

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 287925 Report

This analysis was run 03/28/26 on database version 641.

Pham number 287925 has 59 members, 7 are drafts.

Phages represented in each track:

- Track 1 : EarickHC_69, Pulchra_70, Quhwah_72, Shotgun_68, PhedwardCullen_66, Paschalis_68, Busephilis_67, Savannah_67, Ganandorf_67, PierreOrion_68, Phorgeous_68, Jefe_68, Selwyn23_69, Cranjjs_69, KaiHaiDragon_69, Crisis_69, BeagleBug_67, Piperis_69, Scumberland_70, BrazzalePHS_67, Jollipop_69, CrazyRich_67, Ramiel05_67, Glorp_69, Phrancesco_68, Lucretia_68, Kowalski_67, Antares_68
- Track 2 : Shrubaron_72
- Track 3 : Hermeonysus_68, Yeti_70, LittleFortune_70, Rockwell_67, Honeyfin_69, PiperSansNom_69, Onika_67
- Track 4 : Fireman_71, Tyrumbra_67, RobsFeet_72
- Track 5 : ClearAsMud_72
- Track 6 : Metamorphoo_71
- Track 7 : Sunny_, Merry_
- Track 8 : SirFrank_68
- Track 9 : Jayden_69
- Track 10 : Zapato_68
- Track 11 : Gina_72, Teamocil_72
- Track 12 : Ariadne_78, Smarties_78
- Track 13 : Skugga_68
- Track 14 : NoodlelyBoi_69
- Track 15 : Matzah_69, MementoMori_68, Cinna_67
- Track 16 : Kozie_66
- Track 17 : Terij_66
- Track 18 : Cressida_70
- Track 19 : Margaery_66

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

The start number called the most often in the published annotations is 18, it was called in 45 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antares_68, Ariadne_78, BeagleBug_67, BrazzalePHS_67, Busephilis_67, ClearAsMud_72, Cranjjs_69, CrazyRich_67, Crisis_69, EarickHC_69, Fireman_71,

Ganandorf_67, Gina_72, Glorp_69, Hermeonysus_68, Honeyfin_69, Jayden_69, Jefe_68, Jollipop_69, KaiHaiDragon_69, Kowalski_67, LittleFortune_70, Lucretia_68, Merry_, Metamorphoo_71, NoodlelyBoi_69, Onika_67, Paschalis_68, PhedwardCullen_66, Phorgeous_68, Phrancesco_68, PierreOrion_68, PiperSansNom_69, Piperis_69, Pulchra_70, Quhwah_72, Ramiel05_67, RobsFeet_72, Rockwell_67, Savannah_67, Scumberland_70, Selwyn23_69, Shotgun_68, Shrubaron_72, SirFrank_68, Skugga_68, Smarties_78, Sunny_, Teamocil_72, Tyrumbra_67, Yeti_70, Zapato_68,

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

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

- Cinna_67, Cressida_70, Kozie_66, Margaery_66, Matzah_69, MementoMori_68, Terij_66,

Summary by start number:

Start 15:

- Found in 6 of 59 (10.2%) of genes in pham
- Manual Annotations of this start: 6 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cinna_67 (EI), Cressida_70 (EI), Margaery_66 (EI), Matzah_69 (EI), MementoMori_68 (EI), Terij_66 (EI),

Start 16:

- Found in 1 of 59 (1.7%) 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: Kozie_66 (EI),

Start 18:

- Found in 52 of 59 (88.1%) of genes in pham
- Manual Annotations of this start: 45 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antares_68 (EC), Ariadne_78 (EC), BeagleBug_67 (EC), BrazzalePHS_67 (EC), Busephilis_67 (EC), ClearAsMud_72 (EC), Cranjjs_69 (EC), CrazyRich_67 (EC), Crisis_69 (EC), EarickHC_69 (EC), Fireman_71 (EC), Ganandorf_67 (EC), Gina_72 (EC), Glorp_69 (EC), Hermeonysus_68 (EC), Honeyfin_69 (EC), Jayden_69 (EC), Jefe_68 (EC), Jollipop_69 (EC), KaiHaiDragon_69 (EC), Kowalski_67 (EC), LittleFortune_70 (EC), Lucretia_68 (EC), Merry_ (EC), Metamorphoo_71 (EC), NoodlelyBoi_69 (EC), Onika_67 (EC), Paschalis_68 (EC), PhedwardCullen_66 (EC), Phorgeous_68 (EC), Phrancesco_68 (EC), PierreOrion_68 (EC), PiperSansNom_69 (EC), Piperis_69 (EC), Pulchra_70 (EC), Quhwah_72 (EC), Ramiel05_67 (EC), RobsFeet_72 (EC), Rockwell_67 (EC), Savannah_67 (EC), Scumberland_70 (EC), Selwyn23_69 (EC), Shotgun_68 (EC), Shrubaron_72 (EC), SirFrank_68 (EC), Skugga_68 (EC), Smarties_78 (EC), Sunny_ (EC), Teamocil_72 (EC), Tyrumbra_67 (EC), Yeti_70 (EC), Zapato_68 (EC),

Summary by clusters:

There are 2 clusters represented in this pham: EI, EC,

Info for manual annotations of cluster EC:

- Start number 18 was manually annotated 45 times for cluster EC.

Info for manual annotations of cluster EI:

- Start number 15 was manually annotated 6 times for cluster EI.
- Start number 16 was manually annotated 1 time for cluster EI.

Gene Information:

Gene: Antares_68 Start: 42753, Stop: 42947, Start Num: 18

Candidate Starts for Antares_68:

(Start: 18 @42753 has 45 MA's), (22, 42786), (23, 42792), (29, 42852), (33, 42894),

Gene: Ariadne_78 Start: 44331, Stop: 44549, Start Num: 18

Candidate Starts for Ariadne_78:

(Start: 18 @44331 has 45 MA's), (20, 44343), (28, 44409),

Gene: BeagleBug_67 Start: 42533, Stop: 42727, Start Num: 18

Candidate Starts for BeagleBug_67:

(Start: 18 @42533 has 45 MA's), (22, 42566), (23, 42572), (29, 42632), (33, 42674),

Gene: BrazzalePHS_67 Start: 42521, Stop: 42715, Start Num: 18

Candidate Starts for BrazzalePHS_67:

(Start: 18 @42521 has 45 MA's), (22, 42554), (23, 42560), (29, 42620), (33, 42662),

Gene: Busephilis_67 Start: 42460, Stop: 42654, Start Num: 18

Candidate Starts for Busephilis_67:

(Start: 18 @42460 has 45 MA's), (22, 42493), (23, 42499), (29, 42559), (33, 42601),

Gene: Cinna_67 Start: 44120, Stop: 44341, Start Num: 15

Candidate Starts for Cinna_67:

(14, 44108), (Start: 15 @44120 has 6 MA's), (20, 44141), (22, 44162), (23, 44168), (30, 44273), (33, 44285),

Gene: ClearAsMud_72 Start: 43041, Stop: 43235, Start Num: 18

Candidate Starts for ClearAsMud_72:

(2, 42747), (3, 42756), (5, 42783), (Start: 18 @43041 has 45 MA's), (22, 43074), (23, 43080), (29, 43140), (33, 43182),

Gene: Cranjis_69 Start: 42708, Stop: 42902, Start Num: 18

Candidate Starts for Cranjis_69:

(Start: 18 @42708 has 45 MA's), (22, 42741), (23, 42747), (29, 42807), (33, 42849),

Gene: CrazyRich_67 Start: 42514, Stop: 42708, Start Num: 18

Candidate Starts for CrazyRich_67:

(Start: 18 @42514 has 45 MA's), (22, 42547), (23, 42553), (29, 42613), (33, 42655),

Gene: Cressida_70 Start: 43720, Stop: 43941, Start Num: 15

Candidate Starts for Cressida_70:

(14, 43708), (Start: 15 @43720 has 6 MA's), (20, 43741), (22, 43762), (23, 43768), (30, 43873), (32, 43882), (33, 43885),

Gene: Crisis_69 Start: 42523, Stop: 42717, Start Num: 18

Candidate Starts for Crisis_69:

(Start: 18 @42523 has 45 MA's), (22, 42556), (23, 42562), (29, 42622), (33, 42664),

Gene: EarickHC_69 Start: 42445, Stop: 42639, Start Num: 18

Candidate Starts for EarickHC_69:

(Start: 18 @42445 has 45 MA's), (22, 42478), (23, 42484), (29, 42544), (33, 42586),

Gene: Fireman_71 Start: 44449, Stop: 44691, Start Num: 18

Candidate Starts for Fireman_71:

(Start: 18 @44449 has 45 MA's), (20, 44461), (22, 44482), (23, 44488), (26, 44521), (33, 44602),

Gene: Ganandorf_67 Start: 42541, Stop: 42735, Start Num: 18

Candidate Starts for Ganandorf_67:

(Start: 18 @42541 has 45 MA's), (22, 42574), (23, 42580), (29, 42640), (33, 42682),

Gene: Gina_72 Start: 42545, Stop: 42793, Start Num: 18

Candidate Starts for Gina_72:

(17, 42542), (Start: 18 @42545 has 45 MA's), (22, 42578), (23, 42584), (27, 42620), (33, 42704),

Gene: Glorp_69 Start: 42505, Stop: 42699, Start Num: 18

Candidate Starts for Glorp_69:

(Start: 18 @42505 has 45 MA's), (22, 42538), (23, 42544), (29, 42604), (33, 42646),

Gene: Hermeonysus_68 Start: 42430, Stop: 42624, Start Num: 18

Candidate Starts for Hermeonysus_68:

(Start: 18 @42430 has 45 MA's), (22, 42463), (23, 42469), (29, 42529), (33, 42571), (34, 42595),

Gene: Honeyfin_69 Start: 42690, Stop: 42884, Start Num: 18

Candidate Starts for Honeyfin_69:

(Start: 18 @42690 has 45 MA's), (22, 42723), (23, 42729), (29, 42789), (33, 42831), (34, 42855),

Gene: Jayden_69 Start: 42907, Stop: 43149, Start Num: 18

Candidate Starts for Jayden_69:

(Start: 18 @42907 has 45 MA's), (20, 42919), (22, 42940), (23, 42946), (25, 42970), (29, 43018), (33, 43060),

Gene: Jefe_68 Start: 42491, Stop: 42685, Start Num: 18

Candidate Starts for Jefe_68:

(Start: 18 @42491 has 45 MA's), (22, 42524), (23, 42530), (29, 42590), (33, 42632),

Gene: Jollipop_69 Start: 42879, Stop: 43073, Start Num: 18

Candidate Starts for Jollipop_69:

(Start: 18 @42879 has 45 MA's), (22, 42912), (23, 42918), (29, 42978), (33, 43020),

Gene: KaiHaiDragon_69 Start: 42445, Stop: 42639, Start Num: 18

Candidate Starts for KaiHaiDragon_69:

(Start: 18 @42445 has 45 MA's), (22, 42478), (23, 42484), (29, 42544), (33, 42586),

Gene: Kowalski_67 Start: 42516, Stop: 42710, Start Num: 18

Candidate Starts for Kowalski_67:

(Start: 18 @42516 has 45 MA's), (22, 42549), (23, 42555), (29, 42615), (33, 42657),

Gene: Kozie_66 Start: 43163, Stop: 43441, Start Num: 16

Candidate Starts for Kozie_66:

(Start: 16 @43163 has 1 MA's), (23, 43208), (29, 43280), (33, 43322),

Gene: LittleFortune_70 Start: 42801, Stop: 42995, Start Num: 18

Candidate Starts for LittleFortune_70:

(Start: 18 @42801 has 45 MA's), (22, 42834), (23, 42840), (29, 42900), (33, 42942), (34, 42966),

Gene: Lucretia_68 Start: 42423, Stop: 42617, Start Num: 18

Candidate Starts for Lucretia_68:

(Start: 18 @42423 has 45 MA's), (22, 42456), (23, 42462), (29, 42522), (33, 42564),

Gene: Margaery_66 Start: 43326, Stop: 43547, Start Num: 15

Candidate Starts for Margaery_66:

(14, 43314), (Start: 15 @43326 has 6 MA's), (22, 43368), (23, 43374), (30, 43479), (33, 43491),

Gene: Matzah_69 Start: 44187, Stop: 44408, Start Num: 15

Candidate Starts for Matzah_69:

(14, 44175), (Start: 15 @44187 has 6 MA's), (20, 44208), (22, 44229), (23, 44235), (30, 44340), (33, 44352),

Gene: MementoMori_68 Start: 43782, Stop: 43997, Start Num: 15

Candidate Starts for MementoMori_68:

(14, 43770), (Start: 15 @43782 has 6 MA's), (20, 43803), (22, 43824), (23, 43830), (30, 43935), (33, 43947),

Gene: Merry_ Start: 44599, Stop: 44841, Start Num: 18

Candidate Starts for Merry_:

(6, 44344), (12, 44527), (13, 44536), (Start: 18 @44599 has 45 MA's), (20, 44611), (23, 44638), (29, 44710), (30, 44740), (33, 44752),

Gene: Metamorphoo_71 Start: 43743, Stop: 43985, Start Num: 18

Candidate Starts for Metamorphoo_71:

(4, 43470), (7, 43533), (9, 43542), (10, 43557), (Start: 18 @43743 has 45 MA's), (22, 43776), (23, 43782), (26, 43815), (33, 43896),

Gene: NoodlelyBoi_69 Start: 43290, Stop: 43484, Start Num: 18

Candidate Starts for NoodlelyBoi_69:

(2, 42996), (3, 43005), (5, 43032), (Start: 18 @43290 has 45 MA's), (22, 43323), (23, 43329), (29, 43389), (33, 43431), (34, 43455),

Gene: Onika_67 Start: 42519, Stop: 42713, Start Num: 18

Candidate Starts for Onika_67:

(Start: 18 @42519 has 45 MA's), (22, 42552), (23, 42558), (29, 42618), (33, 42660), (34, 42684),

Gene: Paschalis_68 Start: 42544, Stop: 42738, Start Num: 18

Candidate Starts for Paschalis_68:

(Start: 18 @42544 has 45 MA's), (22, 42577), (23, 42583), (29, 42643), (33, 42685),

Gene: PhedwardCullen_66 Start: 42261, Stop: 42455, Start Num: 18

Candidate Starts for PhedwardCullen_66:

(Start: 18 @42261 has 45 MA's), (22, 42294), (23, 42300), (29, 42360), (33, 42402),

Gene: Phorgeous_68 Start: 42327, Stop: 42521, Start Num: 18

Candidate Starts for Phorgeous_68:

(Start: 18 @42327 has 45 MA's), (22, 42360), (23, 42366), (29, 42426), (33, 42468),

Gene: Phrancesco_68 Start: 42650, Stop: 42844, Start Num: 18

Candidate Starts for Phrancesco_68:

(Start: 18 @42650 has 45 MA's), (22, 42683), (23, 42689), (29, 42749), (33, 42791),

Gene: PierreOrion_68 Start: 42756, Stop: 42950, Start Num: 18

Candidate Starts for PierreOrion_68:

(Start: 18 @42756 has 45 MA's), (22, 42789), (23, 42795), (29, 42855), (33, 42897),

Gene: PiperSansNom_69 Start: 42829, Stop: 43023, Start Num: 18

Candidate Starts for PiperSansNom_69:

(Start: 18 @42829 has 45 MA's), (22, 42862), (23, 42868), (29, 42928), (33, 42970), (34, 42994),

Gene: Piperis_69 Start: 42452, Stop: 42646, Start Num: 18

Candidate Starts for Piperis_69:

(Start: 18 @42452 has 45 MA's), (22, 42485), (23, 42491), (29, 42551), (33, 42593),

Gene: Pulchra_70 Start: 42848, Stop: 43042, Start Num: 18

Candidate Starts for Pulchra_70:

(Start: 18 @42848 has 45 MA's), (22, 42881), (23, 42887), (29, 42947), (33, 42989),

Gene: Quhwah_72 Start: 43137, Stop: 43331, Start Num: 18

Candidate Starts for Quhwah_72:

(Start: 18 @43137 has 45 MA's), (22, 43170), (23, 43176), (29, 43236), (33, 43278),

Gene: Ramiel05_67 Start: 42516, Stop: 42710, Start Num: 18

Candidate Starts for Ramiel05_67:

(Start: 18 @42516 has 45 MA's), (22, 42549), (23, 42555), (29, 42615), (33, 42657),

Gene: RobsFeet_72 Start: 44029, Stop: 44271, Start Num: 18

Candidate Starts for RobsFeet_72:

(Start: 18 @44029 has 45 MA's), (20, 44041), (22, 44062), (23, 44068), (26, 44101), (33, 44182),

Gene: Rockwell_67 Start: 42540, Stop: 42734, Start Num: 18

Candidate Starts for Rockwell_67:

(Start: 18 @42540 has 45 MA's), (22, 42573), (23, 42579), (29, 42639), (33, 42681), (34, 42705),

Gene: Savannah_67 Start: 42567, Stop: 42761, Start Num: 18

Candidate Starts for Savannah_67:

(Start: 18 @42567 has 45 MA's), (22, 42600), (23, 42606), (29, 42666), (33, 42708),

Gene: Scumberland_70 Start: 42762, Stop: 42956, Start Num: 18

Candidate Starts for Scumberland_70:

(Start: 18 @42762 has 45 MA's), (22, 42795), (23, 42801), (29, 42861), (33, 42903),

Gene: Selwyn23_69 Start: 42679, Stop: 42873, Start Num: 18

Candidate Starts for Selwyn23_69:

(Start: 18 @42679 has 45 MA's), (22, 42712), (23, 42718), (29, 42778), (33, 42820),

Gene: Shotgun_68 Start: 42446, Stop: 42640, Start Num: 18

Candidate Starts for Shotgun_68:

(Start: 18 @42446 has 45 MA's), (22, 42479), (23, 42485), (29, 42545), (33, 42587),

Gene: Shrubaron_72 Start: 43624, Stop: 43866, Start Num: 18

Candidate Starts for Shrubaron_72:

(1, 43318), (4, 43351), (7, 43414), (9, 43423), (10, 43438), (Start: 18 @43624 has 45 MA's), (20, 43636), (22, 43657), (23, 43663), (26, 43696), (33, 43777),

Gene: SirFrank_68 Start: 42736, Stop: 42930, Start Num: 18

Candidate Starts for SirFrank_68:

(2, 42442), (3, 42451), (5, 42478), (8, 42532), (11, 42622), (Start: 18 @42736 has 45 MA's), (22, 42769), (23, 42775), (29, 42835), (33, 42877), (34, 42901),

Gene: Skugga_68 Start: 42934, Stop: 43182, Start Num: 18

Candidate Starts for Skugga_68:

(Start: 18 @42934 has 45 MA's), (21, 42955), (22, 42967), (23, 42973), (24, 42994), (27, 43009), (33, 43093),

Gene: Smarties_78 Start: 44331, Stop: 44549, Start Num: 18

Candidate Starts for Smarties_78:

(Start: 18 @44331 has 45 MA's), (20, 44343), (28, 44409),

Gene: Sunny_ Start: 44601, Stop: 44843, Start Num: 18

Candidate Starts for Sunny_:

(6, 44346), (12, 44529), (13, 44538), (Start: 18 @44601 has 45 MA's), (20, 44613), (23, 44640), (29, 44712), (30, 44742), (33, 44754),

Gene: Teamocil_72 Start: 42638, Stop: 42886, Start Num: 18

Candidate Starts for Teamocil_72:

(17, 42635), (Start: 18 @42638 has 45 MA's), (22, 42671), (23, 42677), (27, 42713), (33, 42797),

Gene: Terij_66 Start: 42367, Stop: 42636, Start Num: 15

Candidate Starts for Terij_66:

(Start: 15 @42367 has 6 MA's), (19, 42382), (22, 42409), (23, 42415), (30, 42520), (31, 42526),

Gene: Tyrumbra_67 Start: 43254, Stop: 43496, Start Num: 18

Candidate Starts for Tyrumbra_67:

(Start: 18 @43254 has 45 MA's), (20, 43266), (22, 43287), (23, 43293), (26, 43326), (33, 43407),

Gene: Yeti_70 Start: 42478, Stop: 42672, Start Num: 18

Candidate Starts for Yeti_70:

(Start: 18 @42478 has 45 MA's), (22, 42511), (23, 42517), (29, 42577), (33, 42619), (34, 42643),

Gene: Zapato_68 Start: 43209, Stop: 43409, Start Num: 18

Candidate Starts for Zapato_68:

(Start: 18 @43209 has 45 MA's), (20, 43221), (22, 43242), (23, 43248), (33, 43362),