

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 145993 Report

This analysis was run 04/28/24 on database version 559.

Pham number 145993 has 19 members, 2 are drafts.

Phages represented in each track:

• Track 1 : DD5_79

Track 2 : Lockley_81

Track 3: Chuckly_54, Phasih_50, Aubs_52

Track 4 : Sparkdehlily_59, TDanisky_59, MadMen_49

• Track 5 : Klein_89, Minerva_88, Wanda_93, EricMillard_82, Madiba_62,

Optimus_83, Mova_65

Track 6: BAKA_90, Duke13_87

Track 7 : StAugustine_114

Track 8 : TinyDot_48

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

The start number called the most often in the published annotations is 10, it was called in 12 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• DD5_79, EricMillard_82, Klein_89, Lockley_81, MadMen_49, Madiba_62, Minerva_88, Mova_65, Optimus_83, Sparkdehlily_59, TDanisky_59, Wanda_93,

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

Aubs_52, BAKA_90, Chuckly_54, Duke13_87, Phasih_50,

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

StAugustine_114, TinyDot_48,

Summary by start number:

Start 10

- Found in 17 of 19 (89.5%) of genes in pham
- Manual Annotation's of this start: 12 of 17
- Called 70.6% of time when present
- Phage (with cluster) where this start called: DD5_79 (A1), EricMillard_82 (J),
 Klein_89 (J), Lockley_81 (A1), MadMen_49 (F1), Madiba_62 (F1), Minerva_88 (J),
 Mova_65 (F1), Optimus_83 (J), Sparkdehlily_59 (F1), TDanisky_59 (F1), Wanda_93

(J),

Start 11:

- Found in 1 of 19 (5.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TinyDot_48 (singleton),

Start 12:

- Found in 18 of 19 (94.7%) of genes in pham
- Manual Annotations of this start: 5 of 17
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Aubs_52 (F1), BAKA_90 (J), Chuckly_54 (F1), Duke13_87 (J), Phasih_50 (F1), StAugustine_114 (singleton),

Summary by clusters:

There are 4 clusters represented in this pham: A1, F1, singleton, J,

Info for manual annotations of cluster A1:

•Start number 10 was manually annotated 2 times for cluster A1.

Info for manual annotations of cluster F1:

- •Start number 10 was manually annotated 5 times for cluster F1.
- •Start number 12 was manually annotated 3 times for cluster F1.

Info for manual annotations of cluster J:

- •Start number 10 was manually annotated 5 times for cluster J.
- •Start number 12 was manually annotated 2 times for cluster J.

Gene Information:

Gene: Aubs 52 Start: 36993, Stop: 37229, Start Num: 12

Candidate Starts for Aubs_52:

(2, 36801), (3, 36828), (5, 36873), (Start: 10 @36978 has 12 MA's), (Start: 12 @36993 has 5 MA's), (15, 37071), (16, 37089),

Gene: BAKA 90 Start: 56692, Stop: 56928, Start Num: 12

Candidate Starts for BAKA 90:

(Start: 10 @56677 has 12 MA's), (Start: 12 @56692 has 5 MA's), (15, 56770), (16, 56788),

Gene: Chuckly_54 Start: 37570, Stop: 37806, Start Num: 12

Candidate Starts for Chuckly_54:

(2, 37378), (3, 37405), (5, 37450), (Start: 10 @37555 has 12 MA's), (Start: 12 @37570 has 5 MA's), (15, 37648), (16, 37666),

Gene: DD5 79 Start: 48261, Stop: 48016, Start Num: 10

Candidate Starts for DD5 79:

(Start: 10 @48261 has 12 MA's), (Start: 12 @48246 has 5 MA's), (15, 48168),

Gene: Duke13_87 Start: 55196, Stop: 55432, Start Num: 12

Candidate Starts for Duke13 87:

(Start: 10 @55181 has 12 MA's), (Start: 12 @55196 has 5 MA's), (15, 55274), (16, 55292),

Gene: EricMillard_82 Start: 55472, Stop: 55723, Start Num: 10

Candidate Starts for EricMillard_82:

(Start: 10 @55472 has 12 MA's), (Start: 12 @55487 has 5 MA's), (15, 55565), (16, 55583),

Gene: Klein 89 Start: 55356, Stop: 55607, Start Num: 10

Candidate Starts for Klein_89:

(Start: 10 @55356 has 12 MA's), (Start: 12 @55371 has 5 MA's), (15, 55449), (16, 55467),

Gene: Lockley 81 Start: 48016, Stop: 47771, Start Num: 10

Candidate Starts for Lockley_81:

(1, 48238), (4, 48139), (Start: 10 @48016 has 12 MA's), (Start: 12 @48001 has 5 MA's), (15, 47923),

Gene: MadMen_49 Start: 36625, Stop: 36876, Start Num: 10

Candidate Starts for MadMen 49:

(2, 36448), (3, 36475), (5, 36520), (Start: 10 @36625 has 12 MA's), (Start: 12 @36640 has 5 MA's), (15, 36718), (16, 36736),

Gene: Madiba_62 Start: 40293, Stop: 40544, Start Num: 10

Candidate Starts for Madiba_62:

(Start: 10 @40293 has 12 MA's), (Start: 12 @40308 has 5 MA's), (15, 40386), (16, 40404),

Gene: Minerva_88 Start: 56322, Stop: 56573, Start Num: 10

Candidate Starts for Minerva_88:

(Start: 10 @56322 has 12 MA's), (Start: 12 @56337 has 5 MA's), (15, 56415), (16, 56433),

Gene: Mova_65 Start: 40797, Stop: 41048, Start Num: 10

Candidate Starts for Mova_65:

(Start: 10 @40797 has 12 MA's), (Start: 12 @40812 has 5 MA's), (15, 40890), (16, 40908),

Gene: Optimus 83 Start: 55026, Stop: 55277, Start Num: 10

Candidate Starts for Optimus 83:

(Start: 10 @55026 has 12 MA's), (Start: 12 @55041 has 5 MA's), (15, 55119), (16, 55137),

Gene: Phasih_50 Start: 37464, Stop: 37700, Start Num: 12

Candidate Starts for Phasih_50:

(2, 37272), (3, 37299), (5, 37344), (Start: 10 @37449 has 12 MA's), (Start: 12 @37464 has 5 MA's), (15, 37542), (16, 37560),

Gene: Sparkdehlily_59 Start: 38553, Stop: 38804, Start Num: 10

Candidate Starts for Sparkdehlily_59:

(2, 38376), (3, 38403), (5, 38448), (Start: 10 @38553 has 12 MA's), (Start: 12 @38568 has 5 MA's), (15, 38646), (16, 38664),

Gene: StAugustine_114 Start: 76027, Stop: 75722, Start Num: 12

Candidate Starts for StAugustine_114:

(9, 76051), (Start: 12 @76027 has 5 MA's), (15, 75949), (16, 75931), (18, 75769),

Gene: TDanisky_59 Start: 38553, Stop: 38804, Start Num: 10

Candidate Starts for TDanisky_59:

(2, 38376), (3, 38403), (5, 38448), (Start: 10 @38553 has 12 MA's), (Start: 12 @38568 has 5 MA's), (15, 38646), (16, 38664),

Gene: TinyDot_48 Start: 31731, Stop: 31970, Start Num: 11

Candidate Starts for TinyDot_48:

(6, 31629), (7, 31635), (8, 31686), (11, 31731), (13, 31749), (14, 31779), (17, 31890),

Gene: Wanda_93 Start: 55665, Stop: 55916, Start Num: 10

Candidate Starts for Wanda_93:

(Start: 10 @55665 has 12 MA's), (Start: 12 @55680 has 5 MA's), (15, 55758), (16, 55776),