

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 170152 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170152 has 36 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Hedwig 36
- Track 2 : DirtyBoi_34
- Track 3 : Ecliptus_45
- Track 4: LitninMcQueen 38
- Track 5 : Periwinkle 47
- Track 6 : Kamaru_39
- Track 7 : Getalong_45
- Track 8 : DillTech15_67, Madiba_72
- Track 9: DLane_66, FreddyB_74, Babsiella_56, Seagreen_69, Akhila_61, Ovechkin_71, MilanaBonita_60, Filuzino_69, Kingsley_72, Batiatus_67, Quico_78, Girafales_78, Ramsey_70, Kenuha5_67, Florinda_81, DotProduct_65, Phanphagia_67, Shauna1_68, DaddyRickover_73, Hamulus_69
- Track 10 : Ms6 67
- Track 11: Philonius 56
- Track 12: Mangethe 56, Majeke 56, Zilizebeth 56, Phegasus 56
- Track 13 : Mbo4 27

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

The start number called the most often in the published annotations is 9, it was called in 22 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Akhila_61, Babsiella_56, Batiatus_67, DLane_66, DaddyRickover_73, DillTech15_67, DotProduct_65, Filuzino_69, Florinda_81, FreddyB_74, Girafales_78, Hamulus_69, Kenuha5_67, Kingsley_72, Madiba_72, MilanaBonita_60, Ovechkin_71, Phanphagia_67, Philonius_56, Quico_78, Ramsey_70, Seagreen_69, Shauna1_68,

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

• Ms6_67,

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

• DirtyBoi_34, Ecliptus_45, Getalong_45, Hedwig_36, Kamaru_39, LitninMcQueen_38, Majeke_56, Mangethe_56, Mbo4_27, Periwinkle_47, Phegasus_56, Zilizebeth_56,

Summary by start number:

Start 3:

- Found in 4 of 36 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Kamaru_39 (DN1),

Start 6:

- Found in 5 of 36 (13.9%) of genes in pham
- Manual Annotations of this start: 2 of 33
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Getalong_45 (DN1), LitninMcQueen_38 (DN1), Mbo4_27 (singleton),

Start 7:

- Found in 3 of 36 (8.3%) of genes in pham
- Manual Annotations of this start: 3 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DirtyBoi_34 (DB), Ecliptus_45 (DN), Hedwig_36 (DB),

Start 8:

- Found in 8 of 36 (22.2%) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Periwinkle 47 (DN1),

Start 9:

- Found in 24 of 36 (66.7%) of genes in pham
- Manual Annotations of this start: 22 of 33
- Called 95.8% of time when present
- Phage (with cluster) where this start called: Akhila_61 (F1), Babsiella_56 (I1), Batiatus_67 (F1), DLane_66 (F1), DaddyRickover_73 (F1), DillTech15_67 (F1), DotProduct_65 (F1), Filuzino_69 (F1), Florinda_81 (F1), FreddyB_74 (F1), Girafales_78 (F1), Hamulus_69 (F1), Kenuha5_67 (F1), Kingsley_72 (F1), Madiba_72 (F1), MilanaBonita_60 (F1), Ovechkin_71 (F1), Phanphagia_67 (F1), Philonius_56 (N), Quico_78 (F1), Ramsey_70 (F1), Seagreen_69 (F1), Shauna1_68 (F1),

Start 10:

- Found in 4 of 36 (11.1%) of genes in pham
- Manual Annotations of this start: 4 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Majeke_56 (P1), Mangethe_56 (P1), Phegasus_56 (P1), Zilizebeth_56 (P1),

Start 11:

• Found in 24 of 36 (66.7%) of genes in pham

- No Manual Annotations of this start.
- Called 4.2% of time when present
- Phage (with cluster) where this start called: Ms6_67 (F1),

Summary by clusters:

There are 8 clusters represented in this pham: DN, F1, singleton, P1, I1, DB, N, DN1,

Info for manual annotations of cluster DB:

•Start number 7 was manually annotated 2 times for cluster DB.

Info for manual annotations of cluster DN:

•Start number 7 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- •Start number 3 was manually annotated 1 time for cluster DN1.
- •Start number 6 was manually annotated 2 times for cluster DN1.
- •Start number 8 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster F1:

•Start number 9 was manually annotated 20 times for cluster F1.

Info for manual annotations of cluster I1:

•Start number 9 was manually annotated 1 time for cluster I1.

Info for manual annotations of cluster N:

•Start number 9 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster P1:

•Start number 10 was manually annotated 4 times for cluster P1.

Gene Information:

Gene: Akhila_61 Start: 40673, Stop: 40512, Start Num: 9

Candidate Starts for Akhila_61:

(Start: 9 @ 40673 has 22 MA's), (11, 40658), (16, 40571),

Gene: Babsiella 56 Start: 38691, Stop: 38530, Start Num: 9

Candidate Starts for Babsiella 56:

(Start: 9 @ 38691 has 22 MA's), (11, 38676), (16, 38589),

Gene: Batiatus_67 Start: 44226, Stop: 44065, Start Num: 9

Candidate Starts for Batiatus_67:

(Start: 9 @ 44226 has 22 MA's), (11, 44211), (16, 44124),

Gene: DLane_66 Start: 44160, Stop: 43999, Start Num: 9

Candidate Starts for DLane 66:

(Start: 9 @ 44160 has 22 MA's), (11, 44145), (16, 44058),

Gene: DaddyRickover 73 Start: 46759, Stop: 46598, Start Num: 9

Candidate Starts for DaddyRickover_73:

(Start: 9 @46759 has 22 MA's), (11, 46744), (16, 46657),

Gene: DillTech15_67 Start: 43001, Stop: 42840, Start Num: 9

Candidate Starts for DillTech15_67:

(Start: 9 @43001 has 22 MA's), (11, 42986), (16, 42899), (17, 42887),

Gene: DirtyBoi_34 Start: 28640, Stop: 28837, Start Num: 7

Candidate Starts for DirtyBoi 34:

(Start: 7 @28640 has 3 MA's), (Start: 8 @28664 has 1 MA's), (14, 28748), (18, 28784),

Gene: DotProduct 65 Start: 43940, Stop: 43779, Start Num: 9

Candidate Starts for DotProduct 65:

(Start: 9 @43940 has 22 MA's), (11, 43925), (16, 43838),

Gene: Ecliptus_45 Start: 32219, Stop: 32419, Start Num: 7

Candidate Starts for Ecliptus_45:

(Start: 7 @32219 has 3 MA's), (Start: 8 @32243 has 1 MA's), (14, 32327), (15, 32333), (18, 32363), (19, 32375),

Gene: Filuzino_69 Start: 44711, Stop: 44550, Start Num: 9

Candidate Starts for Filuzino_69:

(Start: 9 @ 44711 has 22 MA's), (11, 44696), (16, 44609),

Gene: Florinda_81 Start: 46866, Stop: 46705, Start Num: 9

Candidate Starts for Florinda_81:

(Start: 9 @ 46866 has 22 MA's), (11, 46851), (16, 46764),

Gene: FreddyB 74 Start: 46101, Stop: 45940, Start Num: 9

Candidate Starts for FreddyB_74:

(Start: 9 @ 46101 has 22 MA's), (11, 46086), (16, 45999),

Gene: Getalong_45 Start: 32518, Stop: 32730, Start Num: 6

Candidate Starts for Getalong 45:

(Start: 3 @32461 has 1 MA's), (4, 32470), (5, 32473), (Start: 6 @32518 has 2 MA's), (Start: 8 @32554 has 1 MA's), (13, 32593), (18, 32674), (19, 32686),

Gene: Girafales_78 Start: 46657, Stop: 46496, Start Num: 9

Candidate Starts for Girafales_78:

(Start: 9 @46657 has 22 MA's), (11, 46642), (16, 46555),

Gene: Hamulus_69 Start: 44779, Stop: 44618, Start Num: 9

Candidate Starts for Hamulus_69:

(Start: 9 @44779 has 22 MA's), (11, 44764), (16, 44677),

Gene: Hedwig_36 Start: 29107, Stop: 29304, Start Num: 7

Candidate Starts for Hedwig_36:

(Start: 7 @ 29107 has 3 MA's), (Start: 8 @ 29131 has 1 MA's), (14, 29215), (15, 29221), (18, 29251),

Gene: Kamaru_39 Start: 29394, Stop: 29663, Start Num: 3

Candidate Starts for Kamaru 39:

(2, 29391), (Start: 3 @29394 has 1 MA's), (4, 29403), (Start: 6 @29451 has 2 MA's), (Start: 8 @29487 has 1 MA's), (18, 29607), (19, 29619),

Gene: Kenuha5_67 Start: 45969, Stop: 45808, Start Num: 9

Candidate Starts for Kenuha5_67:

(Start: 9 @45969 has 22 MA's), (11, 45954), (16, 45867),

Gene: Kingsley_72 Start: 47621, Stop: 47460, Start Num: 9

Candidate Starts for Kingsley_72:

(Start: 9 @ 47621 has 22 MA's), (11, 47606), (16, 47519),

Gene: LitninMcQueen_38 Start: 29200, Stop: 29412, Start Num: 6

Candidate Starts for LitninMcQueen_38:

(2, 29140), (Start: 3 @29143 has 1 MA's), (4, 29152), (Start: 6 @29200 has 2 MA's), (Start: 8 @29236

has 1 MA's), (18, 29356), (19, 29368),

Gene: Madiba_72 Start: 46532, Stop: 46371, Start Num: 9

Candidate Starts for Madiba_72:

(Start: 9 @ 46532 has 22 MA's), (11, 46517), (16, 46430), (17, 46418),

Gene: Majeke_56 Start: 37433, Stop: 37278, Start Num: 10

Candidate Starts for Majeke_56: (Start: 10 @37433 has 4 MA's),

Gene: Mangethe_56 Start: 37433, Stop: 37278, Start Num: 10

Candidate Starts for Mangethe_56: (Start: 10 @37433 has 4 MA's),

Gene: Mbo4_27 Start: 26962, Stop: 27171, Start Num: 6

Candidate Starts for Mbo4_27:

(1, 26791), (Start: 6 @ 26962 has 2 MA's), (Start: 8 @ 26995 has 1 MA's),

Gene: MilanaBonita_60 Start: 40673, Stop: 40512, Start Num: 9

Candidate Starts for MilanaBonita_60:

(Start: 9 @ 40673 has 22 MA's), (11, 40658), (16, 40571),

Gene: Ms6 67 Start: 40374, Stop: 40228, Start Num: 11

Candidate Starts for Ms6_67:

(Start: 9 @40389 has 22 MA's), (11, 40374), (12, 40368), (16, 40287),

Gene: Ovechkin_71 Start: 45449, Stop: 45288, Start Num: 9

Candidate Starts for Ovechkin_71:

(Start: 9 @ 45449 has 22 MA's), (11, 45434), (16, 45347),

Gene: Periwinkle_47 Start: 32200, Stop: 32376, Start Num: 8

Candidate Starts for Periwinkle 47:

(Start: 3 @32107 has 1 MA's), (4, 32116), (Start: 6 @32164 has 2 MA's), (Start: 8 @32200 has 1

MA's), (18, 32320), (19, 32332),

Gene: Phanphagia_67 Start: 44407, Stop: 44246, Start Num: 9

Candidate Starts for Phanphagia_67:

(Start: 9 @44407 has 22 MA's), (11, 44392), (16, 44305),

Gene: Phegasus_56 Start: 37400, Stop: 37245, Start Num: 10

Candidate Starts for Phegasus_56: (Start: 10 @37400 has 4 MA's),

Gene: Philonius_56 Start: 37045, Stop: 36884, Start Num: 9

Candidate Starts for Philonius_56:

(Start: 9 @37045 has 22 MA's), (11, 37030), (16, 36943),

Gene: Quico_78 Start: 46686, Stop: 46525, Start Num: 9

Candidate Starts for Quico_78:

(Start: 9 @46686 has 22 MA's), (11, 46671), (16, 46584),

Gene: Ramsey_70 Start: 46837, Stop: 46676, Start Num: 9

Candidate Starts for Ramsey_70:

(Start: 9 @46837 has 22 MA's), (11, 46822), (16, 46735),

Gene: Seagreen_69 Start: 44285, Stop: 44124, Start Num: 9

Candidate Starts for Seagreen_69:

(Start: 9 @44285 has 22 MA's), (11, 44270), (16, 44183),

Gene: Shauna1_68 Start: 44657, Stop: 44496, Start Num: 9

Candidate Starts for Shauna1_68:

(Start: 9 @44657 has 22 MA's), (11, 44642), (16, 44555),

Gene: Zilizebeth_56 Start: 37424, Stop: 37269, Start Num: 10

Candidate Starts for Zilizebeth_56: (Start: 10 @37424 has 4 MA's),