

Pham 193998



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 193998 Report

This analysis was run 11/02/24 on database version 579.

Pham number 193998 has 67 members, 11 are drafts.

Phages represented in each track:

- Track 1 : Scap1\_36
- Track 2 : HotFries\_36, SheRa\_37, PherryCruz\_36, Doxi13\_37, Annihilus\_37, Bilo\_35, GoblinVoyage\_37, RavenPuff\_36, Moozy\_36
- Track 3 : Poco6\_087
- Track 4 : Pepy6\_088
- Track 5 : Figliar\_54, TenaciousP\_56, EndAve\_57
- Track 6 : Avazak\_58, JulesRay\_59, FortCran\_57, Artorias\_57, Perkunas\_58, Petite\_58
- Track 7 : Runhaar\_56, Vardy\_55, Burley\_56, Crocheter\_56, Nadmeg\_57
- Track 8 : Zeph\_58, Madvan\_56, Phepper\_57, Kenosha\_55
- Track 9 : Eddiemania\_58
- Track 10 : ShaggyRogers\_59, Gusicorn\_58
- Track 11 : Roney\_57, Kerry\_56, Gill\_57, Tanis\_57, Captrips\_56, Copybara\_57, Gravy\_56, Odesza\_56, NoPickles\_56, Magel\_58
- Track 12 : Jodelie19\_55, Chikenjars\_54, Duffington\_54, Nithya\_56, AlainaMarie\_55, OlgasClover\_57, Aflac\_55, BluerMoon\_57
- Track 13 : Arataki\_53, Untouchable\_58
- Track 14 : Pherobrine\_58
- Track 15 : Mysticmoon\_58, Fazel\_57
- Track 16 : Rickmore\_53
- Track 17 : Mossy\_59
- Track 18 : Conley\_55
- Track 19 : OhMyWard\_55
- Track 20 : Hortihabitatio\_57
- Track 21 : Hydrus\_58
- Track 22 : Secretariat\_56
- Track 23 : Schwartz33\_58
- Track 24 : Paella\_97, Qui\_97, Elver\_95

### ***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 40 of the 56 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aflac\_55, AlainaMarie\_55, Arataki\_53, Artorias\_57, Avazak\_58, BluerMoon\_57, Burley\_56, Captrips\_56, Capybara\_57, Chikenjars\_54, Conley\_55, Crocheter\_56, Duffington\_54, Eddiemania\_58, Elver\_95, Fazel\_57, FortCran\_57, Gill\_57, Gravy\_56, Gusicorn\_58, Jodelie19\_55, JulesRay\_59, Kenosha\_55, Kerry\_56, Madvan\_56, Magel\_58, Mossy\_59, Mysticmoon\_58, Nadmeg\_57, Nithya\_56, NoPickles\_56, Odesza\_56, OhMyWard\_55, OlgasClover\_57, Paella\_97, Pepy6\_088, Perkunas\_58, Petite\_58, Phepper\_57, Pherobrine\_58, Qui\_97, Roney\_57, Runhaar\_56, Schwartz33\_58, ShaggyRogers\_59, Tanis\_57, Untouchable\_58, Vardy\_55, Zeph\_58,

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

- EndAve\_57, Figliar\_54, Hortihabitatio\_57, Hydrus\_58, Poco6\_087, Rickmore\_53, Secretariat\_56, TenaciousP\_56,

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

- Annihilus\_37, Bilo\_35, Doxi13\_37, GoblinVoyage\_37, HotFries\_36, Moozy\_36, PherryCruz\_36, RavenPuff\_36, Scap1\_36, SheRa\_37,

### Summary by start number:

Start 15:

- Found in 1 of 67 ( 1.5% ) of genes in pham
- Manual Annotations of this start: 1 of 56
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Scap1\_36 (BI2),

Start 16:

- Found in 2 of 67 ( 3.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Poco6\_087 (CC),

Start 17:

- Found in 35 of 67 ( 52.2% ) of genes in pham
- Manual Annotations of this start: 6 of 56
- Called 20.0% of time when present
- Phage (with cluster) where this start called: EndAve\_57 (DJ), Figliar\_54 (DJ), Hortihabitatio\_57 (DJ), Hydrus\_58 (DJ), Rickmore\_53 (DJ), Secretariat\_56 (DJ), TenaciousP\_56 (DJ),

Start 18:

- Found in 10 of 67 ( 14.9% ) of genes in pham
- Manual Annotations of this start: 9 of 56
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Annihilus\_37 (BI2), Bilo\_35 (BI2), Doxi13\_37 (BI2), GoblinVoyage\_37 (BI2), HotFries\_36 (BI2), Moozy\_36 (BI2), PherryCruz\_36 (BI2), RavenPuff\_36 (BI2), SheRa\_37 (BI2),

Start 19:

- Found in 57 of 67 ( 85.1% ) of genes in pham
- Manual Annotations of this start: 40 of 56
- Called 86.0% of time when present

- Phage (with cluster) where this start called: Aflac\_55 (DJ), AlainaMarie\_55 (DJ), Arataki\_53 (DJ), Artorias\_57 (DJ), Avazak\_58 (DJ), BluerMoon\_57 (DJ), Burley\_56 (DJ), Captrips\_56 (DJ), Cabybara\_57 (DJ), Chikenjars\_54 (DJ), Conley\_55 (DJ), Crocheter\_56 (DJ), Duffington\_54 (DJ), Eddiemania\_58 (DJ), Elver\_95 (FK), Fazel\_57 (DJ), FortCran\_57 (DJ), Gill\_57 (DJ), Gravy\_56 (DJ), Gusicorn\_58 (DJ), Jodelie19\_55 (DJ), JulesRay\_59 (DJ), Kenosha\_55 (DJ), Kerry\_56 (DJ), Madvan\_56 (DJ), Magel\_58 (DJ), Mossy\_59 (DJ), Mysticmoon\_58 (DJ), Nadmeg\_57 (DJ), Nithya\_56 (DJ), NoPickles\_56 (DJ), Odesza\_56 (DJ), OhMyWard\_55 (DJ), OlgasClover\_57 (DJ), Paella\_97 (FK), Pepy6\_088 (CC), Perkunas\_58 (DJ), Petite\_58 (DJ), Phepper\_57 (DJ), Pherobrine\_58 (DJ), Qui\_97 (FK), Roney\_57 (DJ), Runhaar\_56 (DJ), Schwartz33\_58 (DJ), ShaggyRogers\_59 (DJ), Tanis\_57 (DJ), Untouchable\_58 (DJ), Vardy\_55 (DJ), Zeph\_58 (DJ),

### **Summary by clusters:**

There are 4 clusters represented in this pham: CC, DJ, FK, BI2,

Info for manual annotations of cluster BI2:

- Start number 15 was manually annotated 1 time for cluster BI2.
- Start number 18 was manually annotated 9 times for cluster BI2.

Info for manual annotations of cluster DJ:

- Start number 17 was manually annotated 6 times for cluster DJ.
- Start number 19 was manually annotated 38 times for cluster DJ.

Info for manual annotations of cluster FK:

- Start number 19 was manually annotated 2 times for cluster FK.

### **Gene Information:**

Gene: Aflac\_55 Start: 38455, Stop: 38703, Start Num: 19

Candidate Starts for Aflac\_55:

(Start: 17 @38440 has 6 MA's), (Start: 19 @38455 has 40 MA's), (26, 38608),

Gene: AlainaMarie\_55 Start: 38440, Stop: 38688, Start Num: 19

Candidate Starts for AlainaMarie\_55:

(Start: 17 @38425 has 6 MA's), (Start: 19 @38440 has 40 MA's), (26, 38593),

Gene: Annihilus\_37 Start: 27049, Stop: 27300, Start Num: 18

Candidate Starts for Annihilus\_37:

(Start: 18 @27049 has 9 MA's), (25, 27208), (26, 27211),

Gene: Arataki\_53 Start: 38135, Stop: 38383, Start Num: 19

Candidate Starts for Arataki\_53:

(6, 37991), (Start: 17 @38120 has 6 MA's), (Start: 19 @38135 has 40 MA's), (26, 38288),

Gene: Artorias\_57 Start: 38633, Stop: 38884, Start Num: 19

Candidate Starts for Artorias\_57:

(Start: 19 @38633 has 40 MA's), (22, 38723), (26, 38786),

Gene: Avazak\_58 Start: 38960, Stop: 39211, Start Num: 19

Candidate Starts for Avazak\_58:

(Start: 19 @38960 has 40 MA's), (22, 39050), (26, 39113),

Gene: Bilo\_35 Start: 27161, Stop: 27412, Start Num: 18

Candidate Starts for Bilo\_35:

(Start: 18 @27161 has 9 MA's), (25, 27320), (26, 27323),

Gene: BluerMoon\_57 Start: 38484, Stop: 38732, Start Num: 19

Candidate Starts for BluerMoon\_57:

(Start: 17 @38469 has 6 MA's), (Start: 19 @38484 has 40 MA's), (26, 38637),

Gene: Burley\_56 Start: 38225, Stop: 38473, Start Num: 19

Candidate Starts for Burley\_56:

(5, 38060), (12, 38147), (Start: 17 @38210 has 6 MA's), (Start: 19 @38225 has 40 MA's), (26, 38378),

Gene: Captrips\_56 Start: 38108, Stop: 38359, Start Num: 19

Candidate Starts for Captrips\_56:

(Start: 19 @38108 has 40 MA's), (22, 38198), (26, 38261), (27, 38264),

Gene: Capybara\_57 Start: 38439, Stop: 38690, Start Num: 19

Candidate Starts for Capybara\_57:

(Start: 19 @38439 has 40 MA's), (22, 38529), (26, 38592), (27, 38595),

Gene: Chikenjars\_54 Start: 38453, Stop: 38701, Start Num: 19

Candidate Starts for Chikenjars\_54:

(Start: 17 @38438 has 6 MA's), (Start: 19 @38453 has 40 MA's), (26, 38606),

Gene: Conley\_55 Start: 39080, Stop: 39331, Start Num: 19

Candidate Starts for Conley\_55:

(Start: 19 @39080 has 40 MA's), (22, 39170), (24, 39221), (26, 39233),

Gene: Crocheter\_56 Start: 38621, Stop: 38869, Start Num: 19

Candidate Starts for Crocheter\_56:

(5, 38456), (12, 38543), (Start: 17 @38606 has 6 MA's), (Start: 19 @38621 has 40 MA's), (26, 38774),

Gene: Doxi13\_37 Start: 27023, Stop: 27274, Start Num: 18

Candidate Starts for Doxi13\_37:

(Start: 18 @27023 has 9 MA's), (25, 27182), (26, 27185),

Gene: Duffington\_54 Start: 38148, Stop: 38396, Start Num: 19

Candidate Starts for Duffington\_54:

(Start: 17 @38133 has 6 MA's), (Start: 19 @38148 has 40 MA's), (26, 38301),

Gene: Eddiemania\_58 Start: 39366, Stop: 39614, Start Num: 19

Candidate Starts for Eddiemania\_58:

(8, 39246), (Start: 17 @39351 has 6 MA's), (Start: 19 @39366 has 40 MA's), (26, 39519),

Gene: Elver\_95 Start: 54012, Stop: 54290, Start Num: 19

Candidate Starts for Elver\_95:

(Start: 19 @54012 has 40 MA's), (26, 54168),

Gene: EndAve\_57 Start: 38606, Stop: 38869, Start Num: 17

Candidate Starts for EndAve\_57:

(Start: 17 @38606 has 6 MA's), (Start: 19 @38621 has 40 MA's), (26, 38774),

Gene: Fazel\_57 Start: 38400, Stop: 38648, Start Num: 19

Candidate Starts for Fazel\_57:

(Start: 17 @38385 has 6 MA's), (Start: 19 @38400 has 40 MA's), (23, 38508), (26, 38553), (29, 38613),

Gene: Figliar\_54 Start: 38508, Stop: 38771, Start Num: 17

Candidate Starts for Figliar\_54:

(Start: 17 @38508 has 6 MA's), (Start: 19 @38523 has 40 MA's), (26, 38676),

Gene: FortCran\_57 Start: 38633, Stop: 38884, Start Num: 19

Candidate Starts for FortCran\_57:

(Start: 19 @38633 has 40 MA's), (22, 38723), (26, 38786),

Gene: Gill\_57 Start: 38456, Stop: 38707, Start Num: 19

Candidate Starts for Gill\_57:

(Start: 19 @38456 has 40 MA's), (22, 38546), (26, 38609), (27, 38612),

Gene: GoblinVoyage\_37 Start: 27023, Stop: 27274, Start Num: 18

Candidate Starts for GoblinVoyage\_37:

(Start: 18 @27023 has 9 MA's), (25, 27182), (26, 27185),

Gene: Gravy\_56 Start: 38129, Stop: 38380, Start Num: 19

Candidate Starts for Gravy\_56:

(Start: 19 @38129 has 40 MA's), (22, 38219), (26, 38282), (27, 38285),

Gene: Gusicorn\_58 Start: 38538, Stop: 38786, Start Num: 19

Candidate Starts for Gusicorn\_58:

(5, 38376), (Start: 17 @38523 has 6 MA's), (Start: 19 @38538 has 40 MA's), (26, 38691),

Gene: Hortihabitatio\_57 Start: 39213, Stop: 39476, Start Num: 17

Candidate Starts for Hortihabitatio\_57:

(9, 39135), (14, 39162), (Start: 17 @39213 has 6 MA's), (Start: 19 @39228 has 40 MA's), (23, 39336), (26, 39381), (29, 39441),

Gene: HotFries\_36 Start: 27067, Stop: 27318, Start Num: 18

Candidate Starts for HotFries\_36:

(Start: 18 @27067 has 9 MA's), (25, 27226), (26, 27229),

Gene: Hydrus\_58 Start: 39377, Stop: 39640, Start Num: 17

Candidate Starts for Hydrus\_58:

(13, 39317), (Start: 17 @39377 has 6 MA's), (Start: 19 @39392 has 40 MA's), (26, 39545),

Gene: Jodelie19\_55 Start: 39927, Stop: 40175, Start Num: 19

Candidate Starts for Jodelie19\_55:

(Start: 17 @39912 has 6 MA's), (Start: 19 @39927 has 40 MA's), (26, 40080),

Gene: JulesRay\_59 Start: 38629, Stop: 38880, Start Num: 19

Candidate Starts for JulesRay\_59:

(Start: 19 @38629 has 40 MA's), (22, 38719), (26, 38782),

Gene: Kenosha\_55 Start: 38852, Stop: 39100, Start Num: 19

Candidate Starts for Kenosha\_55:

(13, 38777), (Start: 17 @38837 has 6 MA's), (Start: 19 @38852 has 40 MA's), (26, 39005),

Gene: Kerry\_56 Start: 38129, Stop: 38380, Start Num: 19

Candidate Starts for Kerry\_56:

(Start: 19 @38129 has 40 MA's), (22, 38219), (26, 38282), (27, 38285),

Gene: Madvan\_56 Start: 38261, Stop: 38509, Start Num: 19

Candidate Starts for Madvan\_56:

(13, 38186), (Start: 17 @38246 has 6 MA's), (Start: 19 @38261 has 40 MA's), (26, 38414),

Gene: Magel\_58 Start: 38372, Stop: 38623, Start Num: 19

Candidate Starts for Magel\_58:

(Start: 19 @38372 has 40 MA's), (22, 38462), (26, 38525), (27, 38528),

Gene: Moozy\_36 Start: 27024, Stop: 27275, Start Num: 18

Candidate Starts for Moozy\_36:

(Start: 18 @27024 has 9 MA's), (25, 27183), (26, 27186),

Gene: Mossy\_59 Start: 40273, Stop: 40521, Start Num: 19

Candidate Starts for Mossy\_59:

(Start: 17 @40258 has 6 MA's), (Start: 19 @40273 has 40 MA's), (20, 40276), (23, 40381), (26, 40426), (28, 40462), (29, 40486),

Gene: Mysticmoon\_58 Start: 39697, Stop: 39945, Start Num: 19

Candidate Starts for Mysticmoon\_58:

(Start: 17 @39682 has 6 MA's), (Start: 19 @39697 has 40 MA's), (23, 39805), (26, 39850), (29, 39910),

Gene: Nadmeg\_57 Start: 39508, Stop: 39756, Start Num: 19

Candidate Starts for Nadmeg\_57:

(5, 39343), (12, 39430), (Start: 17 @39493 has 6 MA's), (Start: 19 @39508 has 40 MA's), (26, 39661),

Gene: Nithya\_56 Start: 38364, Stop: 38612, Start Num: 19

Candidate Starts for Nithya\_56:

(Start: 17 @38349 has 6 MA's), (Start: 19 @38364 has 40 MA's), (26, 38517),

Gene: NoPickles\_56 Start: 37794, Stop: 38045, Start Num: 19

Candidate Starts for NoPickles\_56:

(Start: 19 @37794 has 40 MA's), (22, 37884), (26, 37947), (27, 37950),

Gene: Odesza\_56 Start: 38316, Stop: 38567, Start Num: 19

Candidate Starts for Odesza\_56:

(Start: 19 @38316 has 40 MA's), (22, 38406), (26, 38469), (27, 38472),

Gene: OhMyWard\_55 Start: 40027, Stop: 40275, Start Num: 19

Candidate Starts for OhMyWard\_55:

(7, 39883), (11, 39940), (Start: 17 @40012 has 6 MA's), (Start: 19 @40027 has 40 MA's), (23, 40135), (26, 40180), (28, 40216), (29, 40240),

Gene: OlgasClover\_57 Start: 39508, Stop: 39756, Start Num: 19

Candidate Starts for OlgasClover\_57:

(Start: 17 @39493 has 6 MA's), (Start: 19 @39508 has 40 MA's), (26, 39661),

Gene: Paella\_97 Start: 54602, Stop: 54880, Start Num: 19

Candidate Starts for Paella\_97:

(Start: 19 @54602 has 40 MA's), (26, 54758),

Gene: Pepy6\_088 Start: 48806, Stop: 49051, Start Num: 19

Candidate Starts for Pepy6\_088:

(10, 48716), (16, 48779), (Start: 19 @48806 has 40 MA's), (21, 48821), (26, 48959),

Gene: Perkunas\_58 Start: 38597, Stop: 38848, Start Num: 19

Candidate Starts for Perkunas\_58:

(Start: 19 @38597 has 40 MA's), (22, 38687), (26, 38750),

Gene: Petito\_58 Start: 39754, Stop: 40005, Start Num: 19

Candidate Starts for Petito\_58:

(Start: 19 @39754 has 40 MA's), (22, 39844), (26, 39907),

Gene: Phepper\_57 Start: 38523, Stop: 38771, Start Num: 19

Candidate Starts for Phepper\_57:

(13, 38448), (Start: 17 @38508 has 6 MA's), (Start: 19 @38523 has 40 MA's), (26, 38676),

Gene: Pherobrine\_58 Start: 40107, Stop: 40355, Start Num: 19

Candidate Starts for Pherobrine\_58:

(14, 40041), (Start: 17 @40092 has 6 MA's), (Start: 19 @40107 has 40 MA's), (23, 40215), (26, 40260), (29, 40320),

Gene: PherryCruz\_36 Start: 27019, Stop: 27270, Start Num: 18

Candidate Starts for PherryCruz\_36:

(Start: 18 @27019 has 9 MA's), (25, 27178), (26, 27181),

Gene: Poco6\_087 Start: 50294, Stop: 50566, Start Num: 16

Candidate Starts for Poco6\_087:

(16, 50294), (Start: 19 @50321 has 40 MA's), (21, 50336), (26, 50474),

Gene: Qui\_97 Start: 54602, Stop: 54880, Start Num: 19

Candidate Starts for Qui\_97:

(Start: 19 @54602 has 40 MA's), (26, 54758),

Gene: RavenPuff\_36 Start: 27019, Stop: 27270, Start Num: 18

Candidate Starts for RavenPuff\_36:

(Start: 18 @27019 has 9 MA's), (25, 27178), (26, 27181),

Gene: Rickmore\_53 Start: 36852, Stop: 37115, Start Num: 17

Candidate Starts for Rickmore\_53:

(Start: 17 @36852 has 6 MA's), (Start: 19 @36867 has 40 MA's), (26, 37020),

Gene: Roney\_57 Start: 38482, Stop: 38733, Start Num: 19

Candidate Starts for Roney\_57:

(Start: 19 @38482 has 40 MA's), (22, 38572), (26, 38635), (27, 38638),

Gene: Runhaar\_56 Start: 38324, Stop: 38572, Start Num: 19

Candidate Starts for Runhaar\_56:



(5, 38159), (12, 38246), (Start: 17 @38309 has 6 MA's), (Start: 19 @38324 has 40 MA's), (26, 38477),

Gene: Scap1\_36 Start: 26822, Stop: 27139, Start Num: 15

Candidate Starts for Scap1\_36:

(Start: 15 @26822 has 1 MA's), (Start: 18 @26888 has 9 MA's), (25, 27047), (26, 27050),

Gene: Schwartz33\_58 Start: 38741, Stop: 38989, Start Num: 19

Candidate Starts for Schwartz33\_58:

(Start: 17 @38726 has 6 MA's), (Start: 19 @38741 has 40 MA's), (22, 38831), (26, 38894),

Gene: Secretariat\_56 Start: 37693, Stop: 37956, Start Num: 17

Candidate Starts for Secretariat\_56:

(1, 37381), (2, 37462), (3, 37495), (4, 37504), (Start: 17 @37693 has 6 MA's), (Start: 19 @37708 has 40 MA's), (24, 37849), (26, 37861),

Gene: ShaggyRogers\_59 Start: 38274, Stop: 38522, Start Num: 19

Candidate Starts for ShaggyRogers\_59:

(5, 38112), (Start: 17 @38259 has 6 MA's), (Start: 19 @38274 has 40 MA's), (26, 38427),

Gene: SheRa\_37 Start: 27065, Stop: 27316, Start Num: 18

Candidate Starts for SheRa\_37:

(Start: 18 @27065 has 9 MA's), (25, 27224), (26, 27227),

Gene: Tanis\_57 Start: 38302, Stop: 38553, Start Num: 19

Candidate Starts for Tanis\_57:

(Start: 19 @38302 has 40 MA's), (22, 38392), (26, 38455), (27, 38458),

Gene: TenaciousP\_56 Start: 39874, Stop: 40137, Start Num: 17

Candidate Starts for TenaciousP\_56:

(Start: 17 @39874 has 6 MA's), (Start: 19 @39889 has 40 MA's), (26, 40042),

Gene: Untouchable\_58 Start: 39434, Stop: 39682, Start Num: 19

Candidate Starts for Untouchable\_58:

(6, 39290), (Start: 17 @39419 has 6 MA's), (Start: 19 @39434 has 40 MA's), (26, 39587),

Gene: Vardy\_55 Start: 38214, Stop: 38462, Start Num: 19

Candidate Starts for Vardy\_55:

(5, 38049), (12, 38136), (Start: 17 @38199 has 6 MA's), (Start: 19 @38214 has 40 MA's), (26, 38367),

Gene: Zeph\_58 Start: 39362, Stop: 39610, Start Num: 19

Candidate Starts for Zeph\_58:

(13, 39287), (Start: 17 @39347 has 6 MA's), (Start: 19 @39362 has 40 MA's), (26, 39515),