

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 194106 Report

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

Pham number 194106 has 47 members, 0 are drafts.

Phages represented in each track:

- Track 1 : ShroomBoi_69
- Track 2 : Philus_71, DRBy19_72
- Track 3 : Polka14_67, Daenerys_63, Leperchaun_61, PHappiness_64, OwlsT2W_68, Renaud18_78, JoeyJr_64, RitaG_64, Spoonbill_67
- Track 4 : Kingsley_76
- Track 5 : FreddyB_69, Martik_68, ShiLan_67
- Track 6 : PhesterPhotato_69
- Track 7 : Necropolis_54, Shipwreck_59, Jebeks_56
- Track 8 : Megiddo_55, Bunnies_60, Bobi_75, Ksquared_58, GreaseLightnin_61
- Track 9 : Techage_61, Seagreen_74
- Track 10 : Zilizebeth_66
- Track 11 : Dynamo_55, Pygmy_59, Glaske_54, Phineas_57, Sonah_56, Bogie_59, CactusJack_55, StressBall_55, HUHilltop_58, Phalm_55
- Track 12 : Brusacoram_57, Thespis_57
- Track 13 : KilKor_55, Donovan_60, Willsammy_55
- Track 14 : Camster_57
- Track 15 : Malithi_56
- Track 16 : StevieRay_60, Atcoo_57

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

The start number called the most often in the published annotations is 5, it was called in 38 of the 47 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bobi_75, Bogie_59, Bunnies_60, CactusJack_55, Camster_57, DRBy19_72, Daenerys_63, Donovan_60, Dynamo_55, FreddyB_69, Glaske_54, GreaseLightnin_61, HUHilltop_58, JoeyJr_64, KilKor_55, Ksquared_58, Leperchaun_61, Martik_68, Megiddo_55, OwlsT2W_68, PHappiness_64, Phalm_55, PhesterPhotato_69, Philus_71, Phineas_57, Polka14_67, Pygmy_59, Renaud18_78, RitaG_64, Seagreen_74, ShiLan_67, ShroomBoi_69, Sonah_56, Spoonbill_67, StressBall_55, Techage_61, Willsammy_55, Zilizebeth_66,

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

- Atcoo_57, Brusacoram_57, Jebeks_56, Malithi_56, Necropolis_54, Shipwreck_59, StevieRay_60, Thespis_57,

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

- Kingsley_76,

Summary by start number:

Start 3:

- Found in 1 of 47 (2.1%) of genes in pham
- Manual Annotations of this start: 1 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kingsley_76 (F1),

Start 5:

- Found in 46 of 47 (97.9%) of genes in pham
- Manual Annotations of this start: 38 of 47
- Called 82.6% of time when present
- Phage (with cluster) where this start called: Bobi_75 (F1), Bogie_59 (P1), Bunnies_60 (P1), CactusJack_55 (P1), Camster_57 (P1), DRBy19_72 (F1), Daenerys_63 (F1), Donovan_60 (P1), Dynamo_55 (P1), FreddyB_69 (F1), Glaske_54 (P1), GreaseLightnin_61 (P1), HUHilltop_58 (P1), JoeyJr_64 (F1), KilKor_55 (P1), Ksquared_58 (P1), Leperchaun_61 (F1), Martik_68 (F1), Megiddo_55 (P1), OwlsT2W_68 (F1), PHappiness_64 (F1), Phalm_55 (P1), PhesterPhotato_69 (F1), Philus_71 (F1), Phineas_57 (P1), Polka14_67 (F1), Pygmy_59 (P1), Renaud18_78 (F4), RitaG_64 (F1), Seagreen_74 (F1), ShiLan_67 (F1), ShroomBoi_69 (F1), Sonah_56 (P1), Spoonbill_67 (F1), StressBall_55 (P1), Techage_61 (P1), Willsammy_55 (P1), Zilizebeth_66 (P1),

Start 7:

- Found in 47 of 47 (100.0%) of genes in pham
- Manual Annotations of this start: 8 of 47
- Called 17.0% of time when present
- Phage (with cluster) where this start called: Atcoo_57 (P1), Brusacoram_57 (P1), Jebeks_56 (P1), Malithi_56 (P1), Necropolis_54 (P1), Shipwreck_59 (P1), StevieRay_60 (P1), Thespis_57 (P1),

Summary by clusters:

There are 3 clusters represented in this pham: F1, P1, F4,

Info for manual annotations of cluster F1:

- Start number 3 was manually annotated 1 time for cluster F1.
- Start number 5 was manually annotated 17 times for cluster F1.

Info for manual annotations of cluster F4:

- Start number 5 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster P1:

- Start number 5 was manually annotated 20 times for cluster P1.
- Start number 7 was manually annotated 8 times for cluster P1.

Gene Information:

Gene: Atcoo_57 Start: 40012, Stop: 40215, Start Num: 7

Candidate Starts for Atcoo_57:

(1, 39916), (2, 39919), (Start: 5 @39964 has 38 MA's), (Start: 7 @40012 has 8 MA's), (8, 40024), (11, 40054), (12, 40168), (13, 40180),

Gene: Bobi_75 Start: 46900, Stop: 47151, Start Num: 5

Candidate Starts for Bobi_75:

(1, 46852), (2, 46855), (Start: 5 @46900 has 38 MA's), (Start: 7 @46948 has 8 MA's), (8, 46960), (11, 46990), (12, 47104), (13, 47116),

Gene: Bogie_59 Start: 39724, Stop: 39975, Start Num: 5

Candidate Starts for Bogie_59:

(1, 39676), (2, 39679), (Start: 5 @39724 has 38 MA's), (Start: 7 @39772 has 8 MA's), (8, 39784), (12, 39928),

Gene: Brusacoram_57 Start: 38555, Stop: 38758, Start Num: 7

Candidate Starts for Brusacoram_57:

(1, 38459), (2, 38462), (Start: 5 @38507 has 38 MA's), (Start: 7 @38555 has 8 MA's), (8, 38567), (9, 38576), (10, 38594), (12, 38711), (13, 38723),

Gene: Bunnies_60 Start: 39854, Stop: 40105, Start Num: 5

Candidate Starts for Bunnies_60:

(1, 39806), (2, 39809), (Start: 5 @39854 has 38 MA's), (Start: 7 @39902 has 8 MA's), (8, 39914), (11, 39944), (12, 40058), (13, 40070),

Gene: CactusJack_55 Start: 38722, Stop: 38973, Start Num: 5

Candidate Starts for CactusJack_55:

(1, 38674), (2, 38677), (Start: 5 @38722 has 38 MA's), (Start: 7 @38770 has 8 MA's), (8, 38782), (12, 38926),

Gene: Camster_57 Start: 38185, Stop: 38436, Start Num: 5

Candidate Starts for Camster_57:

(1, 38137), (2, 38140), (Start: 5 @38185 has 38 MA's), (Start: 7 @38233 has 8 MA's), (8, 38245), (11, 38275), (12, 38389),

Gene: DRBy19_72 Start: 46946, Stop: 47197, Start Num: 5

Candidate Starts for DRBy19_72:

(1, 46898), (2, 46901), (4, 46931), (Start: 5 @46946 has 38 MA's), (Start: 7 @46994 has 8 MA's), (8, 47006),

Gene: Daenerys_63 Start: 43336, Stop: 43587, Start Num: 5

Candidate Starts for Daenerys_63:

(1, 43288), (2, 43291), (Start: 5 @43336 has 38 MA's), (Start: 7 @43384 has 8 MA's), (8, 43396), (11, 43426),

Gene: Donovan_60 Start: 39971, Stop: 40225, Start Num: 5

Candidate Starts for Donovan_60:

(2, 39926), (Start: 5 @39971 has 38 MA's), (6, 40016), (Start: 7 @40019 has 8 MA's), (8, 40031), (9, 40040), (11, 40061), (12, 40175),

Gene: Dynamo_55 Start: 37758, Stop: 38009, Start Num: 5

Candidate Starts for Dynamo_55:

(1, 37710), (2, 37713), (Start: 5 @37758 has 38 MA's), (Start: 7 @37806 has 8 MA's), (8, 37818), (12, 37962),

Gene: FreddyB_69 Start: 44092, Stop: 44343, Start Num: 5

Candidate Starts for FreddyB_69:

(1, 44044), (2, 44047), (Start: 5 @44092 has 38 MA's), (Start: 7 @44140 has 8 MA's), (8, 44152), (9, 44161), (10, 44179),

Gene: Glaske_54 Start: 38722, Stop: 38973, Start Num: 5

Candidate Starts for Glaske_54:

(1, 38674), (2, 38677), (Start: 5 @38722 has 38 MA's), (Start: 7 @38770 has 8 MA's), (8, 38782), (12, 38926),

Gene: GreaseLightnin_61 Start: 40088, Stop: 40339, Start Num: 5

Candidate Starts for GreaseLightnin_61:

(1, 40040), (2, 40043), (Start: 5 @40088 has 38 MA's), (Start: 7 @40136 has 8 MA's), (8, 40148), (11, 40178), (12, 40292), (13, 40304),

Gene: HUHilltop_58 Start: 37981, Stop: 38232, Start Num: 5

Candidate Starts for HUHilltop_58:

(1, 37933), (2, 37936), (Start: 5 @37981 has 38 MA's), (Start: 7 @38029 has 8 MA's), (8, 38041), (12, 38185),

Gene: Jebeks_56 Start: 37326, Stop: 37529, Start Num: 7

Candidate Starts for Jebeks_56:

(1, 37230), (2, 37233), (Start: 5 @37278 has 38 MA's), (Start: 7 @37326 has 8 MA's), (8, 37338), (12, 37482),

Gene: JoeyJr_64 Start: 43504, Stop: 43755, Start Num: 5

Candidate Starts for JoeyJr_64:

(1, 43456), (2, 43459), (Start: 5 @43504 has 38 MA's), (Start: 7 @43552 has 8 MA's), (8, 43564), (11, 43594),

Gene: KilKor_55 Start: 39415, Stop: 39666, Start Num: 5

Candidate Starts for KilKor_55:

(2, 39370), (Start: 5 @39415 has 38 MA's), (6, 39460), (Start: 7 @39463 has 8 MA's), (8, 39475), (9, 39484), (11, 39505), (12, 39619),

Gene: Kingsley_76 Start: 48554, Stop: 48835, Start Num: 3

Candidate Starts for Kingsley_76:

(Start: 3 @48554 has 1 MA's), (Start: 7 @48629 has 8 MA's), (8, 48641), (9, 48650), (12, 48785),

Gene: Ksquared_58 Start: 39854, Stop: 40105, Start Num: 5

Candidate Starts for Ksquared_58:

(1, 39806), (2, 39809), (Start: 5 @39854 has 38 MA's), (Start: 7 @39902 has 8 MA's), (8, 39914), (11, 39944), (12, 40058), (13, 40070),

Gene: Leperchaun_61 Start: 42734, Stop: 42985, Start Num: 5

Candidate Starts for Leperchaun_61:

(1, 42686), (2, 42689), (Start: 5 @42734 has 38 MA's), (Start: 7 @42782 has 8 MA's), (8, 42794), (11, 42824),

Gene: Malithi_56 Start: 37944, Stop: 38147, Start Num: 7

Candidate Starts for Malithi_56:

(1, 37848), (2, 37851), (Start: 5 @37896 has 38 MA's), (Start: 7 @37944 has 8 MA's), (8, 37956), (11, 37986), (12, 38100),

Gene: Martik_68 Start: 45195, Stop: 45446, Start Num: 5

Candidate Starts for Martik_68:

(1, 45147), (2, 45150), (Start: 5 @45195 has 38 MA's), (Start: 7 @45243 has 8 MA's), (8, 45255), (9, 45264), (10, 45282),

Gene: Megiddo_55 Start: 38746, Stop: 38997, Start Num: 5

Candidate Starts for Megiddo_55:

(1, 38698), (2, 38701), (Start: 5 @38746 has 38 MA's), (Start: 7 @38794 has 8 MA's), (8, 38806), (11, 38836), (12, 38950), (13, 38962),

Gene: Necropolis_54 Start: 37395, Stop: 37598, Start Num: 7

Candidate Starts for Necropolis_54:

(1, 37299), (2, 37302), (Start: 5 @37347 has 38 MA's), (Start: 7 @37395 has 8 MA's), (8, 37407), (12, 37551),

Gene: OwlsT2W_68 Start: 44429, Stop: 44680, Start Num: 5

Candidate Starts for OwlsT2W_68:

(1, 44381), (2, 44384), (Start: 5 @44429 has 38 MA's), (Start: 7 @44477 has 8 MA's), (8, 44489), (11, 44519),

Gene: PHappiness_64 Start: 43280, Stop: 43531, Start Num: 5

Candidate Starts for PHappiness_64:

(1, 43232), (2, 43235), (Start: 5 @43280 has 38 MA's), (Start: 7 @43328 has 8 MA's), (8, 43340), (11, 43370),

Gene: Phalm_55 Start: 38722, Stop: 38973, Start Num: 5

Candidate Starts for Phalm_55:

(1, 38674), (2, 38677), (Start: 5 @38722 has 38 MA's), (Start: 7 @38770 has 8 MA's), (8, 38782), (12, 38926),

Gene: PhesterPhotato_69 Start: 43468, Stop: 43719, Start Num: 5

Candidate Starts for PhesterPhotato_69:

(1, 43420), (2, 43423), (4, 43453), (Start: 5 @43468 has 38 MA's), (Start: 7 @43516 has 8 MA's), (8, 43528), (9, 43537), (10, 43555),

Gene: Philus_71 Start: 46922, Stop: 47173, Start Num: 5

Candidate Starts for Philus_71:

(1, 46874), (2, 46877), (4, 46907), (Start: 5 @46922 has 38 MA's), (Start: 7 @46970 has 8 MA's), (8, 46982),

Gene: Phineas_57 Start: 38316, Stop: 38567, Start Num: 5

Candidate Starts for Phineas_57:

(1, 38268), (2, 38271), (Start: 5 @38316 has 38 MA's), (Start: 7 @38364 has 8 MA's), (8, 38376), (12, 38520),

Gene: Polka14_67 Start: 44344, Stop: 44595, Start Num: 5

Candidate Starts for Polka14_67:

(1, 44296), (2, 44299), (Start: 5 @44344 has 38 MA's), (Start: 7 @44392 has 8 MA's), (8, 44404), (11, 44434),

Gene: Pygmy_59 Start: 39780, Stop: 40031, Start Num: 5

Candidate Starts for Pygmy_59:

(1, 39732), (2, 39735), (Start: 5 @39780 has 38 MA's), (Start: 7 @39828 has 8 MA's), (8, 39840), (12, 39984),

Gene: Renaud18_78 Start: 46232, Stop: 46483, Start Num: 5

Candidate Starts for Renaud18_78:

(1, 46184), (2, 46187), (Start: 5 @46232 has 38 MA's), (Start: 7 @46280 has 8 MA's), (8, 46292), (11, 46322),

Gene: RitaG_64 Start: 43625, Stop: 43876, Start Num: 5

Candidate Starts for RitaG_64:

(1, 43577), (2, 43580), (Start: 5 @43625 has 38 MA's), (Start: 7 @43673 has 8 MA's), (8, 43685), (11, 43715),

Gene: Seagreen_74 Start: 47273, Stop: 47527, Start Num: 5

Candidate Starts for Seagreen_74:

(2, 47228), (Start: 5 @47273 has 38 MA's), (6, 47318), (Start: 7 @47321 has 8 MA's), (8, 47333), (9, 47342), (10, 47360), (12, 47477),

Gene: ShiLan_67 Start: 45807, Stop: 46058, Start Num: 5

Candidate Starts for ShiLan_67:

(1, 45759), (2, 45762), (Start: 5 @45807 has 38 MA's), (Start: 7 @45855 has 8 MA's), (8, 45867), (9, 45876), (10, 45894),

Gene: Shipwreck_59 Start: 39803, Stop: 40006, Start Num: 7

Candidate Starts for Shipwreck_59:

(1, 39707), (2, 39710), (Start: 5 @39755 has 38 MA's), (Start: 7 @39803 has 8 MA's), (8, 39815), (12, 39959),

Gene: ShroomBoi_69 Start: 44807, Stop: 45058, Start Num: 5

Candidate Starts for ShroomBoi_69:

(1, 44759), (2, 44762), (Start: 5 @44807 has 38 MA's), (Start: 7 @44855 has 8 MA's), (8, 44867), (9, 44876), (11, 44897), (14, 45050),

Gene: Sonah_56 Start: 37452, Stop: 37703, Start Num: 5

Candidate Starts for Sonah_56:

(1, 37404), (2, 37407), (Start: 5 @37452 has 38 MA's), (Start: 7 @37500 has 8 MA's), (8, 37512), (12, 37656),

Gene: Spoonbill_67 Start: 43351, Stop: 43602, Start Num: 5

Candidate Starts for Spoonbill_67:

(1, 43303), (2, 43306), (Start: 5 @43351 has 38 MA's), (Start: 7 @43399 has 8 MA's), (8, 43411), (11, 43441),

Gene: StevieRay_60 Start: 39821, Stop: 40024, Start Num: 7

Candidate Starts for StevieRay_60:

(1, 39725), (2, 39728), (Start: 5 @39773 has 38 MA's), (Start: 7 @39821 has 8 MA's), (8, 39833), (11, 39863), (12, 39977), (13, 39989),

Gene: StressBall_55 Start: 38722, Stop: 38973, Start Num: 5

Candidate Starts for StressBall_55:

(1, 38674), (2, 38677), (Start: 5 @38722 has 38 MA's), (Start: 7 @38770 has 8 MA's), (8, 38782), (12, 38926),

Gene: Techage_61 Start: 39861, Stop: 40115, Start Num: 5

Candidate Starts for Techage_61:

(2, 39816), (Start: 5 @39861 has 38 MA's), (6, 39906), (Start: 7 @39909 has 8 MA's), (8, 39921), (9, 39930), (10, 39948), (12, 40065),

Gene: Thespis_57 Start: 38555, Stop: 38758, Start Num: 7

Candidate Starts for Thespis_57:

(1, 38459), (2, 38462), (Start: 5 @38507 has 38 MA's), (Start: 7 @38555 has 8 MA's), (8, 38567), (9, 38576), (10, 38594), (12, 38711), (13, 38723),

Gene: Willsammy_55 Start: 38898, Stop: 39149, Start Num: 5

Candidate Starts for Willsammy_55:

(2, 38853), (Start: 5 @38898 has 38 MA's), (6, 38943), (Start: 7 @38946 has 8 MA's), (8, 38958), (9, 38967), (11, 38988), (12, 39102),

Gene: Zilizebeth_66 Start: 40635, Stop: 40889, Start Num: 5

Candidate Starts for Zilizebeth_66:

(1, 40587), (2, 40590), (Start: 5 @40635 has 38 MA's), (Start: 7 @40683 has 8 MA's), (8, 40695), (10, 40722), (12, 40839),