

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 221567 Report

This analysis was run 03/28/25 on database version 593.

Pham number 221567 has 41 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Chargerpower_40
- Track 2 : Kinmap_38
- Track 3 : BogosyJay_38
- Track 4 : Tubs_40, EmyBug_39, Spouty_40, Fayely_40, Aliter_40, Lilleskat_38, Pioneer_40, Conquerage_40, Phaeder_40, Phonnegut_40, Priya_40, Beemo_40, Hanray_38, HortumSL17_40, Holecx_39
- Track 5 : Toaka_38
- Track 6 : Ugenie5_36, Scherzo_39
- Track 7 : RyeScarlet_41, Myxus_40, EdogawaKiddo_38, Onglai_38, Jiawan_38, PackMan_39, Catalina_41, ExplosioNervosa_40, Eidsmoe_40, Qobbit_40
- Track 8 : Arissanae_39
- Track 9 : Darrell_41
- Track 10 : Alma_40
- Track 11 : Sachima_37
- Track 12 : Elephantoon_39
- Track 13 : LoneWolf_39
- Track 14 : Vanisoa_38
- Track 15 : Rahalelujah_38
- Track 16 : Maminiaina_38
- Track 17 : Yecey3_40

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

The start number called the most often in the published annotations is 16, it was called in 22 of the 32 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aliter_40, Arissanae_39, Beemo_40, BogosyJay_38, Chargerpower_40, Conquerage_40, Darrell_41, Elephantoon_39, EmyBug_39, Fayely_40, Hanray_38, Holecx_39, HortumSL17_40, Kinmap_38, Lilleskat_38, LoneWolf_39, Phaeder_40, Phonnegut_40, Pioneer_40, Priya_40, Rahalelujah_38, Spouty_40, Toaka_38, Tubs_40, Vanisoa_38, Yecey3_40,

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

- Alma_40, Catalina_41, EdogawaKiddo_38, Eidsmoe_40, ExplosioNervosa_40, Jiawan_38, Maminiaina_38, Myxus_40, Onglai_38, PackMan_39, Qobbit_40, RyeScarlet_41, Sachima_37, Scherzo_39, Ugenie5_36,

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

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Summary by start number:

Start 15:

- Found in 36 of 41 (87.8%) of genes in pham
- Manual Annotations of this start: 10 of 32
- Called 41.7% of time when present
- Phage (with cluster) where this start called: Alma_40 (A9), Catalina_41 (A9), EdogawaKiddo_38 (A9), Eidsmoe_40 (A9), ExplosioNervosa_40 (A9), Jiawan_38 (A9), Maminiaina_38 (A9), Myxus_40 (A9), Onglai_38 (A9), PackMan_39 (A9), Qobbit_40 (A9), RyeScarlet_41 (A9), Sachima_37 (A9), Scherzo_39 (A9), Ugenie5_36 (A9),

Start 16:

- Found in 41 of 41 (100.0%) of genes in pham
- Manual Annotations of this start: 22 of 32
- Called 63.4% of time when present
- Phage (with cluster) where this start called: Aliter_40 (A9), Arissanae_39 (A9), Beemo_40 (A9), BogosyJay_38 (A9), Chargerpower_40 (A), Conquerage_40 (A9), Darrell_41 (A9), Elephantoon_39 (A9), EmyBug_39 (A9), Fayely_40 (A9), Hanray_38 (A9), Halex_39 (A9), HortumSL17_40 (A9), Kinmap_38 (A21), Lilleskat_38 (A9), LoneWolf_39 (A9), Phaeder_40 (A9), Phonnegut_40 (A9), Pioneer_40 (A9), Priya_40 (A9), Rahalelujah_38 (A9), Spouty_40 (A9), Toaka_38 (A9), Tubs_40 (A9), Vanisoa_38 (A9), Yecey3_40 (A9),

Summary by clusters:

There are 3 clusters represented in this pham: A9, A, A21,

Info for manual annotations of cluster A:

- Start number 16 was manually annotated 1 time for cluster A.

Info for manual annotations of cluster A9:

- Start number 15 was manually annotated 10 times for cluster A9.
- Start number 16 was manually annotated 21 times for cluster A9.

Gene Information:

Gene: Aliter_40 Start: 28623, Stop: 28420, Start Num: 16

Candidate Starts for Aliter_40:

(10, 28767), (13, 28713), (Start: 15 @28632 has 10 MA's), (Start: 16 @28623 has 22 MA's), (18, 28575), (20, 28560), (21, 28557), (23, 28542), (26, 28452),

Gene: Alma_40 Start: 28716, Stop: 28504, Start Num: 15

Candidate Starts for Alma_40:

(10, 28851), (13, 28797), (Start: 15 @28716 has 10 MA's), (Start: 16 @28707 has 22 MA's), (20, 28644), (21, 28641), (26, 28536),

Gene: Arissanae_39 Start: 29179, Stop: 28973, Start Num: 16

Candidate Starts for Arissanae_39:

(Start: 16 @29179 has 22 MA's), (19, 29125), (20, 29113), (21, 29110), (22, 29101), (24, 29062), (26, 29005),

Gene: Beemo_40 Start: 28751, Stop: 28548, Start Num: 16

Candidate Starts for Beemo_40:

(10, 28895), (13, 28841), (Start: 15 @28760 has 10 MA's), (Start: 16 @28751 has 22 MA's), (18, 28703), (20, 28688), (21, 28685), (23, 28670), (26, 28580),

Gene: BogosyJay_38 Start: 28294, Stop: 28085, Start Num: 16

Candidate Starts for BogosyJay_38:

(10, 28438), (13, 28384), (Start: 15 @28303 has 10 MA's), (Start: 16 @28294 has 22 MA's), (21, 28228), (22, 28219), (23, 28213), (26, 28117),

Gene: Catalina_41 Start: 28705, Stop: 28493, Start Num: 15

Candidate Starts for Catalina_41:

(10, 28840), (13, 28786), (Start: 15 @28705 has 10 MA's), (Start: 16 @28696 has 22 MA's), (18, 28648), (20, 28633), (21, 28630), (23, 28615), (26, 28525),

Gene: Chargerpower_40 Start: 27772, Stop: 27572, Start Num: 16

Candidate Starts for Chargerpower_40:

(14, 27832), (Start: 15 @27781 has 10 MA's), (Start: 16 @27772 has 22 MA's), (20, 27709), (21, 27706), (22, 27697), (24, 27658), (25, 27634), (26, 27601),

Gene: Conquerage_40 Start: 28725, Stop: 28522, Start Num: 16

Candidate Starts for Conquerage_40:

(10, 28869), (13, 28815), (Start: 15 @28734 has 10 MA's), (Start: 16 @28725 has 22 MA's), (18, 28677), (20, 28662), (21, 28659), (23, 28644), (26, 28554),

Gene: Darrell_41 Start: 29065, Stop: 28859, Start Num: 16

Candidate Starts for Darrell_41:

(1, 29536), (2, 29452), (4, 29380), (6, 29356), (8, 29272), (12, 29155), (Start: 15 @29074 has 10 MA's), (Start: 16 @29065 has 22 MA's), (20, 28999), (21, 28996), (22, 28987), (24, 28948), (26, 28891),

Gene: EdogawaKiddo_38 Start: 28711, Stop: 28499, Start Num: 15

Candidate Starts for EdogawaKiddo_38:

(10, 28846), (13, 28792), (Start: 15 @28711 has 10 MA's), (Start: 16 @28702 has 22 MA's), (18, 28654), (20, 28639), (21, 28636), (23, 28621), (26, 28531),

Gene: Eidsmoe_40 Start: 28768, Stop: 28556, Start Num: 15

Candidate Starts for Eidsmoe_40:

(10, 28903), (13, 28849), (Start: 15 @28768 has 10 MA's), (Start: 16 @28759 has 22 MA's), (18, 28711), (20, 28696), (21, 28693), (23, 28678), (26, 28588),

Gene: Elephantoon_39 Start: 28036, Stop: 27833, Start Num: 16

Candidate Starts for Elephantoon_39:

(3, 28366), (5, 28351), (9, 28243), (13, 28126), (Start: 15 @28045 has 10 MA's), (Start: 16 @28036 has 22 MA's), (21, 27970), (23, 27955), (26, 27865),

Gene: EmyBug_39 Start: 28761, Stop: 28558, Start Num: 16

Candidate Starts for EmyBug_39:

(10, 28905), (13, 28851), (Start: 15 @28770 has 10 MA's), (Start: 16 @28761 has 22 MA's), (18, 28713), (20, 28698), (21, 28695), (23, 28680), (26, 28590),

Gene: ExplosioNervosa_40 Start: 28794, Stop: 28582, Start Num: 15

Candidate Starts for ExplosioNervosa_40:

(10, 28929), (13, 28875), (Start: 15 @28794 has 10 MA's), (Start: 16 @28785 has 22 MA's), (18, 28737), (20, 28722), (21, 28719), (23, 28704), (26, 28614),

Gene: Fayely_40 Start: 28728, Stop: 28525, Start Num: 16

Candidate Starts for Fayely_40:

(10, 28872), (13, 28818), (Start: 15 @28737 has 10 MA's), (Start: 16 @28728 has 22 MA's), (18, 28680), (20, 28665), (21, 28662), (23, 28647), (26, 28557),

Gene: Hanray_38 Start: 28706, Stop: 28503, Start Num: 16

Candidate Starts for Hanray_38:

(10, 28850), (13, 28796), (Start: 15 @28715 has 10 MA's), (Start: 16 @28706 has 22 MA's), (18, 28658), (20, 28643), (21, 28640), (23, 28625), (26, 28535),

Gene: Horex_39 Start: 28719, Stop: 28516, Start Num: 16

Candidate Starts for Horex_39:

(10, 28863), (13, 28809), (Start: 15 @28728 has 10 MA's), (Start: 16 @28719 has 22 MA's), (18, 28671), (20, 28656), (21, 28653), (23, 28638), (26, 28548),

Gene: HortumSL17_40 Start: 28695, Stop: 28492, Start Num: 16

Candidate Starts for HortumSL17_40:

(10, 28839), (13, 28785), (Start: 15 @28704 has 10 MA's), (Start: 16 @28695 has 22 MA's), (18, 28647), (20, 28632), (21, 28629), (23, 28614), (26, 28524),

Gene: Jiawan_38 Start: 28747, Stop: 28535, Start Num: 15

Candidate Starts for Jiawan_38:

(10, 28882), (13, 28828), (Start: 15 @28747 has 10 MA's), (Start: 16 @28738 has 22 MA's), (18, 28690), (20, 28675), (21, 28672), (23, 28657), (26, 28567),

Gene: Kinmap_38 Start: 27826, Stop: 27623, Start Num: 16

Candidate Starts for Kinmap_38:

(Start: 16 @27826 has 22 MA's), (19, 27772), (20, 27760), (21, 27757), (26, 27652),

Gene: Lilleskat_38 Start: 28655, Stop: 28452, Start Num: 16

Candidate Starts for Lilleskat_38:

(10, 28799), (13, 28745), (Start: 15 @28664 has 10 MA's), (Start: 16 @28655 has 22 MA's), (18, 28607), (20, 28592), (21, 28589), (23, 28574), (26, 28484),

Gene: LoneWolf_39 Start: 28284, Stop: 28081, Start Num: 16

Candidate Starts for LoneWolf_39:

(13, 28374), (Start: 15 @28293 has 10 MA's), (Start: 16 @28284 has 22 MA's), (18, 28236), (21, 28218), (23, 28203), (26, 28113),

Gene: Maminiaina_38 Start: 28285, Stop: 28067, Start Num: 15

Candidate Starts for Maminiaina_38:

(10, 28420), (13, 28366), (Start: 15 @28285 has 10 MA's), (Start: 16 @28276 has 22 MA's), (21, 28210), (22, 28201), (23, 28195), (26, 28099),

Gene: Myxus_40 Start: 28704, Stop: 28492, Start Num: 15

Candidate Starts for Myxus_40:

(10, 28839), (13, 28785), (Start: 15 @28704 has 10 MA's), (Start: 16 @28695 has 22 MA's), (18, 28647), (20, 28632), (21, 28629), (23, 28614), (26, 28524),

Gene: Onglai_38 Start: 27045, Stop: 26833, Start Num: 15

Candidate Starts for Onglai_38:

(10, 27180), (13, 27126), (Start: 15 @27045 has 10 MA's), (Start: 16 @27036 has 22 MA's), (18, 26988), (20, 26973), (21, 26970), (23, 26955), (26, 26865),

Gene: PackMan_39 Start: 28704, Stop: 28492, Start Num: 15

Candidate Starts for PackMan_39:

(10, 28839), (13, 28785), (Start: 15 @28704 has 10 MA's), (Start: 16 @28695 has 22 MA's), (18, 28647), (20, 28632), (21, 28629), (23, 28614), (26, 28524),

Gene: Phaeder_40 Start: 28695, Stop: 28492, Start Num: 16

Candidate Starts for Phaeder_40:

(10, 28839), (13, 28785), (Start: 15 @28704 has 10 MA's), (Start: 16 @28695 has 22 MA's), (18, 28647), (20, 28632), (21, 28629), (23, 28614), (26, 28524),

Gene: Phonnegut_40 Start: 28750, Stop: 28547, Start Num: 16

Candidate Starts for Phonnegut_40:

(10, 28894), (13, 28840), (Start: 15 @28759 has 10 MA's), (Start: 16 @28750 has 22 MA's), (18, 28702), (20, 28687), (21, 28684), (23, 28669), (26, 28579),

Gene: Pioneer_40 Start: 28750, Stop: 28547, Start Num: 16

Candidate Starts for Pioneer_40:

(10, 28894), (13, 28840), (Start: 15 @28759 has 10 MA's), (Start: 16 @28750 has 22 MA's), (18, 28702), (20, 28687), (21, 28684), (23, 28669), (26, 28579),

Gene: Priya_40 Start: 28762, Stop: 28559, Start Num: 16

Candidate Starts for Priya_40:

(10, 28906), (13, 28852), (Start: 15 @28771 has 10 MA's), (Start: 16 @28762 has 22 MA's), (18, 28714), (20, 28699), (21, 28696), (23, 28681), (26, 28591),

Gene: Qobbit_40 Start: 28733, Stop: 28521, Start Num: 15

Candidate Starts for Qobbit_40:

(10, 28868), (13, 28814), (Start: 15 @28733 has 10 MA's), (Start: 16 @28724 has 22 MA's), (18, 28676), (20, 28661), (21, 28658), (23, 28643), (26, 28553),

Gene: Rahalelujah_38 Start: 27745, Stop: 27539, Start Num: 16

Candidate Starts for Rahalelujah_38:

(Start: 16 @27745 has 22 MA's), (20, 27682), (21, 27679), (22, 27670), (23, 27664), (24, 27628), (26, 27571),

Gene: RyeScarlet_41 Start: 28728, Stop: 28516, Start Num: 15

Candidate Starts for RyeScarlet_41:

(10, 28863), (13, 28809), (Start: 15 @28728 has 10 MA's), (Start: 16 @28719 has 22 MA's), (18, 28671), (20, 28656), (21, 28653), (23, 28638), (26, 28548),

Gene: Sachima_37 Start: 28644, Stop: 28429, Start Num: 15

Candidate Starts for Sachima_37:

(10, 28779), (13, 28725), (Start: 15 @28644 has 10 MA's), (Start: 16 @28635 has 22 MA's), (17, 28623), (20, 28572), (21, 28569), (22, 28560), (23, 28554), (26, 28461),

Gene: Scherzo_39 Start: 28716, Stop: 28504, Start Num: 15

Candidate Starts for Scherzo_39:

(13, 28797), (Start: 15 @28716 has 10 MA's), (Start: 16 @28707 has 22 MA's), (17, 28695), (18, 28659), (20, 28644), (21, 28641), (23, 28626), (26, 28536),

Gene: Spouty_40 Start: 28761, Stop: 28558, Start Num: 16

Candidate Starts for Spouty_40:

(10, 28905), (13, 28851), (Start: 15 @28770 has 10 MA's), (Start: 16 @28761 has 22 MA's), (18, 28713), (20, 28698), (21, 28695), (23, 28680), (26, 28590),

Gene: Toaka_38 Start: 27999, Stop: 27790, Start Num: 16

Candidate Starts for Toaka_38:

(11, 28095), (Start: 16 @27999 has 22 MA's), (17, 27987), (20, 27936), (21, 27933), (22, 27924), (23, 27918), (26, 27822),

Gene: Tubs_40 Start: 28695, Stop: 28492, Start Num: 16

Candidate Starts for Tubs_40:

(10, 28839), (13, 28785), (Start: 15 @28704 has 10 MA's), (Start: 16 @28695 has 22 MA's), (18, 28647), (20, 28632), (21, 28629), (23, 28614), (26, 28524),

Gene: Ugenie5_36 Start: 28715, Stop: 28503, Start Num: 15

Candidate Starts for Ugenie5_36:

(13, 28796), (Start: 15 @28715 has 10 MA's), (Start: 16 @28706 has 22 MA's), (17, 28694), (18, 28658), (20, 28643), (21, 28640), (23, 28625), (26, 28535),

Gene: Vanisoa_38 Start: 29009, Stop: 28803, Start Num: 16

Candidate Starts for Vanisoa_38:

(Start: 16 @29009 has 22 MA's), (17, 28997), (20, 28943), (21, 28940), (22, 28931), (26, 28835),

Gene: Yecey3_40 Start: 27948, Stop: 27742, Start Num: 16

Candidate Starts for Yecey3_40:

(7, 28239), (13, 28038), (Start: 15 @27957 has 10 MA's), (Start: 16 @27948 has 22 MA's), (19, 27894), (20, 27882), (21, 27879), (22, 27870), (23, 27864), (26, 27774),