

# Pham 161854



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 161854 Report

This analysis was run 05/04/24 on database version 560.

Pham number 161854 has 45 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Poco6\_089
- Track 2 : Eddiemania\_54
- Track 3 : Runhaar\_54, Nadmeg\_55, Kenosha\_53
- Track 4 : Figliar\_52, Jodelie19\_53, TenaciousP\_59, OlgasClover\_55
- Track 5 : Zeph\_58
- Track 6 : Vardy\_53, Burley\_54
- Track 7 : AlainaMarie\_53
- Track 8 : Roney\_53, Kerry\_52, Tanis\_53, Gravy\_52, Capybara\_53, Gill\_53, Magel\_54
- Track 9 : Rickmore\_50
- Track 10 : Pherobrine\_55
- Track 11 : Duffington\_52
- Track 12 : Madvan\_53
- Track 13 : Crocheter\_54
- Track 14 : Hydrus\_56
- Track 15 : Phepper\_55
- Track 16 : Chikenjars\_52, EndAve\_55
- Track 17 : Aflac\_53
- Track 18 : Conley\_52
- Track 19 : Untouchable\_55
- Track 20 : Captrips\_54, Artorias\_53, FortCran\_57
- Track 21 : Fazel\_58
- Track 22 : Avazak\_54
- Track 23 : OhMyWard\_52
- Track 24 : Perkunas\_55
- Track 25 : BluerMoon\_55
- Track 26 : Hortihabitatio\_54
- Track 27 : Petito\_55
- Track 28 : Schwartz33\_55
- Track 29 : Secretariat\_53
- Track 30 : Odesza\_52

***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 32 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aflac\_53, AlainaMarie\_53, Artorias\_53, Avazak\_54, Burley\_54, Captrips\_54, Cappybara\_53, Chickenjars\_52, Conley\_52, Crocheter\_54, Duffington\_52, Eddiemania\_54, EndAve\_55, Figliar\_52, FortCran\_57, Gill\_53, Gravy\_52, Hortihabitatio\_54, Jodelie19\_53, Kenosha\_53, Kerry\_52, Madvan\_53, Magel\_54, Nadmeg\_55, Odesza\_52, OhMyWard\_52, OlgasClover\_55, Perkunas\_55, Petite\_55, Phepper\_55, Pherobrine\_55, Poco6\_089, Rickmore\_50, Roney\_53, Runhaar\_54, Schwartz33\_55, Secretariat\_53, Tanis\_53, TenaciousP\_59, Untouchable\_55, Vardy\_53,

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

- BluerMoon\_55, Fazel\_58, Hydrus\_56, Zeph\_58,

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

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### **Summary by start number:**

Start 10:

- Found in 14 of 45 ( 31.1% ) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 21.4% of time when present
- Phage (with cluster) where this start called: BluerMoon\_55 (DJ), Hydrus\_56 (DJ), Zeph\_58 (DJ),

Start 13:

- Found in 1 of 45 ( 2.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fazel\_58 (DJ),

Start 17:

- Found in 45 of 45 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 32 of 33
- Called 91.1% of time when present
- Phage (with cluster) where this start called: Aflac\_53 (DJ), AlainaMarie\_53 (DJ), Artorias\_53 (DJ), Avazak\_54 (DJ), Burley\_54 (DJ), Captrips\_54 (DJ), Cappybara\_53 (DJ), Chickenjars\_52 (DJ), Conley\_52 (DJ), Crocheter\_54 (DJ), Duffington\_52 (DJ), Eddiemania\_54 (DJ), EndAve\_55 (DJ), Figliar\_52 (DJ), FortCran\_57 (DJ), Gill\_53 (DJ), Gravy\_52 (DJ), Hortihabitatio\_54 (DJ), Jodelie19\_53 (DJ), Kenosha\_53 (DJ), Kerry\_52 (DJ), Madvan\_53 (DJ), Magel\_54 (DJ), Nadmeg\_55 (DJ), Odesza\_52 (DJ), OhMyWard\_52 (DJ), OlgasClover\_55 (DJ), Perkunas\_55 (DJ), Petite\_55 (DJ), Phepper\_55 (DJ), Pherobrine\_55 (DJ), Poco6\_089 (CC), Rickmore\_50 (DJ), Roney\_53 (DJ), Runhaar\_54 (DJ), Schwartz33\_55 (DJ), Secretariat\_53 (DJ), Tanis\_53 (DJ), TenaciousP\_59 (DJ), Untouchable\_55 (DJ), Vardy\_53 (DJ),

### **Summary by clusters:**

There are 2 clusters represented in this pham: CC, DJ,

Info for manual annotations of cluster DJ:

- Start number 10 was manually annotated 1 time for cluster DJ.
- Start number 17 was manually annotated 32 times for cluster DJ.

### **Gene Information:**

Gene: Aflac\_53 Start: 37122, Stop: 37580, Start Num: 17

Candidate Starts for Aflac\_53:

(Start: 10 @37050 has 1 MA's), (Start: 17 @37122 has 32 MA's), (18, 37134), (28, 37287), (34, 37329), (36, 37359), (39, 37401), (45, 37443), (50, 37467), (61, 37545),

Gene: AlainaMarie\_53 Start: 37102, Stop: 37566, Start Num: 17

Candidate Starts for AlainaMarie\_53:

(Start: 17 @37102 has 32 MA's), (22, 37147), (33, 37300), (34, 37309), (39, 37381), (45, 37423), (50, 37447), (59, 37519),

Gene: Artorias\_53 Start: 36489, Stop: 36887, Start Num: 17

Candidate Starts for Artorias\_53:

(Start: 17 @36489 has 32 MA's), (28, 36657), (34, 36699), (39, 36771), (41, 36789), (55, 36864), (57, 36873),

Gene: Avazak\_54 Start: 36834, Stop: 37244, Start Num: 17

Candidate Starts for Avazak\_54:

(Start: 17 @36834 has 32 MA's), (31, 37020), (32, 37023), (34, 37038), (39, 37110), (42, 37131), (54, 37221),

Gene: BluerMoon\_55 Start: 37073, Stop: 37609, Start Num: 10

Candidate Starts for BluerMoon\_55:

(Start: 10 @37073 has 1 MA's), (Start: 17 @37145 has 32 MA's), (18, 37157), (25, 37220), (26, 37229), (34, 37352), (36, 37382), (39, 37424), (45, 37466), (47, 37472), (49, 37484), (59, 37565),

Gene: Burley\_54 Start: 36888, Stop: 37352, Start Num: 17

Candidate Starts for Burley\_54:

(Start: 10 @36816 has 1 MA's), (Start: 17 @36888 has 32 MA's), (20, 36915), (26, 36972), (34, 37095), (36, 37125), (39, 37167), (40, 37173), (45, 37209), (50, 37233), (64, 37344),

Gene: Captrips\_54 Start: 35964, Stop: 36362, Start Num: 17

Candidate Starts for Captrips\_54:

(Start: 17 @35964 has 32 MA's), (28, 36132), (34, 36174), (39, 36246), (41, 36264), (55, 36339), (57, 36348),

Gene: Capybara\_53 Start: 36333, Stop: 36743, Start Num: 17

Candidate Starts for Capybara\_53:

(16, 36330), (Start: 17 @36333 has 32 MA's), (23, 36393), (24, 36396), (26, 36417), (27, 36456), (28, 36495), (34, 36537), (37, 36570), (39, 36609), (42, 36630), (54, 36720),

Gene: Chikenjars\_52 Start: 37114, Stop: 37578, Start Num: 17

Candidate Starts for Chikenjars\_52:

(Start: 17 @37114 has 32 MA's), (18, 37126), (33, 37312), (34, 37321), (36, 37351), (39, 37393), (45, 37435), (50, 37459), (59, 37531),

Gene: Conley\_52 Start: 37120, Stop: 37530, Start Num: 17

Candidate Starts for Conley\_52:

(Start: 17 @37120 has 32 MA's), (20, 37147), (31, 37306), (32, 37309), (34, 37324), (39, 37396), (42, 37417), (46, 37441), (54, 37507),

Gene: Crocheter\_54 Start: 37278, Stop: 37745, Start Num: 17

Candidate Starts for Crocheter\_54:

(Start: 10 @37206 has 1 MA's), (Start: 17 @37278 has 32 MA's), (26, 37362), (34, 37485), (36, 37515), (39, 37557), (40, 37563), (45, 37599), (50, 37623), (56, 37689), (58, 37692), (64, 37740),

Gene: Duffington\_52 Start: 36809, Stop: 37273, Start Num: 17

Candidate Starts for Duffington\_52:

(9, 36698), (Start: 10 @36737 has 1 MA's), (Start: 17 @36809 has 32 MA's), (18, 36821), (24, 36872), (25, 36884), (26, 36893), (28, 36974), (34, 37016), (36, 37046), (39, 37088), (45, 37130), (49, 37148), (59, 37229),

Gene: Eddiemania\_54 Start: 38023, Stop: 38493, Start Num: 17

Candidate Starts for Eddiemania\_54:

(Start: 17 @38023 has 32 MA's), (18, 38035), (34, 38230), (36, 38260), (39, 38302), (40, 38308), (45, 38344), (56, 38434), (58, 38437), (64, 38485),

Gene: EndAve\_55 Start: 37282, Stop: 37746, Start Num: 17

Candidate Starts for EndAve\_55:

(Start: 17 @37282 has 32 MA's), (18, 37294), (33, 37480), (34, 37489), (36, 37519), (39, 37561), (45, 37603), (50, 37627), (59, 37699),

Gene: Fazel\_58 Start: 36698, Stop: 37225, Start Num: 13

Candidate Starts for Fazel\_58:

(13, 36698), (Start: 17 @36737 has 32 MA's), (18, 36749), (23, 36797), (30, 36914), (34, 36944), (39, 37016), (40, 37022), (45, 37058), (47, 37064), (65, 37175),

Gene: Figliar\_52 Start: 37190, Stop: 37648, Start Num: 17

Candidate Starts for Figliar\_52:

(Start: 17 @37190 has 32 MA's), (18, 37202), (25, 37265), (28, 37355), (34, 37397), (36, 37427), (39, 37469), (45, 37511), (50, 37535), (61, 37613),

Gene: FortCran\_57 Start: 36489, Stop: 36887, Start Num: 17

Candidate Starts for FortCran\_57:

(Start: 17 @36489 has 32 MA's), (28, 36657), (34, 36699), (39, 36771), (41, 36789), (55, 36864), (57, 36873),

Gene: Gill\_53 Start: 36350, Stop: 36760, Start Num: 17

Candidate Starts for Gill\_53:

(16, 36347), (Start: 17 @36350 has 32 MA's), (23, 36410), (24, 36413), (26, 36434), (27, 36473), (28, 36512), (34, 36554), (37, 36587), (39, 36626), (42, 36647), (54, 36737),

Gene: Gravy\_52 Start: 36023, Stop: 36433, Start Num: 17

Candidate Starts for Gravy\_52:

(16, 36020), (Start: 17 @36023 has 32 MA's), (23, 36083), (24, 36086), (26, 36107), (27, 36146), (28, 36185), (34, 36227), (37, 36260), (39, 36299), (42, 36320), (54, 36410),

Gene: Hortihabitatio\_54 Start: 36942, Stop: 37460, Start Num: 17

Candidate Starts for Hortihabitatio\_54:

(Start: 10 @36870 has 1 MA's), (Start: 17 @36942 has 32 MA's), (18, 36954), (23, 37002), (30, 37119), (34, 37149), (39, 37221), (40, 37227), (45, 37263), (65, 37380),

Gene: Hydrus\_56 Start: 37978, Stop: 38517, Start Num: 10

Candidate Starts for Hydrus\_56:

(Start: 10 @37978 has 1 MA's), (Start: 17 @38050 has 32 MA's), (26, 38134), (34, 38257), (36, 38287), (39, 38329), (40, 38335), (45, 38371), (56, 38461), (58, 38464), (64, 38512),

Gene: Jodelie19\_53 Start: 38594, Stop: 39052, Start Num: 17

Candidate Starts for Jodelie19\_53:

(Start: 17 @38594 has 32 MA's), (18, 38606), (25, 38669), (28, 38759), (34, 38801), (36, 38831), (39, 38873), (45, 38915), (50, 38939), (61, 39017),

Gene: Kenosha\_53 Start: 37509, Stop: 37976, Start Num: 17

Candidate Starts for Kenosha\_53:

(11, 37449), (Start: 17 @37509 has 32 MA's), (20, 37536), (26, 37593), (34, 37716), (36, 37746), (39, 37788), (40, 37794), (45, 37830), (50, 37854), (56, 37920), (58, 37923), (64, 37971),

Gene: Kerry\_52 Start: 36023, Stop: 36433, Start Num: 17

Candidate Starts for Kerry\_52:

(16, 36020), (Start: 17 @36023 has 32 MA's), (23, 36083), (24, 36086), (26, 36107), (27, 36146), (28, 36185), (34, 36227), (37, 36260), (39, 36299), (42, 36320), (54, 36410),

Gene: Madvan\_53 Start: 36919, Stop: 37386, Start Num: 17

Candidate Starts for Madvan\_53:

(Start: 10 @36847 has 1 MA's), (Start: 17 @36919 has 32 MA's), (20, 36946), (26, 37003), (34, 37126), (36, 37156), (39, 37198), (45, 37240), (50, 37264), (56, 37330), (58, 37333), (64, 37381),

Gene: Magel\_54 Start: 36254, Stop: 36676, Start Num: 17

Candidate Starts for Magel\_54:

(16, 36251), (Start: 17 @36254 has 32 MA's), (23, 36314), (24, 36317), (26, 36338), (27, 36377), (28, 36416), (34, 36458), (37, 36491), (39, 36530), (42, 36551), (54, 36653),

Gene: Nadmeg\_55 Start: 38165, Stop: 38632, Start Num: 17

Candidate Starts for Nadmeg\_55:

(11, 38105), (Start: 17 @38165 has 32 MA's), (20, 38192), (26, 38249), (34, 38372), (36, 38402), (39, 38444), (40, 38450), (45, 38486), (50, 38510), (56, 38576), (58, 38579), (64, 38627),

Gene: Odesza\_52 Start: 36078, Stop: 36488, Start Num: 17

Candidate Starts for Odesza\_52:

(16, 36075), (Start: 17 @36078 has 32 MA's), (23, 36138), (24, 36141), (26, 36162), (27, 36201), (34, 36282), (37, 36315), (39, 36354), (42, 36375), (44, 36393), (54, 36465),

Gene: OhMyWard\_52 Start: 38137, Stop: 38601, Start Num: 17

Candidate Starts for OhMyWard\_52:

(Start: 17 @38137 has 32 MA's), (19, 38161), (34, 38344), (36, 38374), (39, 38416), (40, 38422), (45, 38458), (50, 38482),

Gene: OlgasClover\_55 Start: 38175, Stop: 38633, Start Num: 17

Candidate Starts for OlgasClover\_55:

(Start: 17 @38175 has 32 MA's), (18, 38187), (25, 38250), (28, 38340), (34, 38382), (36, 38412), (39, 38454), (45, 38496), (50, 38520), (61, 38598),

Gene: Perkunas\_55 Start: 36360, Stop: 36770, Start Num: 17

Candidate Starts for Perkunas\_55:

(1, 35874), (2, 35889), (3, 35949), (4, 35967), (5, 35979), (6, 36039), (7, 36168), (8, 36210), (Start: 17 @36360 has 32 MA's), (19, 36384), (27, 36483), (34, 36564), (36, 36594), (37, 36597), (39, 36636), (42, 36657), (54, 36747),

Gene: Petito\_55 Start: 38180, Stop: 38590, Start Num: 17

Candidate Starts for Petito\_55:

(Start: 17 @38180 has 32 MA's), (31, 38366), (32, 38369), (34, 38384), (39, 38456), (42, 38477),

Gene: Phepper\_55 Start: 37181, Stop: 37648, Start Num: 17

Candidate Starts for Phepper\_55:

(Start: 10 @37109 has 1 MA's), (Start: 17 @37181 has 32 MA's), (20, 37208), (26, 37265), (34, 37388), (36, 37418), (39, 37460), (40, 37466), (45, 37502), (50, 37526), (56, 37592), (58, 37595), (64, 37643),

Gene: Pherobrine\_55 Start: 38033, Stop: 38560, Start Num: 17

Candidate Starts for Pherobrine\_55:

(Start: 10 @37961 has 1 MA's), (Start: 17 @38033 has 32 MA's), (18, 38045), (23, 38093), (30, 38210), (34, 38240), (39, 38312), (43, 38348), (45, 38354), (47, 38360), (51, 38384), (60, 38459), (62, 38510),

Gene: Poco6\_089 Start: 48918, Stop: 49439, Start Num: 17

Candidate Starts for Poco6\_089:

(14, 48906), (Start: 17 @48918 has 32 MA's), (20, 48945), (29, 49089), (32, 49107), (34, 49122), (35, 49125), (36, 49152), (38, 49158), (41, 49212), (42, 49215), (48, 49245), (51, 49266), (53, 49296), (62, 49365), (63, 49380),

Gene: Rickmore\_50 Start: 34982, Stop: 35440, Start Num: 17

Candidate Starts for Rickmore\_50:

(Start: 10 @34910 has 1 MA's), (Start: 17 @34982 has 32 MA's), (18, 34994), (34, 35189), (36, 35219), (39, 35261), (45, 35303), (48, 35312), (50, 35327), (61, 35405),

Gene: Roney\_53 Start: 36376, Stop: 36786, Start Num: 17

Candidate Starts for Roney\_53:

(16, 36373), (Start: 17 @36376 has 32 MA's), (23, 36436), (24, 36439), (26, 36460), (27, 36499), (28, 36538), (34, 36580), (37, 36613), (39, 36652), (42, 36673), (54, 36763),

Gene: Runhaar\_54 Start: 36981, Stop: 37448, Start Num: 17

Candidate Starts for Runhaar\_54:

(11, 36921), (Start: 17 @36981 has 32 MA's), (20, 37008), (26, 37065), (34, 37188), (36, 37218), (39, 37260), (40, 37266), (45, 37302), (50, 37326), (56, 37392), (58, 37395), (64, 37443),

Gene: Schwartz33\_55 Start: 37144, Stop: 37581, Start Num: 17

Candidate Starts for Schwartz33\_55:

(Start: 17 @37144 has 32 MA's), (20, 37171), (34, 37348), (36, 37378),

Gene: Secretariat\_53 Start: 36006, Stop: 36494, Start Num: 17

Candidate Starts for Secretariat\_53:

(12, 35955), (15, 35997), (Start: 17 @36006 has 32 MA's), (20, 36033), (21, 36045), (34, 36210), (35, 36213), (36, 36240), (52, 36360), (66, 36483),

Gene: Tanis\_53 Start: 36196, Stop: 36606, Start Num: 17

Candidate Starts for Tanis\_53:

(16, 36193), (Start: 17 @36196 has 32 MA's), (23, 36256), (24, 36259), (26, 36280), (27, 36319), (28, 36358), (34, 36400), (37, 36433), (39, 36472), (42, 36493), (54, 36583),

Gene: TenaciousP\_59 Start: 38556, Stop: 39014, Start Num: 17

Candidate Starts for TenaciousP\_59:

(Start: 17 @38556 has 32 MA's), (18, 38568), (25, 38631), (28, 38721), (34, 38763), (36, 38793), (39, 38835), (45, 38877), (50, 38901), (61, 38979),

Gene: Untouchable\_55 Start: 37530, Stop: 37997, Start Num: 17

Candidate Starts for Untouchable\_55:

(Start: 10 @37458 has 1 MA's), (Start: 17 @37530 has 32 MA's), (26, 37614), (34, 37737), (36, 37767), (39, 37809), (40, 37815), (45, 37851), (56, 37941), (58, 37944), (64, 37992),

Gene: Vardy\_53 Start: 36877, Stop: 37338, Start Num: 17

Candidate Starts for Vardy\_53:

(Start: 10 @36805 has 1 MA's), (Start: 17 @36877 has 32 MA's), (20, 36904), (26, 36961), (34, 37084), (36, 37114), (39, 37156), (40, 37162), (45, 37198), (50, 37222), (64, 37333),

Gene: Zeph\_58 Start: 37958, Stop: 38485, Start Num: 10

Candidate Starts for Zeph\_58:

(Start: 10 @37958 has 1 MA's), (Start: 17 @38030 has 32 MA's), (26, 38114), (34, 38237), (36, 38267), (39, 38309), (56, 38429), (58, 38432), (64, 38480),