

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 216362 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216362 has 36 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Abidatro 63
- Track 2 : Galaxy_62
- Track 3: OtsoOtso_75, Polka_66
- Track 4 : Cygnet 73
- Track 5 : Lunar 69
- Track 6 : Kuleana 70
- Track 7: Kuleana 71
- Track 8 : Antrice 76
- Track 9: Bedetta_71, HannahPhantana_68, Amelia_66
- Track 10 : Amelia 67
- Track 11 : LittleTokvo 67
- Track 12 : Coral 68
- Track 13 : Coral_67Track 14 : StuartMinion_60
- Track 15: Rattail 67
- Track 16: Leona 65
- Track 17 : Renna12_69
- Track 18 : Renna12 67
- Track 19: Babushka 69
- Track 20: Juno112_66, Atlantica_68
- Track 21 : RedFox 68
- Track 22: RedFox 67
- Track 23 : StuartMinion 61
- Track 24: Hillester 68, RadFad 68
- Track 25 : Auxilium 60
- Track 26 : AbbyDaisy_64
- Track 27: ThayneTheZag 66
- Track 28 : Bhageatrice 68, Seahorse 66
- Track 29 : Tiff81 59
- Track 30 : Gusanita_67

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

The start number called the most often in the published annotations is 49, it was called in 7 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Amelia_66, Bedetta_71, Coral_67, Coral_68, HannahPhantana_68, Kuleana_71, Lunar_69, OtsoOtso_75, Polka_66,

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:

• AbbyDaisy_64, Abidatro_63, Amelia_67, Antrice_76, Atlantica_68, Auxilium_60, Babushka_69, Bhageatrice_68, Cygnet_73, Galaxy_62, Gusanita_67, Hillester_68, Juno112_66, Kuleana_70, Leona_65, LittleTokyo_67, RadFad_68, Rattail_67, RedFox_67, RedFox_68, Renna12_67, Renna12_69, Seahorse_66, StuartMinion_60, StuartMinion_61, ThayneTheZag_66, Tiff81_59,

Summary by start number:

Start 14:

- Found in 2 of 36 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rattail_67 (AS3), RedFox_68 (AS3),

Start 15:

- Found in 1 of 36 (2.8%) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abidatro_63 (AS1),

Start 16:

- Found in 9 of 36 (25.0%) of genes in pham
- Manual Annotations of this start: 6 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbyDaisy_64 (AY), Auxilium_60 (AY), Bhageatrice_68 (AY), Gusanita_67 (FF), Hillester_68 (AY), RadFad_68 (AY), Seahorse_66 (AY), ThayneTheZag_66 (AY), Tiff81_59 (AY),

Start 18:

- Found in 1 of 36 (2.8%) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Renna12_67 (AS3),

Start 19:

- Found in 11 of 36 (30.6%) of genes in pham
- Manual Annotations of this start: 6 of 24
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Antrice_76 (AS2), Atlantica_68 (AS3), Cygnet_73 (AS2), Galaxy_62 (AS1), Juno112_66 (AS3), Kuleana_70 (AS2), Leona_65 (AS3), LittleTokyo_67 (AS2), RedFox_67 (AS3), StuartMinion_60 (AS3),

Start 47:

- Found in 2 of 36 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Babushka_69 (AS3), Renna12_69 (AS3),

Start 48:

- Found in 1 of 36 (2.8%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: StuartMinion_61 (AS3),

Start 49:

- Found in 9 of 36 (25.0%) of genes in pham
- Manual Annotations of this start: 7 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amelia_66 (AS2), Bedetta_71 (AS2), Coral_67 (AS2), Coral_68 (AS2), HannahPhantana_68 (AS2), Kuleana_71 (AS2), Lunar_69 (AS2), OtsoOtso_75 (AS2), Polka_66 (AS2),

Start 66:

- Found in 1 of 36 (2.8%) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amelia 67 (AS2),

Summary by clusters:

There are 5 clusters represented in this pham: AY, AS2, AS1, FF, AS3,

Info for manual annotations of cluster AS1:

- •Start number 15 was manually annotated 1 time for cluster AS1.
- Start number 19 was manually annotated 1 time for cluster AS1.

Info for manual annotations of cluster AS2:

- •Start number 19 was manually annotated 2 times for cluster AS2.
- •Start number 49 was manually annotated 7 times for cluster AS2.
- •Start number 66 was manually annotated 1 time for cluster AS2.

Info for manual annotations of cluster AS3:

- •Start number 14 was manually annotated 1 time for cluster AS3.
- •Start number 18 was manually annotated 1 time for cluster AS3.
- •Start number 19 was manually annotated 3 times for cluster AS3.
- •Start number 47 was manually annotated 1 time for cluster AS3.

Info for manual annotations of cluster AY:

•Start number 16 was manually annotated 5 times for cluster AY.

Info for manual annotations of cluster FF:

•Start number 16 was manually annotated 1 time for cluster FF.

Gene Information:

Gene: AbbyDaisy_64 Start: 35318, Stop: 35455, Start Num: 16

Candidate Starts for AbbyDaisy_64:

(Start: 16 @35318 has 6 MA's), (20, 35339), (27, 35375),

Gene: Abidatro_63 Start: 37722, Stop: 37874, Start Num: 15

Candidate Starts for Abidatro_63:

(Start: 15 @ 37722 has 1 MA's), (17, 37725), (Start: 19 @ 37734 has 6 MA's), (27, 37782),

Gene: Amelia_66 Start: 36727, Stop: 36852, Start Num: 49

Candidate Starts for Amelia_66:

(Start: 49 @ 36727 has 7 MA's), (54, 36775), (58, 36796), (59, 36802), (64, 36841),

Gene: Amelia_67 Start: 36849, Stop: 36971, Start Num: 66

Candidate Starts for Amelia 67:

(53, 36762), (55, 36777), (57, 36789), (60, 36813), (61, 36816), (Start: 66 @36849 has 1 MA's), (67,

36879), (68, 36900), (69, 36921), (70, 36936), (71, 36942),

Gene: Antrice_76 Start: 37839, Stop: 37967, Start Num: 19

Candidate Starts for Antrice 76:

(Start: 19 @37839 has 6 MA's), (29, 37893),

Gene: Atlantica_68 Start: 37422, Stop: 37550, Start Num: 19

Candidate Starts for Atlantica 68:

(Start: 19 @37422 has 6 MA's), (38, 37506),

Gene: Auxilium_60 Start: 32290, Stop: 32427, Start Num: 16

Candidate Starts for Auxilium_60: (Start: 16 @32290 has 6 MA's),

Gene: Babushka 69 Start: 37394, Stop: 37513, Start Num: 47

Candidate Starts for Babushka_69:

(21, 37286), (24, 37307), (25, 37316), (28, 37322), (Start: 47 @37394 has 1 MA's), (50, 37409),

Gene: Bedetta 71 Start: 36890, Stop: 37015, Start Num: 49

Candidate Starts for Bedetta_71:

(Start: 49 @36890 has 7 MA's), (54, 36938), (58, 36959), (59, 36965), (64, 37004),

Gene: Bhageatrice_68 Start: 37131, Stop: 37268, Start Num: 16

Candidate Starts for Bhageatrice_68:

(10, 37104), (Start: 16 @37131 has 6 MA's), (20, 37152), (37, 37224),

Gene: Coral_68 Start: 37035, Stop: 37154, Start Num: 49

Candidate Starts for Coral 68:

(23, 36948), (26, 36963), (30, 36975), (39, 36999), (Start: 49 @37035 has 7 MA's), (62, 37128),

Gene: Coral_67 Start: 36913, Stop: 37038, Start Num: 49

Candidate Starts for Coral 67:

(Start: 49 @36913 has 7 MA's), (54, 36961), (58, 36982), (59, 36988), (64, 37027),

Gene: Cygnet_73 Start: 38186, Stop: 38317, Start Num: 19

Candidate Starts for Cygnet_73:

(Start: 19 @38186 has 6 MA's), (34, 38258),

Gene: Galaxy_62 Start: 36560, Stop: 36700, Start Num: 19

Candidate Starts for Galaxy_62:

(Start: 19 @36560 has 6 MA's), (27, 36608),

Gene: Gusanita_67 Start: 41673, Stop: 41810, Start Num: 16

Candidate Starts for Gusanita 67:

(12, 41661), (Start: 16 @41673 has 6 MA's), (27, 41730), (36, 41763),

Gene: HannahPhantana 68 Start: 36722, Stop: 36847, Start Num: 49

Candidate Starts for HannahPhantana 68:

(Start: 49 @36722 has 7 MA's), (54, 36770), (58, 36791), (59, 36797), (64, 36836),

Gene: Hillester_68 Start: 35895, Stop: 36032, Start Num: 16

Candidate Starts for Hillester_68:

(10, 35868), (Start: 16 @ 35895 has 6 MA's), (20, 35916), (27, 35952),

Gene: Juno112 66 Start: 37424, Stop: 37552, Start Num: 19

Candidate Starts for Juno112_66:

(Start: 19 @37424 has 6 MA's), (38, 37508),

Gene: Kuleana 70 Start: 37424, Stop: 37552, Start Num: 19

Candidate Starts for Kuleana_70:

(1, 37223), (3, 37271), (9, 37334), (Start: 19 @37424 has 6 MA's), (27, 37472), (41, 37532), (45, 37541),

Gene: Kuleana 71 Start: 37549, Stop: 37671, Start Num: 49

Candidate Starts for Kuleana 71:

(24, 37459), (25, 37468), (28, 37474), (39, 37510), (Start: 49 @37549 has 7 MA's), (51, 37573), (52, 37579), (64, 37660),

Gene: Leona 65 Start: 37507, Stop: 37635, Start Num: 19

Candidate Starts for Leona 65:

(Start: 19 @37507 has 6 MA's), (29, 37561), (38, 37591),

Gene: LittleTokyo_67 Start: 36418, Stop: 36546, Start Num: 19

Candidate Starts for LittleTokyo_67:

(5, 36304), (6, 36313), (11, 36388), (Start: 19 @36418 has 6 MA's), (27, 36466), (35, 36496),

Gene: Lunar_69 Start: 37045, Stop: 37170, Start Num: 49

Candidate Starts for Lunar_69:

(Start: 49 @ 37045 has 7 MA's), (58, 37114), (59, 37120), (64, 37159),

Gene: OtsoOtso_75 Start: 36577, Stop: 36696, Start Num: 49

Candidate Starts for OtsoOtso_75:

(Start: 49 @36577 has 7 MA's), (62, 36670),

Gene: Polka_66 Start: 36577, Stop: 36696, Start Num: 49

Candidate Starts for Polka 66:

(Start: 49 @36577 has 7 MA's), (62, 36670),

Gene: RadFad_68 Start: 35895, Stop: 36032, Start Num: 16

Candidate Starts for RadFad 68:

(10, 35868), (Start: 16 @35895 has 6 MA's), (20, 35916), (27, 35952),

Gene: Rattail_67 Start: 37721, Stop: 37858, Start Num: 14

Candidate Starts for Rattail_67:

(12, 37712), (13, 37715), (Start: 14 @37721 has 1 MA's), (25, 37778), (28, 37784), (40, 37829), (43, 37847),

Gene: RedFox_68 Start: 37646, Stop: 37783, Start Num: 14

Candidate Starts for RedFox_68:

(12, 37637), (13, 37640), (Start: 14 @37646 has 1 MA's), (25, 37703), (40, 37754), (43, 37772),

Gene: RedFox_67 Start: 37521, Stop: 37649, Start Num: 19

Candidate Starts for RedFox_67:

(Start: 19 @37521 has 6 MA's), (33, 37590), (34, 37593), (35, 37596), (38, 37605),

Gene: Renna12 69 Start: 38028, Stop: 38147, Start Num: 47

Candidate Starts for Renna12_69:

(24, 37944), (31, 37968), (32, 37977), (Start: 47 @38028 has 1 MA's), (50, 38043),

Gene: Renna12_67 Start: 37634, Stop: 37759, Start Num: 18

Candidate Starts for Renna12_67:

(Start: 18 @ 37634 has 1 MA's), (27, 37682), (41, 37742), (42, 37745),

Gene: Seahorse_66 Start: 36402, Stop: 36539, Start Num: 16

Candidate Starts for Seahorse_66:

(10, 36375), (Start: 16 @36402 has 6 MA's), (20, 36423), (37, 36495),

Gene: StuartMinion_60 Start: 33885, Stop: 34013, Start Num: 19

Candidate Starts for StuartMinion_60:

(Start: 19 @33885 has 6 MA's), (22, 33906), (34, 33957), (38, 33969),

Gene: StuartMinion_61 Start: 34010, Stop: 34144, Start Num: 48

Candidate Starts for StuartMinion 61:

(2, 33719), (4, 33740), (7, 33791), (8, 33794), (21, 33899), (24, 33920), (25, 33929), (39, 33971), (44, 34001), (46, 34004), (48, 34010), (56, 34067), (63, 34115), (65, 34133),

Gene: ThayneTheZag_66 Start: 34569, Stop: 34706, Start Num: 16

Candidate Starts for ThayneTheZag_66:

(Start: 16 @34569 has 6 MA's), (20, 34590), (27, 34626),

Gene: Tiff81_59 Start: 32815, Stop: 32952, Start Num: 16

Candidate Starts for Tiff81 59:

(10, 32788), (Start: 16 @ 32815 has 6 MA's), (20, 32836),