

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 196896 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196896 has 17 members, 1 are drafts.

Phages represented in each track:

- Track 1 : BenchScraper 49
- Track 2 : Phrank15 51
- Track 3 : Raphaella_50
- Track 4: MidnightRain_54
- Track 5 : Anekin 47
- Track 6 : Persistence_46
- Track 7 : Ragga 42
- Track 8 : BillyTP_52
- Track 9: Arianna_34, Poushou_34, TouchMeNot_34, Colleen_34
- Track 10 : Sonali 38
- Track 11 : Mufasa8 37
- Track 12 : TripleJ 39
- Track 13 : Kukla_38
- Track 14 : Sleepyhead_39

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

The start number called the most often in the published annotations is 21, it was called in 7 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Anekin_47, BenchScraper_49, BillyTP_52, MidnightRain_54, Persistence_46, Phrank15_51, Raphaella_50,

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

Arianna_34, Colleen_34, Kukla_38, Poushou_34, Raqqa_42, TouchMeNot_34, TripleJ_39,

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

Mufasa8_37, Sleepyhead_39, Sonali_38,

Summary by start number:

Start 8:

- Found in 7 of 17 (41.2%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Sonali_38 (FG),

Start 9:

- Found in 4 of 17 (23.5%) of genes in pham
- Manual Annotations of this start: 4 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arianna_34 (EO), Colleen_34 (EO), Poushou_34 (EO), TouchMeNot_34 (EO),

Start 13:

- Found in 1 of 17 (5.9%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sleepyhead_39 (singleton),

Start 14:

- Found in 2 of 17 (11.8%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 50.0% of time when present
- Phage (with cluster) where this start called: TripleJ_39 (FJ),

Start 15:

- Found in 2 of 17 (11.8%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Mufasa8_37 (FG),

Start 18:

- Found in 2 of 17 (11.8%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Kukla_38 (FJ),

Start 21:

- Found in 14 of 17 (82.4%) of genes in pham
- Manual Annotations of this start: 7 of 16
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Anekin_47 (AY), BenchScraper_49 (AY), BillyTP_52 (AY), MidnightRain_54 (AY), Persistence_46 (AY), Phrank15_51 (AY), Raphaella_50 (AY),

Start 24:

- Found in 2 of 17 (11.8%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Ragga 42 (AY),

Summary by clusters:

There are 5 clusters represented in this pham: AY, FJ, FG, EO, singleton,

Info for manual annotations of cluster AY:

•Start number 21 was manually annotated 7 times for cluster AY.

Info for manual annotations of cluster EO:

•Start number 9 was manually annotated 4 times for cluster EO.

Info for manual annotations of cluster FG:

- •Start number 8 was manually annotated 1 time for cluster FG.
- •Start number 15 was manually annotated 1 time for cluster FG.

Info for manual annotations of cluster FJ:

- •Start number 14 was manually annotated 1 time for cluster FJ.
- •Start number 18 was manually annotated 1 time for cluster FJ.

Gene Information:

Gene: Anekin_47 Start: 30921, Stop: 30547, Start Num: 21

Candidate Starts for Anekin 47:

(3, 31044), (4, 31008), (5, 31002), (6, 30987), (7, 30969), (Start: 8 @30963 has 1 MA's), (Start: 21 @30921 has 7 MA's), (22, 30915), (31, 30816), (33, 30804), (34, 30801), (36, 30762), (40, 30687), (45, 30636),

Gene: Arianna_34 Start: 32062, Stop: 31622, Start Num: 9

Candidate Starts for Arianna 34:

(Start: 9 @32062 has 4 MA's), (12, 32053), (Start: 21 @32020 has 7 MA's), (42, 31750), (47, 31705), (48, 31699), (54, 31639),

Gene: BenchScraper_49 Start: 30807, Stop: 30433, Start Num: 21

Candidate Starts for BenchScraper 49:

(3, 30930), (4, 30894), (5, 30888), (6, 30873), (7, 30855), (Start: 8 @ 30849 has 1 MA's), (Start: 21 @ 30807 has 7 MA's), (22, 30801), (33, 30690), (34, 30687), (36, 30648), (45, 30522),

Gene: BillyTP_52 Start: 32678, Stop: 32304, Start Num: 21

Candidate Starts for BillyTP_52:

(3, 32801), (4, 32765), (5, 32759), (6, 32744), (7, 32726), (Start: 8 @32720 has 1 MA's), (Start: 21 @32678 has 7 MA's), (22, 32672), (31, 32573), (34, 32558), (36, 32519), (45, 32393),

Gene: Colleen 34 Start: 32062, Stop: 31622, Start Num: 9

Candidate Starts for Colleen 34:

(Start: 9 @ 32062 has 4 MA's), (12, 32053), (Start: 21 @ 32020 has 7 MA's), (42, 31750), (47, 31705), (48, 31699), (54, 31639),

Gene: Kukla_38 Start: 28870, Stop: 28484, Start Num: 18

Candidate Starts for Kukla 38:

(Start: 14 @28885 has 1 MA's), (Start: 18 @28870 has 1 MA's), (Start: 21 @28858 has 7 MA's), (28, 28783), (37, 28669), (45, 28573),

Gene: MidnightRain_54 Start: 32585, Stop: 32211, Start Num: 21

Candidate Starts for MidnightRain_54:

(3, 32708), (4, 32672), (5, 32666), (6, 32651), (7, 32633), (Start: 8 @ 32627 has 1 MA's), (Start: 21 @ 32585 has 7 MA's), (22, 32579), (31, 32480), (33, 32468), (34, 32465), (36, 32426), (38, 32360), (40, 32351), (45, 32300),

Gene: Mufasa8_37 Start: 30860, Stop: 30435, Start Num: 15

Candidate Starts for Mufasa8 37:

(Start: 8 @ 30878 has 1 MA's), (11, 30869), (Start: 15 @ 30860 has 1 MA's), (17, 30848), (25, 30818), (30, 30755), (32, 30731), (41, 30590), (47, 30536), (49, 30512), (50, 30506), (53, 30479),

Gene: Persistence 46 Start: 30198, Stop: 29824, Start Num: 21

Candidate Starts for Persistence 46:

(1, 30387), (2, 30357), (3, 30321), (4, 30285), (5, 30279), (6, 30264), (7, 30246), (Start: 8 @30240 has 1 MA's), (Start: 21 @30198 has 7 MA's), (22, 30192), (31, 30093), (33, 30081), (34, 30078), (45, 29913),

Gene: Phrank15_51 Start: 31429, Stop: 31055, Start Num: 21

Candidate Starts for Phrank15 51:

(4, 31516), (5, 31510), (6, 31495), (7, 31477), (Start: 21 @31429 has 7 MA's), (22, 31423), (31, 31324), (33, 31312), (34, 31309), (36, 31270), (45, 31144), (52, 31072),

Gene: Poushou_34 Start: 31891, Stop: 31451, Start Num: 9

Candidate Starts for Poushou_34:

(Start: 9 @31891 has 4 MA's), (12, 31882), (Start: 21 @31849 has 7 MA's), (42, 31579), (47, 31534), (48, 31528), (54, 31468),

Gene: Raphaella_50 Start: 31072, Stop: 30698, Start Num: 21

Candidate Starts for Raphaella_50:

(3, 31195), (4, 31159), (5, 31153), (6, 31138), (7, 31120), (Start: 21 @31072 has 7 MA's), (22, 31066), (24, 31048), (31, 30967), (34, 30952), (36, 30913), (40, 30838), (45, 30787),

Gene: Raqqa_42 Start: 28245, Stop: 27895, Start Num: 24

Candidate Starts for Raqqa_42:

(3, 28392), (4, 28356), (5, 28350), (6, 28335), (7, 28317), (Start: 21 @28269 has 7 MA's), (22, 28263), (24, 28245), (34, 28149), (36, 28110), (45, 27984),

Gene: Sleepyhead_39 Start: 29869, Stop: 29420, Start Num: 13

Candidate Starts for Sleepyhead_39:

(10, 29878), (Start: 13 @29869 has 1 MA's), (16, 29854), (25, 29812), (29, 29761), (30, 29749), (31, 29734), (35, 29710), (39, 29596), (43, 29545), (46, 29518), (55, 29431),

Gene: Sonali_38 Start: 33170, Stop: 32727, Start Num: 8

Candidate Starts for Sonali_38:

(Start: 8 @33170 has 1 MA's), (Start: 15 @33152 has 1 MA's), (17, 33140), (19, 33134), (20, 33128), (23, 33116), (25, 33110), (26, 33095), (27, 33077), (30, 33047), (33, 33020), (44, 32855), (49, 32804), (51, 32783),

Gene: TouchMeNot_34 Start: 32062, Stop: 31622, Start Num: 9

Candidate Starts for TouchMeNot_34:

(Start: 9 @32062 has 4 MA's), (12, 32053), (Start: 21 @32020 has 7 MA's), (42, 31750), (47, 31705), (48, 31699), (54, 31639),

Gene: TripleJ_39 Start: 28726, Stop: 28325, Start Num: 14

Candidate Starts for TripleJ_39:

(Start: 14 @28726 has 1 MA's), (Start: 18 @28711 has 1 MA's), (Start: 21 @28699 has 7 MA's), (28, 28624), (37, 28510), (45, 28414),