

# Pham 296587



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 296587 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296587 has 61 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Nergal\_44
- Track 2 : MalagasyRose\_48
- Track 3 : Validus\_51, McMater\_49, Richo\_49, Chavito\_50, Dartin\_49, Shaobing\_49, Peanam\_49, Niklas\_49
- Track 4 : MarkPhew\_50
- Track 5 : LeMond\_51, Scarlett\_51, Oscar\_51
- Track 6 : Torres\_45, Nikao\_45, Teejan\_44, Binglebops\_42, LilPharaoh\_42, Nutello\_42, Trice\_42, Enkosi\_44, SgtBeansprout\_42, Mdavu\_43, Amelie\_42
- Track 7 : Nibb\_49
- Track 8 : KiSi\_51
- Track 9 : Chris\_49
- Track 10 : Pixie\_49, Lea83\_50, ShedlockHolmes\_50, Yuna\_53
- Track 11 : Hurricane\_50
- Track 12 : TribbleTrouble\_47
- Track 13 : MacnCheese\_51
- Track 14 : Keshu\_51
- Track 15 : Pharb\_47
- Track 16 : Hammy\_49, Amohnition\_49, DarthP\_49
- Track 17 : Unicorn\_49, Shadow1\_52, Sunflower1121\_53
- Track 18 : Ellie\_45, Applecrisp\_46
- Track 19 : Krueger\_53
- Track 20 : Tigress9\_53, Syra333\_52
- Track 21 : SirPhilip\_49
- Track 22 : PhelpsODU\_49
- Track 23 : Phrank\_50, Bryler\_50, Cain\_50, Tierra\_50
- Track 24 : TClif\_51
- Track 25 : Ximenita\_53
- Track 26 : Fefferhead\_47
- Track 27 : Amgine\_47, Lavahound\_48
- Track 28 : Ekdilam\_46
- Track 29 : November\_47

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

The start number called the most often in the published annotations is 3, it was called in 52 of the 53 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amelie\_42, Amgine\_47, Amohnition\_49, Applecrisp\_46, Binglebops\_42, Bryler\_50, Cain\_50, Chavito\_50, Chris\_49, DarthP\_49, Dartin\_49, Ekdilam\_46, Ellie\_45, Enkosi\_44, Fefferhead\_47, Hammy\_49, Hurricane\_50, Keshu\_51, KiSi\_51, Krueger\_53, Lavahound\_48, LeMond\_51, Lea83\_50, LilPharaoh\_42, MacnCheese\_51, MalagasyRose\_48, MarkPhew\_50, McMater\_49, Mdavu\_43, Nergal\_44, Nibb\_49, Nikao\_45, Niklas\_49, November\_47, Nutello\_42, Oscar\_51, Peanam\_49, Pharb\_47, Phrank\_50, Pixie\_49, Richo\_49, Scarlett\_51, SgtBeansprout\_42, Shadow1\_52, Shaobing\_49, ShedlockHolmes\_50, SirPhilip\_49, Sunflower1121\_53, Syra333\_52, TClif\_51, Teejan\_44, Tierra\_50, Tigress9\_53, Torres\_45, TripleTrouble\_47, Trice\_42, Unicorn\_49, Validus\_51, Ximenita\_53, Yuna\_53,

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

- PhelpsODU\_49,

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

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### Summary by start number:

Start 3:

- Found in 61 of 61 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 52 of 53
- Called 98.4% of time when present
- Phage (with cluster) where this start called: Amelie\_42 (K1), Amgine\_47 (K6), Amohnition\_49 (K6), Applecrisp\_46 (K6), Binglebops\_42 (K1), Bryler\_50 (K6), Cain\_50 (K6), Chavito\_50 (K1), Chris\_49 (K1), DarthP\_49 (K6), Dartin\_49 (K1), Ekdilam\_46 (K6), Ellie\_45 (K6), Enkosi\_44 (K1), Fefferhead\_47 (K6), Hammy\_49 (K6), Hurricane\_50 (K3), Keshu\_51 (K3), KiSi\_51 (K1), Krueger\_53 (K6), Lavahound\_48 (K6), LeMond\_51 (K1), Lea83\_50 (K3), LilPharaoh\_42 (K1), MacnCheese\_51 (K3), MalagasyRose\_48 (AG), MarkPhew\_50 (K1), McMater\_49 (K1), Mdavu\_43 (K1), Nergal\_44 (AG), Nibb\_49 (K1), Nikao\_45 (K1), Niklas\_49 (K1), November\_47 (K6), Nutello\_42 (K1), Oscar\_51 (K1), Peanam\_49 (K1), Pharb\_47 (K3), Phrank\_50 (K6), Pixie\_49 (K3), Richo\_49 (K1), Scarlett\_51 (K1), SgtBeansprout\_42 (K1), Shadow1\_52 (K6), Shaobing\_49 (K1), ShedlockHolmes\_50 (K3), SirPhilip\_49 (K6), Sunflower1121\_53 (K6), Syra333\_52 (K6), TClif\_51 (K6), Teejan\_44 (K1), Tierra\_50 (K6), Tigress9\_53 (K6), Torres\_45 (K1), TripleTrouble\_47 (K3), Trice\_42 (K1), Unicorn\_49 (K6), Validus\_51 (K1), Ximenita\_53 (K6), Yuna\_53 (K6),

Start 6:

- Found in 12 of 61 ( 19.7% ) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 8.3% of time when present
- Phage (with cluster) where this start called: PhelpsODU\_49 (K6),

### Summary by clusters:

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

Info for manual annotations of cluster AG:

- Start number 3 was manually annotated 2 times for cluster AG.

Info for manual annotations of cluster K1:

- Start number 3 was manually annotated 20 times for cluster K1.

Info for manual annotations of cluster K3:

- Start number 3 was manually annotated 8 times for cluster K3.

Info for manual annotations of cluster K6:

- Start number 3 was manually annotated 22 times for cluster K6.
- Start number 6 was manually annotated 1 time for cluster K6.

### ***Gene Information:***

Gene: Amelie\_42 Start: 35625, Stop: 35855, Start Num: 3

Candidate Starts for Amelie\_42:

(Start: 3 @35625 has 52 MA's), (13, 35748),

Gene: Amgine\_47 Start: 37114, Stop: 37353, Start Num: 3

Candidate Starts for Amgine\_47:

(Start: 3 @37114 has 52 MA's), (17, 37276), (19, 37300), (28, 37342),

Gene: Amohnition\_49 Start: 37124, Stop: 37360, Start Num: 3

Candidate Starts for Amohnition\_49:

(Start: 3 @37124 has 52 MA's), (7, 37169), (12, 37247), (19, 37310), (28, 37352),

Gene: Applecrisp\_46 Start: 36610, Stop: 36849, Start Num: 3

Candidate Starts for Applecrisp\_46:

(Start: 3 @36610 has 52 MA's), (19, 36796), (28, 36838),

Gene: Binglebops\_42 Start: 35625, Stop: 35855, Start Num: 3

Candidate Starts for Binglebops\_42:

(Start: 3 @35625 has 52 MA's), (13, 35748),

Gene: Bryler\_50 Start: 35931, Stop: 36173, Start Num: 3

Candidate Starts for Bryler\_50:

(Start: 3 @35931 has 52 MA's), (Start: 6 @35970 has 1 MA's), (16, 36081), (17, 36093), (18, 36108), (19, 36117), (28, 36159),

Gene: Cain\_50 Start: 35919, Stop: 36161, Start Num: 3

Candidate Starts for Cain\_50:

(Start: 3 @35919 has 52 MA's), (Start: 6 @35958 has 1 MA's), (16, 36069), (17, 36081), (18, 36096), (19, 36105), (28, 36147),

Gene: Chavito\_50 Start: 37532, Stop: 37762, Start Num: 3

Candidate Starts for Chavito\_50:

(Start: 3 @37532 has 52 MA's), (12, 37646), (28, 37751),

Gene: Chris\_49 Start: 36985, Stop: 37221, Start Num: 3

Candidate Starts for Chris\_49:

(Start: 3 @36985 has 52 MA's), (4, 36997), (13, 37117), (21, 37180), (22, 37189), (25, 37204), (26, 37210),

Gene: DarthP\_49 Start: 37008, Stop: 37244, Start Num: 3

Candidate Starts for DarthP\_49:

(Start: 3 @37008 has 52 MA's), (7, 37053), (12, 37131), (19, 37194), (28, 37236),

Gene: Dartin\_49 Start: 36870, Stop: 37100, Start Num: 3

Candidate Starts for Dartin\_49:

(Start: 3 @36870 has 52 MA's), (12, 36984), (28, 37089),

Gene: Ekdilam\_46 Start: 36552, Stop: 36788, Start Num: 3

Candidate Starts for Ekdilam\_46:

(Start: 3 @36552 has 52 MA's), (5, 36582), (7, 36597), (12, 36675), (28, 36780),

Gene: Ellie\_45 Start: 36302, Stop: 36541, Start Num: 3

Candidate Starts for Ellie\_45:

(Start: 3 @36302 has 52 MA's), (19, 36488), (28, 36530),

Gene: Enkosi\_44 Start: 38238, Stop: 38468, Start Num: 3

Candidate Starts for Enkosi\_44:

(Start: 3 @38238 has 52 MA's), (13, 38361),

Gene: Fefferhead\_47 Start: 36252, Stop: 36491, Start Num: 3

Candidate Starts for Fefferhead\_47:

(1, 36168), (2, 36174), (Start: 3 @36252 has 52 MA's), (28, 36480),

Gene: Hammy\_49 Start: 36996, Stop: 37232, Start Num: 3

Candidate Starts for Hammy\_49:

(Start: 3 @36996 has 52 MA's), (7, 37041), (12, 37119), (19, 37182), (28, 37224),

Gene: Hurricane\_50 Start: 36762, Stop: 36989, Start Num: 3

Candidate Starts for Hurricane\_50:

(Start: 3 @36762 has 52 MA's), (11, 36864), (15, 36903), (21, 36957), (24, 36978),

Gene: Keshu\_51 Start: 36829, Stop: 37056, Start Num: 3

Candidate Starts for Keshu\_51:

(Start: 3 @36829 has 52 MA's), (9, 36919), (11, 36931), (15, 36970), (21, 37024), (24, 37045),

Gene: KiSi\_51 Start: 37368, Stop: 37604, Start Num: 3

Candidate Starts for KiSi\_51:

(Start: 3 @37368 has 52 MA's), (4, 37380), (13, 37500), (21, 37563), (26, 37593),

Gene: Krueger\_53 Start: 36925, Stop: 37167, Start Num: 3

Candidate Starts for Krueger\_53:

(Start: 3 @36925 has 52 MA's), (Start: 6 @36964 has 1 MA's), (12, 37048), (17, 37087), (18, 37102), (19, 37111), (28, 37153),

Gene: Lavahound\_48 Start: 37235, Stop: 37474, Start Num: 3

Candidate Starts for Lavahound\_48:

(Start: 3 @37235 has 52 MA's), (17, 37397), (19, 37421), (28, 37463),

Gene: LeMond\_51 Start: 37352, Stop: 37588, Start Num: 3

Candidate Starts for LeMond\_51:

(Start: 3 @37352 has 52 MA's), (4, 37364), (13, 37484), (17, 37514), (21, 37547), (26, 37577),

Gene: Lea83\_50 Start: 36803, Stop: 37042, Start Num: 3

Candidate Starts for Lea83\_50:

(Start: 3 @36803 has 52 MA's), (19, 36989), (28, 37031),

Gene: LilPharaoh\_42 Start: 35353, Stop: 35583, Start Num: 3

Candidate Starts for LilPharaoh\_42:

(Start: 3 @35353 has 52 MA's), (13, 35476),

Gene: MacnCheese\_51 Start: 37711, Stop: 37947, Start Num: 3

Candidate Starts for MacnCheese\_51:

(Start: 3 @37711 has 52 MA's), (10, 37810), (13, 37843), (16, 37861), (19, 37897), (28, 37936),

Gene: MalagasyRose\_48 Start: 34740, Stop: 34961, Start Num: 3

Candidate Starts for MalagasyRose\_48:

(Start: 3 @34740 has 52 MA's), (4, 34752), (16, 34878), (20, 34920), (23, 34941), (27, 34953),

Gene: MarkPhew\_50 Start: 36817, Stop: 37053, Start Num: 3

Candidate Starts for MarkPhew\_50:

(Start: 3 @36817 has 52 MA's), (4, 36829), (11, 36919), (13, 36949), (26, 37042),

Gene: McMater\_49 Start: 36870, Stop: 37100, Start Num: 3

Candidate Starts for McMater\_49:

(Start: 3 @36870 has 52 MA's), (12, 36984), (28, 37089),

Gene: Mdavu\_43 Start: 35614, Stop: 35844, Start Num: 3

Candidate Starts for Mdavu\_43:

(Start: 3 @35614 has 52 MA's), (13, 35737),

Gene: Nergal\_44 Start: 34720, Stop: 34947, Start Num: 3

Candidate Starts for Nergal\_44:

(Start: 3 @34720 has 52 MA's), (8, 34795), (12, 34843), (20, 34912), (24, 34936),

Gene: Nibb\_49 Start: 36506, Stop: 36742, Start Num: 3

Candidate Starts for Nibb\_49:

(Start: 3 @36506 has 52 MA's), (4, 36518), (11, 36608), (13, 36638), (21, 36701), (26, 36731),

Gene: Nikao\_45 Start: 38238, Stop: 38468, Start Num: 3

Candidate Starts for Nikao\_45:

(Start: 3 @38238 has 52 MA's), (13, 38361),

Gene: Niklas\_49 Start: 36931, Stop: 37161, Start Num: 3

Candidate Starts for Niklas\_49:

(Start: 3 @36931 has 52 MA's), (12, 37045), (28, 37150),

Gene: November\_47 Start: 36759, Stop: 36995, Start Num: 3

Candidate Starts for November\_47:

(Start: 3 @36759 has 52 MA's), (5, 36789), (7, 36804), (12, 36882), (19, 36945), (28, 36987),

Gene: Nutello\_42 Start: 35625, Stop: 35855, Start Num: 3

Candidate Starts for Nutello\_42:

(Start: 3 @35625 has 52 MA's), (13, 35748),

Gene: Oscar\_51 Start: 37254, Stop: 37490, Start Num: 3

Candidate Starts for Oscar\_51:

(Start: 3 @37254 has 52 MA's), (4, 37266), (13, 37386), (17, 37416), (21, 37449), (26, 37479),

Gene: Peanam\_49 Start: 36889, Stop: 37119, Start Num: 3

Candidate Starts for Peanam\_49:

(Start: 3 @36889 has 52 MA's), (12, 37003), (28, 37108),

Gene: Pharb\_47 Start: 35513, Stop: 35752, Start Num: 3

Candidate Starts for Pharb\_47:

(Start: 3 @35513 has 52 MA's), (12, 35636), (16, 35663), (19, 35699), (28, 35741),

Gene: PhelpsODU\_49 Start: 35991, Stop: 36194, Start Num: 6

Candidate Starts for PhelpsODU\_49:

(Start: 3 @35952 has 52 MA's), (Start: 6 @35991 has 1 MA's), (17, 36114), (18, 36129), (19, 36138), (28, 36180),

Gene: Phrank\_50 Start: 35909, Stop: 36151, Start Num: 3

Candidate Starts for Phrank\_50:

(Start: 3 @35909 has 52 MA's), (Start: 6 @35948 has 1 MA's), (16, 36059), (17, 36071), (18, 36086), (19, 36095), (28, 36137),

Gene: Pixie\_49 Start: 36282, Stop: 36521, Start Num: 3

Candidate Starts for Pixie\_49:

(Start: 3 @36282 has 52 MA's), (19, 36468), (28, 36510),

Gene: Richo\_49 Start: 36870, Stop: 37100, Start Num: 3

Candidate Starts for Richo\_49:

(Start: 3 @36870 has 52 MA's), (12, 36984), (28, 37089),

Gene: Scarlett\_51 Start: 37246, Stop: 37482, Start Num: 3

Candidate Starts for Scarlett\_51:

(Start: 3 @37246 has 52 MA's), (4, 37258), (13, 37378), (17, 37408), (21, 37441), (26, 37471),

Gene: SgtBeansprout\_42 Start: 35625, Stop: 35855, Start Num: 3

Candidate Starts for SgtBeansprout\_42:

(Start: 3 @35625 has 52 MA's), (13, 35748),

Gene: Shadow1\_52 Start: 37070, Stop: 37312, Start Num: 3

Candidate Starts for Shadow1\_52:

(Start: 3 @37070 has 52 MA's), (Start: 6 @37109 has 1 MA's), (17, 37232), (18, 37247), (19, 37256), (28, 37298),

Gene: Shaobing\_49 Start: 36907, Stop: 37137, Start Num: 3

Candidate Starts for Shaobing\_49:

(Start: 3 @36907 has 52 MA's), (12, 37021), (28, 37126),

Gene: ShedlockHolmes\_50 Start: 36807, Stop: 37046, Start Num: 3

Candidate Starts for ShedlockHolmes\_50:

(Start: 3 @36807 has 52 MA's), (19, 36993), (28, 37035),

Gene: SirPhilip\_49 Start: 37339, Stop: 37575, Start Num: 3  
Candidate Starts for SirPhilip\_49:  
(Start: 3 @37339 has 52 MA's), (17, 37501), (19, 37525), (22, 37543), (28, 37567),

Gene: Sunflower1121\_53 Start: 37171, Stop: 37413, Start Num: 3  
Candidate Starts for Sunflower1121\_53:  
(Start: 3 @37171 has 52 MA's), (Start: 6 @37210 has 1 MA's), (17, 37333), (18, 37348), (19, 37357),  
(28, 37399),

Gene: Syra333\_52 Start: 36835, Stop: 37077, Start Num: 3  
Candidate Starts for Syra333\_52:  
(Start: 3 @36835 has 52 MA's), (Start: 6 @36874 has 1 MA's), (12, 36958), (17, 36997), (18, 37012),  
(19, 37021),

Gene: TClif\_51 Start: 37232, Stop: 37471, Start Num: 3  
Candidate Starts for TClif\_51:  
(Start: 3 @37232 has 52 MA's), (10, 37331), (12, 37355), (28, 37460),

Gene: Teejan\_44 Start: 38238, Stop: 38468, Start Num: 3  
Candidate Starts for Teejan\_44:  
(Start: 3 @38238 has 52 MA's), (13, 38361),

Gene: Tierra\_50 Start: 36720, Stop: 36962, Start Num: 3  
Candidate Starts for Tierra\_50:  
(Start: 3 @36720 has 52 MA's), (Start: 6 @36759 has 1 MA's), (16, 36870), (17, 36882), (18, 36897),  
(19, 36906), (28, 36948),

Gene: Tigress9\_53 Start: 36925, Stop: 37167, Start Num: 3  
Candidate Starts for Tigress9\_53:  
(Start: 3 @36925 has 52 MA's), (Start: 6 @36964 has 1 MA's), (12, 37048), (17, 37087), (18, 37102),  
(19, 37111),

Gene: Torres\_45 Start: 38239, Stop: 38469, Start Num: 3  
Candidate Starts for Torres\_45:  
(Start: 3 @38239 has 52 MA's), (13, 38362),

Gene: TribelTrouble\_47 Start: 36163, Stop: 36402, Start Num: 3  
Candidate Starts for TribelTrouble\_47:  
(Start: 3 @36163 has 52 MA's), (12, 36286), (14, 36298), (16, 36313), (19, 36349), (25, 36382), (28,  
36391),

Gene: Trice\_42 Start: 35626, Stop: 35856, Start Num: 3  
Candidate Starts for Trice\_42:  
(Start: 3 @35626 has 52 MA's), (13, 35749),

Gene: Unicorn\_49 Start: 35952, Stop: 36194, Start Num: 3  
Candidate Starts for Unicorn\_49:  
(Start: 3 @35952 has 52 MA's), (Start: 6 @35991 has 1 MA's), (17, 36114), (18, 36129), (19, 36138),  
(28, 36180),

Gene: Validus\_51 Start: 36951, Stop: 37181, Start Num: 3  
Candidate Starts for Validus\_51:  
(Start: 3 @36951 has 52 MA's), (12, 37065), (28, 37170),

Gene: Ximenita\_53 Start: 37024, Stop: 37266, Start Num: 3

Candidate Starts for Ximenita\_53:

(Start: 3 @37024 has 52 MA's), (Start: 6 @37063 has 1 MA's), (12, 37147), (17, 37186), (18, 37201), (19, 37210), (26, 37249),

Gene: Yuna\_53 Start: 37811, Stop: 38050, Start Num: 3

Candidate Starts for Yuna\_53:

(Start: 3 @37811 has 52 MA's), (19, 37997), (28, 38039),