Pham 145838


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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 145838 Report

This analysis was run 04/05/24 on database version 557.
Pham number 145838 has 34 members, 8 are drafts.
Phages represented in each track:

- Track 1 : Mercedes_58
- Track 2 : NarutoRun_76, Hiddenleaf_77, JingleBells_77, OverHedge_76, CoolCookie_81, Snakēhole_77, Cybele_76, PhunaPhoke_76, Erudite_75, AnnaSerenā 76, Kate_76, Ḡilda_76, Hāunter_77, FreddiēHg_77, JDawG_75, MortySmith_74, Pharpāy_75, Krāpus_76, An̄akin_76, Potty_75, Neptunē_76, DannyDe_7̄7, Rachella_76, Dauntless_76, Chivey_77, Poultress_76
- Track 3: Rie18_76, Hāger_78
- Track 4 : Aesir_75
- Track 5 : Karate_75
- Track 6 : Tedro_76
- Track 7 : Crestdrop_79
- Track 8 : FuzzBuster_20


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

The start number called the most often in the published annotations is 4, it was called in 23 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anakin_76, AnnaSerena_76, Chivey_77, CoolCookie_81, Cybele_76, DannyDe_77, Dauntless_76, Erudite_75, FreddieHg_77, Gilda_76, Hager_78, Haunter_77, Hiddenleaf_77, JDawG_75, JingleBells_77, Karāe_75, Katē_76, Krampus_76, MortySmith_74, NarutoRun_76, Neptune_76, OverHedge_76, Pharpay_75, PhunaPhoke_76, Potty_75, Poultress_76, Rachella_76, Rie18_76, Snakehole_77, Tedro_76,

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

- Aesir_75, Crestdrop_79,

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

- FuzzBuster_20, Mercedes_58,


## Summary by start number:

Start 3:

- Found in 31 of 34 ( $91.2 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called $3.2 \%$ of time when present
- Phage (with cluster) where this start called: Aesir_75 (EF),

Start 4:

- Found in 32 of 34 ( $94.1 \%$ ) of genes in pham
- Manual Annotations of this start: 23 of 26
- Called $93.8 \%$ of time when present
- Phage (with cluster) where this start called: Anakin_76 (EF), AnnaSerena_76 (EF), Chivey_77 (EF), CoolCookie_81 (EF), Cybele_76 (EF), DannyDe_77 (EF),
Dauntless_76 (EF), Erudite_75 (EF), FreddieHg_77 (EF), Gilda_76 (EF), Hager_78 (EF), Haunter_77 (EF), Hiddenleaf_77 (EF), JDawG_75 (EF), JingleBells_77 (EF), Karate_75 (EF), Kate_76 (EF), Krampus_76 (EF), MortySmith_74 (EF),
NarutoR̄un_76 (EF), Neptune 76 (EF), OverHedge_76 (EF), Pharpay_ 75 (EF),
PhunaPhoke 76 (EF), Potty 75 (EF), Poultress 76 (EF), Rachella_76 (EF), Rie18_76 (EF), Snakehole_77 (EF), Tedro_76 (EF),

Start 6:

- Found in 1 of 34 ( $2.9 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Mercedes_58 (EA),

Start 8:

- Found in 1 of 34 ( $2.9 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: FuzzBuster_20 (singleton),

Start 9:

- Found in 30 of 34 ( $88.2 \%$ ) of genes in pham
- No Manual Annotations of this start.
- Called $3.3 \%$ of time when present
- Phage (with cluster) where this start called: Crestdrop_79 (EF),


## Summary by clusters:

There are 3 clusters represented in this pham: singleton, EF, EA,
Info for manual annotations of cluster EA:

- Start number 6 was manually annotated 1 time for cluster EA.

Info for manual annotations of cluster EF:

- Start number 3 was manually annotated 1 time for cluster EF.
-Start number 4 was manually annotated 23 times for cluster EF.


## Gene Information:

Gene: Aesir_75 Start: 52985, Stop: 53188, Start Num: 3

Candidate Starts for Aesir_75:
(Start: 3 @52985 has 1 MA's's), (Start: 4 @53000 has 23 MA's), (9, 53057), (12, 53135), (13, 53153), $(14,53165)$,

Gene: Anakin_76 Start: 53365, Stop: 53553, Start Num: 4
Candidate Starts for Anakin_76:
(Start: 3 @53350 has 1 MA's), (Start: 4 @53365 has 23 MA's), (9, 53422), (12, 53500), (13, 53518), $(14,53530)$,

Gene: AnnaSerena_76 Start: 53399, Stop: 53587, Start Num: 4
Candidate Starts for AnnaSerena_76:
(Start: 3 @53384 has 1 MA's), (Start: 4 @53399 has 23 MA's), (9, 53456), (12, 53534), (13, 53552), $(14,53564)$,

Gene: Chivey_77 Start: 52802, Stop: 52990, Start Num: 4
Candidate Starts for Chivey_77:
(Start: 3 @52787 has 1 MA's), (Start: 4 @52802 has 23 MA's), (9, 52859), (12, 52937), (13, 52955), $(14,52967)$,

Gene: CoolCookie_81 Start: 53498, Stop: 53686, Start Num: 4
Candidate Starts for CoolCookie_81:
(Start: 3 @53483 has 1 MA's), (Start: 4 @53498 has 23 MA's), (9, 53555), (12, 53633), (13, 53651), $(14,53663)$,

Gene: Crestdrop_79 Start: 53376, Stop: 53507, Start Num: 9
Candidate Starts for Crestdrop_79:
(Start: 4 @53319 has 23 MA's), (9, 53376), (12, 53454), (13, 53472), (14, 53484),
Gene: Cybele_76 Start: 53395, Stop: 53583, Start Num: 4
Candidate Starts for Cybele_76:
(Start: 3 @53380 has 1 MA's), (Start: 4 @53395 has 23 MA's), ( 9,53452 ), (12, 53530), (13, 53548), $(14,53560)$,

Gene: DannyDe_77 Start: 52804, Stop: 52992, Start Num: 4
Candidate Starts for DannyDe_77:
(Start: 3 @52789 has 1 MA's), (Start: 4 @52804 has 23 MA's), (9, 52861), (12, 52939), (13, 52957), $(14,52969)$,

Gene: Dauntless_76 Start: 53031, Stop: 53219, Start Num: 4
Candidate Starts for Dauntless_76:
(Start: 3 @ 53016 has 1 MA's), (Start: 4 @53031 has 23 MA's), ( 9,53088 ), (12, 53166), (13, 53184), $(14,53196)$,

Gene: Erudite_75 Start: 53031, Stop: 53219, Start Num: 4
Candidate Starts for Erudite_75:
(Start: 3 @ 53016 has 1 MA's), (Start: 4 @53031 has 23 MA's), (9, 53088), (12, 53166), (13, 53184), $(14,53196)$,

Gene: FreddieHg_77 Start: 52819, Stop: 53007, Start Num: 4
Candidate Starts for FreddieHg_77:
(Start: 3 @52804 has 1 MA's), (Start: 4 @52819 has 23 MA's), (9, 52876), (12, 52954), (13, 52972), $(14,52984)$,

Gene: FuzzBuster_20 Start: 7753, Stop: 7890, Start Num: 8
Candidate Starts for FuzzBuster_20:
(7, 7738), (Start: 8 @7753 has 1 MA's), (10, 7762), (12, 7828), (13, 7846),
Gene: Gilda_76 Start: 53387, Stop: 53575, Start Num: 4
Candidate Starts for Gilda_76:
(Start: 3 @ 53372 has 1 MA's), (Start: 4 @53387 has 23 MA's), ( 9,53444 ), (12, 53522), (13, 53540), $(14,53552)$,

Gene: Hager_78 Start: 52853, Stop: 53041, Start Num: 4
Candidate Starts for Hager_78:
(Start: 3 @52838 has 1 MA's), (Start: 4 @52853 has 23 MA's), (12, 52988), (13, 53006), (14, 53018),
Gene: Haunter_77 Start: 52808, Stop: 52996, Start Num: 4
Candidate Starts for Haunter_77:
(Start: 3 @52793 has 1 MA's), (Start: 4 @52808 has 23 MA's), (9, 52865), (12, 52943), (13, 52961), $(14,52973)$,

Gene: Hiddenleaf_77 Start: 52802, Stop: 52990, Start Num: 4 Candidate Starts for Hiddenleaf_77:
(Start: 3 @ 52787 has 1 MA's), (Start: 4 @52802 has 23 MA's), (9, 52859), (12, 52937), (13, 52955), $(14,52967)$,

Gene: JDawG_75 Start: 52995, Stop: 53183, Start Num: 4 Candidate Starts for JDawG_75:
(Start: 3 @52980 has 1 MA's), (Start: 4 @52995 has 23 MA's), (9, 53052), (12, 53130), (13, 53148), $(14,53160)$,

Gene: JingleBells_77 Start: 52907, Stop: 53095, Start Num: 4
Candidate Starts for JingleBells_77:
(Start: 3 @52892 has 1 MA's), (Start: 4 @52907 has 23 MA's), (9, 52964), (12, 53042), (13, 53060), $(14,53072)$,

Gene: Karate_75 Start: 53099, Stop: 53287, Start Num: 4
Candidate Starts for Karate_75:
(Start: 3 @53084 has 1 MA's), (Start: 4 @53099 has 23 MA's), (9, 53156), (13, 53252), (14, 53264),
Gene: Kate_76 Start: 53310, Stop: 53498, Start Num: 4
Candidate Starts for Kate_76:
(Start: 3 @ 53295 has 1 MA's), (Start: 4 @53310 has 23 MA's), ( 9,53367 ), (12, 53445), (13, 53463), $(14,53475)$,

Gene: Krampus_76 Start: 53400, Stop: 53588, Start Num: 4
Candidate Starts for Krampus_76:
(Start: 3 @ 53385 has 1 MA's), (Start: 4 @53400 has 23 MA's), ( 9,53457 ), (12, 53535), (13, 53553), $(14,53565)$,

Gene: Mercedes_58 Start: 39826, Stop: 40002, Start Num: 6 Candidate Starts for Mercedes_58:
(2, 39766), (5, 39823), (Start: 6 @39826 has 1 MA's), (11, 39919),
Gene: MortySmith_74 Start: 52505, Stop: 52693, Start Num: 4
Candidate Starts for MortySmith_74:
(Start: 3 @52490 has 1 MA's), (Start: 4 @52505 has 23 MA's), (9, 52562), (12, 52640), (13, 52658), (14, 52670),

Gene: NarutoRun_76 Start: 53365, Stop: 53553, Start Num: 4
Candidate Starts for NarutoRun_76:
(Start: 3 @53350 has 1 MA's), (Start: 4 @53365 has 23 MA's), (9, 53422), (12, 53500), (13, 53518), (14, 53530),

Gene: Neptune_76 Start: 53395, Stop: 53583, Start Num: 4
Candidate Starts for Neptune_76:
(Start: 3 @53380 has 1 MA's), (Start: 4 @53395 has 23 MA's), (9, 53452), (12, 53530), (13, 53548), (14, 53560),

Gene: OverHedge_76 Start: 53261, Stop: 53449, Start Num: 4
Candidate Starts for OverHedge_76:
(Start: 3 @53246 has 1 MA's), (Start: 4 @53261 has 23 MA's), (9, 53318), (12, 53396), (13, 53414), (14, 53426),

Gene: Pharpay_75 Start: 53410, Stop: 53598, Start Num: 4
Candidate Starts for Pharpay_75:
(Start: 3 @53395 has 1 MA's), (Start: 4 @53410 has 23 MA's), (9, 53467), (12, 53545), (13, 53563), (14, 53575),

Gene: PhunaPhoke_76 Start: 53380, Stop: 53568, Start Num: 4 Candidate Starts for PhunaPhoke_76:
(Start: 3 @53365 has 1 MA's), (Start: 4 @53380 has 23 MA's), (9, 53437), (12, 53515), (13, 53533), $(14,53545)$,

Gene: Potty_75 Start: 53310, Stop: 53498, Start Num: 4
Candidate Starts for Potty_75:
(Start: 3 @53295 has 1 MA's), (Start: 4 @53310 has 23 MA's), (9, 53367), (12, 53445), (13, 53463), (14, 53475),

Gene: Poultress_76 Start: 53607, Stop: 53795, Start Num: 4
Candidate Starts for Poultress_76:
(Start: 3 @53592 has 1 MA's), (Start: 4 @53607 has 23 MA's), (9, 53664), (12, 53742), (13, 53760), (14, 53772),

Gene: Rachella_76 Start: 53391, Stop: 53579, Start Num: 4
Candidate Starts for Rachella_76:
(Start: 3 @53376 has 1 MA's), (Start: 4 @53391 has 23 MA's), (9, 53448), (12, 53526), (13, 53544), (14, 53556),

Gene: Rie18_76 Start: 53133, Stop: 53321, Start Num: 4
Candidate Starts for Rie18_76:
(Start: 3 @53118 has 1 MA's), (Start: 4 @53133 has 23 MA's), (12, 53268), (13, 53286), (14, 53298),
Gene: Snakehole_77 Start: 52751, Stop: 52939, Start Num: 4
Candidate Starts for Snakehole_77:
(Start: 3 @52736 has 1 MA's), (Start: 4 @52751 has 23 MA's), (9, 52808), (12, 52886), (13, 52904), (14, 52916),

Gene: Tedro_76 Start: 52895, Stop: 53083, Start Num: 4

Candidate Starts for Tedro_76:
(1, 52859), (Start: 3 @52880 has 1 MA's), (Start: 4 @52895 has 23 MA's), (9, 52952), (13, 53048), $(14,53060)$,

