

# Pham 161885



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 161885 Report

This analysis was run 04/28/24 on database version 559.

Pham number 161885 has 57 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Trike\_44, KittenMittens\_43, Drake94\_44, PeaceMeal1\_44, Severus\_44, Poompha\_45
- Track 2 : Edison31\_44
- Track 3 : Rebeuca\_46, Twister\_44, Topanga\_44, WalterMcMickey\_44, Kristoff\_46
- Track 4 : Eaglepride\_47
- Track 5 : Goose\_46, OKCentral2016\_45
- Track 6 : Chupacabra\_45
- Track 7 : RhynO\_47
- Track 8 : Kimona\_47
- Track 9 : Phantastic\_48
- Track 10 : Isca\_46, Rockstar\_47, MK4\_47
- Track 11 : Bugatti\_48, Puppy\_49, SaturnRing\_48, Scout\_47, BlueBird\_49, HelDan\_47, TNguyen7\_48, Idleandcovert\_48, Giroux\_48, Fred313\_47, Heathen\_47, Pistachio\_49
- Track 12 : Popcicle\_47, Texage\_46, Margo\_47, Hookmount\_47, Caviar\_47, Veracruz\_46, QuinnKiro\_46, Panamaxus\_45, Pocahontas\_47, Todacoro\_47, Lambert1\_47, Norbert\_46, ResDef\_48, Noella\_47
- Track 13 : B1\_44, JF2\_47, JF4\_47
- Track 14 : MA5\_47
- Track 15 : BabyRay\_47
- Track 16 : Sheen\_48
- Track 17 : DroogsArmy\_44, Timshel\_46
- Track 18 : HINdeR\_44

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

The start number called the most often in the published annotations is 19, it was called in 50 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- B1\_44, BabyRay\_47, BlueBird\_49, Bugatti\_48, Caviar\_47, Chupacabra\_45, Drake94\_44, DroogsArmy\_44, Eaglepride\_47, Edison31\_44, Fred313\_47, Giroux\_48, Goose\_46, Heathen\_47, HelDan\_47, Hookmount\_47, Idleandcovert\_48, Isca\_46, JF2\_47, JF4\_47, KittenMittens\_43, Kristoff\_46, Lambert1\_47, MA5\_47,

MK4\_47, Margo\_47, Noella\_47, Norbert\_46, OKCentral2016\_45, Panamaxus\_45, PeaceMeal1\_44, Phantastic\_48, Pistachio\_49, Pocahontas\_47, Poompha\_45, Popcicle\_47, Puppy\_49, QuinnKiro\_46, Rebeuca\_46, ResDef\_48, RhynO\_47, Rockstar\_47, SaturnRing\_48, Scout\_47, Severus\_44, Sheen\_48, TNguyen7\_48, Texage\_46, Timshel\_46, Todacoro\_47, Topanga\_44, Trike\_44, Twister\_44, Veracruz\_46, WalterMcMickey\_44,

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

- HINdeR\_44,

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

- Kimona\_47,

### Summary by start number:

Start 17:

- Found in 1 of 57 ( 1.8% ) of genes in pham
- Manual Annotations of this start: 1 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: HINdeR\_44 (A7),

Start 18:

- Found in 1 of 57 ( 1.8% ) of genes in pham
- Manual Annotations of this start: 1 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kimona\_47 (A19),

Start 19:

- Found in 56 of 57 ( 98.2% ) of genes in pham
- Manual Annotations of this start: 50 of 52
- Called 98.2% of time when present
- Phage (with cluster) where this start called: B1\_44 (A3), BabyRay\_47 (A3), BlueBird\_49 (A3), Bugatti\_48 (A3), Caviar\_47 (A3), Chupacabra\_45 (A10), Drake94\_44 (A10), DroogsArmy\_44 (A7), Eaglepride\_47 (A10), Edison31\_44 (A10), Fred313\_47 (A3), Giroux\_48 (A3), Goose\_46 (A10), Heathen\_47 (A3), HelDan\_47 (A3), Hookmount\_47 (A3), Idleandcovert\_48 (A3), Isca\_46 (A3), JF2\_47 (A3), JF4\_47 (A3), KittenMittens\_43 (A10), Kristoff\_46 (A10), Lambert1\_47 (A3), MA5\_47 (A3), MK4\_47 (A3), Margo\_47 (A3), Noella\_47 (A3), Norbert\_46 (A3), OKCentral2016\_45 (A10), Panamaxus\_45 (A3), PeaceMeal1\_44 (A10), Phantastic\_48 (A3), Pistachio\_49 (A3), Pocahontas\_47 (A3), Poompha\_45 (A10), Popcicle\_47 (A3), Puppy\_49 (A3), QuinnKiro\_46 (A3), Rebeuca\_46 (A10), ResDef\_48 (A3), RhynO\_47 (A10), Rockstar\_47 (A3), SaturnRing\_48 (A3), Scout\_47 (A3), Severus\_44 (A10), Sheen\_48 (A7), TNguyen7\_48 (A3), Texage\_46 (A3), Timshel\_46 (A7), Todacoro\_47 (A3), Topanga\_44 (A10), Trike\_44 (A10), Twister\_44 (A10), Veracruz\_46 (A3), WalterMcMickey\_44 (A10),

### Summary by clusters:

There are 4 clusters represented in this pham: A3, A19, A10, A7,

Info for manual annotations of cluster A10:

- Start number 19 was manually annotated 16 times for cluster A10.

Info for manual annotations of cluster A19:

- Start number 18 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A3:

- Start number 19 was manually annotated 31 times for cluster A3.

Info for manual annotations of cluster A7:

- Start number 17 was manually annotated 1 time for cluster A7.
- Start number 19 was manually annotated 3 times for cluster A7.

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

Gene: B1\_44 Start: 31212, Stop: 31006, Start Num: 19

Candidate Starts for B1\_44:

(Start: 19 @31212 has 50 MA's), (21, 31197), (32, 31113), (38, 31056), (39, 31053),

Gene: BabyRay\_47 Start: 31939, Stop: 31742, Start Num: 19

Candidate Starts for BabyRay\_47:

(Start: 19 @31939 has 50 MA's), (26, 31897), (31, 31843),

Gene: BlueBird\_49 Start: 32028, Stop: 31831, Start Num: 19

Candidate Starts for BlueBird\_49:

(Start: 19 @32028 has 50 MA's), (25, 31989), (31, 31932), (37, 31875),

Gene: Bugatti\_48 Start: 32028, Stop: 31831, Start Num: 19

Candidate Starts for Bugatti\_48:

(Start: 19 @32028 has 50 MA's), (25, 31989), (31, 31932), (37, 31875),

Gene: Caviar\_47 Start: 32274, Stop: 32074, Start Num: 19

Candidate Starts for Caviar\_47:

(Start: 19 @32274 has 50 MA's), (26, 32232), (31, 32178),

Gene: Chupacabra\_45 Start: 31666, Stop: 31460, Start Num: 19

Candidate Starts for Chupacabra\_45:

(Start: 19 @31666 has 50 MA's), (26, 31627), (33, 31540), (34, 31531), (38, 31507),

Gene: Drake94\_44 Start: 30942, Stop: 30736, Start Num: 19

Candidate Starts for Drake94\_44:

(12, 31095), (Start: 19 @30942 has 50 MA's), (20, 30930), (26, 30903), (33, 30816), (34, 30807), (38, 30783),

Gene: DroogsArmy\_44 Start: 33755, Stop: 33543, Start Num: 19

Candidate Starts for DroogsArmy\_44:

(Start: 19 @33755 has 50 MA's), (24, 33722), (33, 33626), (34, 33617),

Gene: Eaglepride\_47 Start: 31736, Stop: 31527, Start Num: 19

Candidate Starts for Eaglepride\_47:

(Start: 19 @31736 has 50 MA's), (26, 31697), (27, 31691), (34, 31601),

Gene: Edison31\_44 Start: 31686, Stop: 31480, Start Num: 19

Candidate Starts for Edison31\_44:

(Start: 19 @31686 has 50 MA's), (22, 31665), (26, 31647), (33, 31560), (34, 31551), (38, 31527),

Gene: Fred313\_47 Start: 31601, Stop: 31404, Start Num: 19

Candidate Starts for Fred313\_47:

(Start: 19 @31601 has 50 MA's), (25, 31562), (31, 31505), (37, 31448),

Gene: Giroux\_48 Start: 32027, Stop: 31830, Start Num: 19

Candidate Starts for Giroux\_48:

(Start: 19 @32027 has 50 MA's), (25, 31988), (31, 31931), (37, 31874),

Gene: Goose\_46 Start: 31470, Stop: 31264, Start Num: 19

Candidate Starts for Goose\_46:

(Start: 19 @31470 has 50 MA's), (26, 31431), (33, 31344), (34, 31335), (38, 31311),

Gene: HINdeR\_44 Start: 33644, Stop: 33369, Start Num: 17

Candidate Starts for HINdeR\_44:

(1, 33833), (2, 33830), (3, 33824), (4, 33821), (5, 33806), (6, 33803), (7, 33800), (10, 33767), (11, 33749), (13, 33713), (15, 33671), (Start: 17 @33644 has 1 MA's), (Start: 19 @33578 has 50 MA's), (33, 33449), (34, 33440),

Gene: Heathen\_47 Start: 31657, Stop: 31460, Start Num: 19

Candidate Starts for Heathen\_47:

(Start: 19 @31657 has 50 MA's), (25, 31618), (31, 31561), (37, 31504),

Gene: HelDan\_47 Start: 31909, Stop: 31712, Start Num: 19

Candidate Starts for HelDan\_47:

(Start: 19 @31909 has 50 MA's), (25, 31870), (31, 31813), (37, 31756),

Gene: Hookmount\_47 Start: 32275, Stop: 32075, Start Num: 19

Candidate Starts for Hookmount\_47:

(Start: 19 @32275 has 50 MA's), (26, 32233), (31, 32179),

Gene: Idleandcovert\_48 Start: 32028, Stop: 31831, Start Num: 19

Candidate Starts for Idleandcovert\_48:

(Start: 19 @32028 has 50 MA's), (25, 31989), (31, 31932), (37, 31875),

Gene: Isca\_46 Start: 31461, Stop: 31255, Start Num: 19

Candidate Starts for Isca\_46:

(9, 31641), (16, 31536), (Start: 19 @31461 has 50 MA's), (21, 31446), (32, 31362), (38, 31305), (39, 31302),

Gene: JF2\_47 Start: 31212, Stop: 31006, Start Num: 19

Candidate Starts for JF2\_47:

(Start: 19 @31212 has 50 MA's), (21, 31197), (32, 31113), (38, 31056), (39, 31053),

Gene: JF4\_47 Start: 31212, Stop: 31006, Start Num: 19

Candidate Starts for JF4\_47:

(Start: 19 @31212 has 50 MA's), (21, 31197), (32, 31113), (38, 31056), (39, 31053),

Gene: Kimona\_47 Start: 30659, Stop: 30456, Start Num: 18

Candidate Starts for Kimona\_47:

(Start: 18 @30659 has 1 MA's), (23, 30629), (26, 30614), (33, 30524), (34, 30515), (36, 30503), (38, 30491),

Gene: KittenMittens\_43 Start: 30950, Stop: 30744, Start Num: 19  
Candidate Starts for KittenMittens\_43:  
(12, 31103), (Start: 19 @30950 has 50 MA's), (20, 30938), (26, 30911), (33, 30824), (34, 30815), (38, 30791),

Gene: Kristoff\_46 Start: 32038, Stop: 31832, Start Num: 19  
Candidate Starts for Kristoff\_46:  
(Start: 19 @32038 has 50 MA's), (26, 31999), (30, 31945), (33, 31912), (34, 31903), (38, 31879),

Gene: Lambert1\_47 Start: 32274, Stop: 32074, Start Num: 19  
Candidate Starts for Lambert1\_47:  
(Start: 19 @32274 has 50 MA's), (26, 32232), (31, 32178),

Gene: MA5\_47 Start: 31363, Stop: 31157, Start Num: 19  
Candidate Starts for MA5\_47:  
(Start: 19 @31363 has 50 MA's), (21, 31348), (28, 31297), (32, 31264), (38, 31207),

Gene: MK4\_47 Start: 31446, Stop: 31240, Start Num: 19  
Candidate Starts for MK4\_47:  
(9, 31626), (16, 31521), (Start: 19 @31446 has 50 MA's), (21, 31431), (32, 31347), (38, 31290), (39, 31287),

Gene: Margo\_47 Start: 32300, Stop: 32100, Start Num: 19  
Candidate Starts for Margo\_47:  
(Start: 19 @32300 has 50 MA's), (26, 32258), (31, 32204),

Gene: Noella\_47 Start: 32275, Stop: 32075, Start Num: 19  
Candidate Starts for Noella\_47:  
(Start: 19 @32275 has 50 MA's), (26, 32233), (31, 32179),

Gene: Norbert\_46 Start: 32274, Stop: 32074, Start Num: 19  
Candidate Starts for Norbert\_46:  
(Start: 19 @32274 has 50 MA's), (26, 32232), (31, 32178),

Gene: OKCentral2016\_45 Start: 31373, Stop: 31167, Start Num: 19  
Candidate Starts for OKCentral2016\_45:  
(Start: 19 @31373 has 50 MA's), (26, 31334), (33, 31247), (34, 31238), (38, 31214),

Gene: Panamaxus\_45 Start: 32274, Stop: 32074, Start Num: 19  
Candidate Starts for Panamaxus\_45:  
(Start: 19 @32274 has 50 MA's), (26, 32232), (31, 32178),

Gene: PeaceMeal1\_44 Start: 30951, Stop: 30745, Start Num: 19  
Candidate Starts for PeaceMeal1\_44:  
(12, 31104), (Start: 19 @30951 has 50 MA's), (20, 30939), (26, 30912), (33, 30825), (34, 30816), (38, 30792),

Gene: Phantastic\_48 Start: 31650, Stop: 31450, Start Num: 19  
Candidate Starts for Phantastic\_48:  
(8, 31851), (14, 31752), (16, 31725), (Start: 19 @31650 has 50 MA's), (21, 31635), (28, 31584), (32, 31551), (38, 31494),

Gene: Pistachio\_49 Start: 31575, Stop: 31378, Start Num: 19  
Candidate Starts for Pistachio\_49:  
(Start: 19 @31575 has 50 MA's), (25, 31536), (31, 31479), (37, 31422),

Gene: Pocahontas\_47 Start: 32271, Stop: 32071, Start Num: 19  
Candidate Starts for Pocahontas\_47:  
(Start: 19 @32271 has 50 MA's), (26, 32229), (31, 32175),

Gene: Poompha\_45 Start: 30949, Stop: 30743, Start Num: 19  
Candidate Starts for Poompha\_45:  
(12, 31102), (Start: 19 @30949 has 50 MA's), (20, 30937), (26, 30910), (33, 30823), (34, 30814), (38, 30790),

Gene: Popcicle\_47 Start: 32271, Stop: 32071, Start Num: 19  
Candidate Starts for Popcicle\_47:  
(Start: 19 @32271 has 50 MA's), (26, 32229), (31, 32175),

Gene: Puppy\_49 Start: 31648, Stop: 31451, Start Num: 19  
Candidate Starts for Puppy\_49:  
(Start: 19 @31648 has 50 MA's), (25, 31609), (31, 31552), (37, 31495),

Gene: QuinnKiro\_46 Start: 32274, Stop: 32074, Start Num: 19  
Candidate Starts for QuinnKiro\_46:  
(Start: 19 @32274 has 50 MA's), (26, 32232), (31, 32178),

Gene: Rebeuca\_46 Start: 32039, Stop: 31833, Start Num: 19  
Candidate Starts for Rebeuca\_46:  
(Start: 19 @32039 has 50 MA's), (26, 32000), (30, 31946), (33, 31913), (34, 31904), (38, 31880),

Gene: ResDef\_48 Start: 32274, Stop: 32074, Start Num: 19  
Candidate Starts for ResDef\_48:  
(Start: 19 @32274 has 50 MA's), (26, 32232), (31, 32178),

Gene: RhynO\_47 Start: 31838, Stop: 31632, Start Num: 19  
Candidate Starts for RhynO\_47:  
(12, 31991), (Start: 19 @31838 has 50 MA's), (22, 31817), (26, 31799), (33, 31712), (34, 31703), (35, 31694), (37, 31682),

Gene: Rockstar\_47 Start: 31455, Stop: 31249, Start Num: 19  
Candidate Starts for Rockstar\_47:  
(9, 31635), (16, 31530), (Start: 19 @31455 has 50 MA's), (21, 31440), (32, 31356), (38, 31299), (39, 31296),

Gene: SaturnRing\_48 Start: 32028, Stop: 31831, Start Num: 19  
Candidate Starts for SaturnRing\_48:  
(Start: 19 @32028 has 50 MA's), (25, 31989), (31, 31932), (37, 31875),

Gene: Scout\_47 Start: 31156, Stop: 30959, Start Num: 19  
Candidate Starts for Scout\_47:  
(Start: 19 @31156 has 50 MA's), (25, 31117), (31, 31060), (37, 31003),

Gene: Severus\_44 Start: 30949, Stop: 30743, Start Num: 19  
Candidate Starts for Severus\_44:

(12, 31102), (Start: 19 @30949 has 50 MA's), (20, 30937), (26, 30910), (33, 30823), (34, 30814), (38, 30790),

Gene: Sheen\_48 Start: 34305, Stop: 34093, Start Num: 19

Candidate Starts for Sheen\_48:

(12, 34458), (Start: 19 @34305 has 50 MA's), (21, 34290), (29, 34236), (32, 34197), (34, 34164), (40, 34131),

Gene: TNguyen7\_48 Start: 31995, Stop: 31798, Start Num: 19

Candidate Starts for TNguyen7\_48:

(Start: 19 @31995 has 50 MA's), (25, 31956), (31, 31899), (37, 31842),

Gene: Texage\_46 Start: 32275, Stop: 32075, Start Num: 19

Candidate Starts for Texage\_46:

(Start: 19 @32275 has 50 MA's), (26, 32233), (31, 32179),

Gene: Timshel\_46 Start: 34012, Stop: 33800, Start Num: 19

Candidate Starts for Timshel\_46:

(Start: 19 @34012 has 50 MA's), (24, 33979), (33, 33883), (34, 33874),

Gene: Todacoro\_47 Start: 32274, Stop: 32074, Start Num: 19

Candidate Starts for Todacoro\_47:

(Start: 19 @32274 has 50 MA's), (26, 32232), (31, 32178),

Gene: Topanga\_44 Start: 31688, Stop: 31482, Start Num: 19

Candidate Starts for Topanga\_44:

(Start: 19 @31688 has 50 MA's), (26, 31649), (30, 31595), (33, 31562), (34, 31553), (38, 31529),

Gene: Trike\_44 Start: 30957, Stop: 30751, Start Num: 19

Candidate Starts for Trike\_44:

(12, 31110), (Start: 19 @30957 has 50 MA's), (20, 30945), (26, 30918), (33, 30831), (34, 30822), (38, 30798),

Gene: Twister\_44 Start: 31599, Stop: 31393, Start Num: 19

Candidate Starts for Twister\_44:

(Start: 19 @31599 has 50 MA's), (26, 31560), (30, 31506), (33, 31473), (34, 31464), (38, 31440),

Gene: Veracruz\_46 Start: 32274, Stop: 32074, Start Num: 19

Candidate Starts for Veracruz\_46:

(Start: 19 @32274 has 50 MA's), (26, 32232), (31, 32178),

Gene: WalterMcMickey\_44 Start: 31599, Stop: 31393, Start Num: 19

Candidate Starts for WalterMcMickey\_44:

(Start: 19 @31599 has 50 MA's), (26, 31560), (30, 31506), (33, 31473), (34, 31464), (38, 31440),