

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 134027 Report

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

Pham number 134027 has 23 members, 4 are drafts.

Phages represented in each track:

- Track 1: MrMiyagi 4, Fowlmouth 4
- Track 2 : Keelan_134
- Track 3: Guey18_138, Ziko_137
- Track 4 : Fryberger_133, Volt_138, Ronaldo_135
- Track 5: JordanFarm_49, Waterlily_50, Truong_47, Ashton_48, AloeVera_48, Akoni 47
- Track 6 : Barroma 49
- Track 7 : Atuin 139
- Track 8 : SJReid 146
- Track 9 : PauloDiaboli 181
- Track 10 : A3Wally 182
- Track 11 : Zooman_159
- Track 12 : Big4_173
- Track 13 : Cece_168
- Track 14 : Pumpernickel 175

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

The start number called the most often in the published annotations is 5, it was called in 6 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• A3Wally_182, Atuin_139, Big4_173, Cece_168, PauloDiaboli_181, Pumpernickel_175, SJReid_146, Zooman_159,

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

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

Akoni_47, AloeVera_48, Ashton_48, Barroma_49, Fowlmouth_4, Fryberger_133, Guey18_138, JordanFarm_49, Keelan_134, MrMiyagi_4, Ronaldo_135, Truong_47, Volt_138, Waterlily_50, Ziko_137,

Summary by start number:

Start 3:

- Found in 5 of 23 (21.7%) of genes in pham
- Manual Annotations of this start: 5 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fryberger_133 (DP), Guey18_138 (DP), Ronaldo_135 (DP), Volt_138 (DP), Ziko_137 (DP),

Start 4:

- Found in 6 of 23 (26.1%) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Keelan_134 (DP),

Start 5:

- Found in 8 of 23 (34.8%) of genes in pham
- Manual Annotations of this start: 6 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally_182 (GD1), Atuin_139 (FC), Big4_173 (GD2), Cece_168 (GD3), PauloDiaboli_181 (GD1), Pumpernickel_175 (GD4), SJReid_146 (FC), Zooman_159 (GD2),

Start 7:

- Found in 7 of 23 (30.4%) of genes in pham
- Manual Annotations of this start: 5 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Akoni_47 (EK2), AloeVera_48 (EK2), Ashton_48 (EK2), Barroma_49 (EK2), JordanFarm_49 (EK2), Truong_47 (EK2), Waterlily_50 (EK2),

Start 10:

- Found in 2 of 23 (8.7%) of genes in pham
- Manual Annotations of this start: 2 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fowlmouth_4 (AC), MrMiyagi_4 (AC),

Summary by clusters:

There are 8 clusters represented in this pham: GD1, GD2, GD3, GD4, AC, FC, EK2, DP,

Info for manual annotations of cluster AC:

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

Info for manual annotations of cluster DP:

- •Start number 3 was manually annotated 5 times for cluster DP.
- •Start number 4 was manually annotated 1 time for cluster DP.

Info for manual annotations of cluster EK2:

•Start number 7 was manually annotated 5 times for cluster EK2.

Info for manual annotations of cluster GD1:

•Start number 5 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster GD2:

•Start number 5 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:

•Start number 5 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:

•Start number 5 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally 182 Start: 100432, Stop: 100740, Start Num: 5

Candidate Starts for A3Wally 182:

(Start: 5 @ 100432 has 6 MA's), (9, 100456), (12, 100483), (32, 100600), (36, 100666), (39, 100705),

Gene: Akoni_47 Start: 48233, Stop: 48451, Start Num: 7

Candidate Starts for Akoni 47:

(6, 48230), (Start: 7 @48233 has 5 MA's), (12, 48272), (13, 48275),

Gene: AloeVera_48 Start: 48446, Stop: 48664, Start Num: 7

Candidate Starts for AloeVera 48:

(6, 48443), (Start: 7 @ 48446 has 5 MA's), (12, 48485), (13, 48488),

Gene: Ashton_48 Start: 48445, Stop: 48663, Start Num: 7

Candidate Starts for Ashton_48:

(6, 48442), (Start: 7 @48445 has 5 MA's), (12, 48484), (13, 48487),

Gene: Atuin_139 Start: 97267, Stop: 97545, Start Num: 5

Candidate Starts for Atuin 139:

(Start: 5 @ 97267 has 6 MA's), (29, 97414),

Gene: Barroma_49 Start: 48235, Stop: 48453, Start Num: 7

Candidate Starts for Barroma_49:

(Start: 7 @48235 has 5 MA's), (12, 48274), (13, 48277),

Gene: Big4_173 Start: 97536, Stop: 97844, Start Num: 5

Candidate Starts for Big4 173:

(1, 97461), (2, 97470), (Start: 5 @97536 has 6 MA's), (8, 97557), (12, 97587), (15, 97614), (32, 97704), (35, 97746),

Gene: Cece_168 Start: 102563, Stop: 102877, Start Num: 5

Candidate Starts for Cece_168:

(Start: 5 @ 102563 has 6 MA's), (9, 102587), (12, 102614), (19, 102656), (25, 102698), (38, 102830),

Gene: Fowlmouth 4 Start: 3411, Stop: 3611, Start Num: 10

Candidate Starts for Fowlmouth 4:

(Start: 10 @3411 has 2 MA's), (11, 3423), (19, 3468), (20, 3474), (28, 3519), (29, 3522), (32, 3540),

Gene: Fryberger_133 Start: 63596, Stop: 63859, Start Num: 3

Candidate Starts for Fryberger 133:

(Start: 3 @63596 has 5 MA's), (Start: 4 @63602 has 1 MA's), (13, 63659), (14, 63680), (16, 63686), (21, 63707), (22, 63716), (24, 63734), (29, 63755), (31, 63770), (33, 63794), (34, 63806), (35, 63815),

Gene: Guey18_138 Start: 64810, Stop: 65070, Start Num: 3

Candidate Starts for Guey18_138:

(Start: 3 @64810 has 5 MA's), (Start: 4 @64816 has 1 MA's), (13, 64873), (14, 64894), (16, 64900), (21, 64921), (24, 64948), (29, 64969), (31, 64984), (33, 65008), (35, 65029),

Gene: JordanFarm_49 Start: 48446, Stop: 48664, Start Num: 7

Candidate Starts for JordanFarm 49:

(6, 48443), (Start: 7 @ 48446 has 5 MA's), (12, 48485), (13, 48488),

Gene: Keelan_134 Start: 64318, Stop: 64569, Start Num: 4

Candidate Starts for Keelan_134:

(Start: 4 @64318 has 1 MA's), (13, 64375), (18, 64411), (22, 64432), (23, 64435), (26, 64462), (29, 64471), (30, 64477), (32, 64489), (33, 64510),

Gene: MrMiyagi_4 Start: 3411, Stop: 3611, Start Num: 10

Candidate Starts for MrMiyagi_4:

(Start: 10 @3411 has 2 MA's), (11, 3423), (19, 3468), (20, 3474), (28, 3519), (29, 3522), (32, 3540),

Gene: PauloDiaboli_181 Start: 98479, Stop: 98787, Start Num: 5

Candidate Starts for PauloDiaboli_181:

(Start: 5 @ 98479 has 6 MA's), (9, 98503), (12, 98530), (32, 98647), (39, 98752),

Gene: Pumpernickel_175 Start: 100142, Stop: 100450, Start Num: 5

Candidate Starts for Pumpernickel 175:

(Start: 5 @100142 has 6 MA's), (8, 100163), (9, 100166), (12, 100193), (17, 100229), (18, 100232), (19, 100235), (22, 100253), (31, 100307), (35, 100352), (37, 100400),

Gene: Ronaldo_135 Start: 64501, Stop: 64764, Start Num: 3

Candidate Starts for Ronaldo 135:

(Start: 3 @64501 has 5 MA's), (Start: 4 @64507 has 1 MA's), (13, 64564), (14, 64585), (16, 64591), (21, 64612), (22, 64621), (24, 64639), (29, 64660), (31, 64675), (33, 64699), (34, 64711), (35, 64720),

Gene: SJReid_146 Start: 88739, Stop: 88987, Start Num: 5

Candidate Starts for SJReid_146:

(Start: 5 @88739 has 6 MA's), (27, 88880), (28, 88883), (29, 88886),

Gene: Truong_47 Start: 48235, Stop: 48453, Start Num: 7

Candidate Starts for Truong_47:

(6, 48232), (Start: 7 @ 48235 has 5 MA's), (12, 48274), (13, 48277),

Gene: Volt 138 Start: 64665, Stop: 64928, Start Num: 3

Candidate Starts for Volt 138:

(Start: 3 @64665 has 5 MA's), (Start: 4 @64671 has 1 MA's), (13, 64728), (14, 64749), (16, 64755), (21, 64776), (22, 64785), (24, 64803), (29, 64824), (31, 64839), (33, 64863), (34, 64875), (35, 64884),

Gene: Waterlily 50 Start: 48486, Stop: 48704, Start Num: 7

Candidate Starts for Waterlily_50:

(6, 48483), (Start: 7 @ 48486 has 5 MA's), (12, 48525), (13, 48528),

Gene: Ziko_137 Start: 64772, Stop: 65032, Start Num: 3

Candidate Starts for Ziko_137:

(Start: 3 @64772 has 5 MA's), (Start: 4 @64778 has 1 MA's), (13, 64835), (14, 64856), (16, 64862), (21, 64883), (24, 64910), (29, 64931), (31, 64946), (33, 64970), (35, 64991),

Gene: Zooman_159 Start: 94719, Stop: 95027, Start Num: 5

Candidate Starts for Zooman_159:

(Start: 5 @ 94719 has 6 MA's), (8, 94740), (12, 94770), (18, 94809), (32, 94887), (35, 94929),