Starts for Tyson_60:
(Start: 17 @42697 has 9 MA's), (19, 42724), (24, 42751), (25, 42763), (27, 42823), (32, 42898), (34, 42910), (40, 43000), (41, 43006), (50, 43111), (55, 43141), (70, 43246), (86, 43369), (96, 43444), (98, 43459),

Gene: WelcomeAyanna_47 Start: 37339, Stop: 38178, Start Num: 15
Candidate Starts for WelcomeAyanna_47:
(8, 37243), (Start: 15 @37339 has 3 MA's), (18, 37351), (20, 37384), (Start: 21 @37396 has 4 MA's), (27, 37498), (29, 37507), (36, 37609), (41, 37678), (49, 37771), (65, 37885), (68, 37909), (71, 37927), (74, 37948), (75, 37951), (76, 37954), (78, 37978), (84, 38029), (85, 38032), (92, 38092),

Gene: Wyatt2_61 Start: 42695, Stop: 43513, Start Num: 17
Candidate Starts for Wyatt2_61:
(Start: 17 @42695 has 9 MA's), (19, 42722), (24, 42749), (25, 42761), (27, 42821), (32, 42896), (34, 42908), (40, 42998), (41, 43004), (50, 43109), (55, 43139), (70, 43244), (86, 43367), (96, 43442), (98, 43457),