

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 4332 Report

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

Pham number 4332 has 25 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Kovu 22
- Track 2 : EastWest_55
- Track 3: Wyborn_7, Sicarius2_7
- Track 4: Abba 27
- Track 5: TunaTartare 192
- Track 6 : Sham_183
- Track 7: Muntaha 161, Wakanda 159
- Track 8 : Circinus_152, BillNye_151
- Track 9 : Atuin 141
- Track 10: Racecar 147, Talia1610 152, Mimi 152, Bloom 150
- Track 11 : DunneganBoMo 139
- Track 12 : SJReid 148
- Track 13 : Patbob_145Track 14 : Sonali_28
- Track 15 : Bumble 57
- Track 16: Altadena 58
- Track 17 : Hirko_55
- Track 18: Kharcho 6, Ottawa 6

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

The start number called the most often in the published annotations is 15, it was called in 5 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

BillNye_151, Circinus_152, Muntaha_161, TunaTartare_192, Wakanda_159,

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

Sham 183.

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

• Abba_27, Altadena_58, Atuin_141, Bloom_150, Bumble_57, DunneganBoMo_139, EastWest_55, Hirko_55, Kharcho_6, Kovu_22, Mimi_152, Ottawa_6, Patbob_145, Racecar_147, SJReid_148, Sicarius2_7, Sonali_28, Talia1610_152, Wyborn_7,

Summary by start number:

Start 6:

- Found in 1 of 25 (4.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kovu_22 (AL),

Start 8:

- Found in 1 of 25 (4.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atuin_141 (FC),

Start 11:

- Found in 7 of 25 (28.0%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bloom_150 (FC), DunneganBoMo_139 (FC), Mimi_152 (FC), Patbob_145 (FC), Racecar_147 (FC), SJReid_148 (FC), Talia1610_152 (FC),

Start 14:

- Found in 1 of 25 (4.0%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hirko 55 (FL),

Start 15:

- Found in 6 of 25 (24.0%) of genes in pham
- Manual Annotations of this start: 5 of 17
- Called 83.3% of time when present
- Phage (with cluster) where this start called: BillNye_151 (BK2), Circinus_152 (BK2), Muntaha_161 (BK2), TunaTartare_192 (BK1), Wakanda_159 (BK2),

Start 16:

- Found in 2 of 25 (8.0%) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abba_27 (AO3), EastWest_55 (AO),

Start 17:

- Found in 1 of 25 (4.0%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sonali_28 (FG),

Start 19:

- Found in 3 of 25 (12.0%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Sham 183 (BK1),

Start 20:

- Found in 2 of 25 (8.0%) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kharcho_6 (FM), Ottawa_6 (FM),

Start 22:

- Found in 4 of 25 (16.0%) of genes in pham
- Manual Annotations of this start: 3 of 17
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Bumble_57 (FH), Sicarius2_7 (AO2), Wyborn_7 (AO2),

Start 24:

- Found in 2 of 25 (8.0%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Altadena_58 (FH),

Summary by clusters:

There are 11 clusters represented in this pham: AL, AO, FC, AO3, AO2, BK2, FG, FH, FL, FM, BK1,

Info for manual annotations of cluster AO:

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

Info for manual annotations of cluster AO2:

•Start number 22 was manually annotated 2 times for cluster AO2.

Info for manual annotations of cluster AO3:

•Start number 16 was manually annotated 1 time for cluster AO3.

Info for manual annotations of cluster BK1:

- •Start number 15 was manually annotated 1 time for cluster BK1.
- Start number 19 was manually annotated 1 time for cluster BK1.

Info for manual annotations of cluster BK2:

•Start number 15 was manually annotated 4 times for cluster BK2.

Info for manual annotations of cluster FC:

•Start number 11 was manually annotated 1 time for cluster FC.

Info for manual annotations of cluster FG:

•Start number 17 was manually annotated 1 time for cluster FG.

Info for manual annotations of cluster FH:

- •Start number 22 was manually annotated 1 time for cluster FH.
- •Start number 24 was manually annotated 1 time for cluster FH.

Info for manual annotations of cluster FL:

•Start number 14 was manually annotated 1 time for cluster FL.

Info for manual annotations of cluster FM:

•Start number 20 was manually annotated 2 times for cluster FM.

Gene Information:

Gene: Abba_27 Start: 23462, Stop: 23824, Start Num: 16

Candidate Starts for Abba 27:

(1, 23108), (5, 23414), (Start: 16 @23462 has 2 MA's), (47, 23735),

Gene: Altadena_58 Start: 37595, Stop: 37945, Start Num: 24

Candidate Starts for Altadena_58:

(23, 37592), (Start: 24 @ 37595 has 1 MA's), (34, 37673), (54, 37904),

Gene: Atuin_141 Start: 97930, Stop: 98343, Start Num: 8

Candidate Starts for Atuin_141:

(8, 97930), (29, 98047), (35, 98089), (37, 98101), (45, 98254),

Gene: BillNye_151 Start: 88009, Stop: 88371, Start Num: 15

Candidate Starts for BillNye_151:

(Start: 15 @88009 has 5 MA's), (29, 88081), (31, 88087), (32, 88093), (33, 88099), (35, 88117), (36, 88123), (52, 88324), (53, 88327),

Gene: Bloom_150 Start: 99871, Stop: 100284, Start Num: 11

Candidate Starts for Bloom_150:

(4, 99835), (Start: 11 @99871 has 1 MA's), (21, 99913), (38, 100036), (44, 100144), (48, 100210), (53, 100237),

Gene: Bumble_57 Start: 38445, Stop: 38798, Start Num: 22

Candidate Starts for Bumble 57:

(Start: 22 @38445 has 3 MA's), (Start: 24 @38451 has 1 MA's), (34, 38529), (39, 38562), (45, 38691), (54, 38757),

Gene: Circinus_152 Start: 87975, Stop: 88337, Start Num: 15

Candidate Starts for Circinus_152:

(Start: 15 @87975 has 5 MA's), (29, 88047), (31, 88053), (32, 88059), (33, 88065), (35, 88083), (36, 88089), (52, 88290), (53, 88293),

Gene: DunneganBoMo_139 Start: 94525, Stop: 94944, Start Num: 11

Candidate Starts for DunneganBoMo 139:

(Start: 11 @94525 has 1 MA's), (21, 94567), (31, 94639), (38, 94690), (42, 94783), (44, 94798), (48, 94864), (53, 94891), (56, 94933),

Gene: EastWest_55 Start: 37310, Stop: 37666, Start Num: 16

Candidate Starts for EastWest_55:

(3, 37235), (7, 37265), (Start: 16 @37310 has 2 MA's), (29, 37385), (34, 37409), (40, 37457), (41, 37520), (46, 37571), (54, 37631),

Gene: Hirko 55 Start: 40206, Stop: 40562, Start Num: 14

Candidate Starts for Hirko_55:

(Start: 14 @40206 has 1 MA's), (Start: 19 @40218 has 1 MA's), (26, 40257), (28, 40287), (47, 40488), (55, 40551),

Gene: Kharcho_6 Start: 1919, Stop: 2308, Start Num: 20

Candidate Starts for Kharcho_6:

(Start: 20 @1919 has 2 MA's), (27, 1982),

Gene: Kovu 22 Start: 15481, Stop: 15873, Start Num: 6

Candidate Starts for Kovu_22:

(2, 15433), (6, 15481), (10, 15490), (12, 15511), (13, 15514), (18, 15526), (Start: 22 @15541 has 3 MA's), (27, 15589), (31, 15601), (32, 15607), (42, 15721), (49, 15790), (50, 15796), (57, 15862),

Gene: Mimi_152 Start: 98936, Stop: 99349, Start Num: 11

Candidate Starts for Mimi 152:

(4, 98900), (Start: 11 @98936 has 1 MA's), (21, 98978), (38, 99101), (44, 99209), (48, 99275), (53, 99302),

Gene: Muntaha_161 Start: 87293, Stop: 87655, Start Num: 15

Candidate Starts for Muntaha 161:

(9, 87257), (Start: 15 @87293 has 5 MA's), (30, 87368), (31, 87371), (32, 87377), (33, 87383), (43, 87518), (52, 87608), (53, 87611),

Gene: Ottawa_6 Start: 1919, Stop: 2308, Start Num: 20

Candidate Starts for Ottawa_6:

(Start: 20 @1919 has 2 MA's), (27, 1982),

Gene: Patbob_145 Start: 99649, Stop: 100068, Start Num: 11

Candidate Starts for Patbob 145:

(4, 99613), (Start: 11 @99649 has 1 MA's), (21, 99691), (31, 99763), (38, 99814), (44, 99922), (48, 99988), (56, 100057),

Gene: Racecar_147 Start: 99924, Stop: 100337, Start Num: 11

Candidate Starts for Racecar_147:

(4, 99888), (Start: 11 @99924 has 1 MA's), (21, 99966), (38, 100089), (44, 100197), (48, 100263), (53, 100290),

Gene: SJReid_148 Start: 89398, Stop: 89817, Start Num: 11

Candidate Starts for SJReid_148:

(Start: 11 @89398 has 1 MA's), (25, 89458), (35, 89548), (44, 89671), (47, 89722), (56, 89806),

Gene: Sham 183 Start: 99378, Stop: 99734, Start Num: 19

Candidate Starts for Sham_183:

(Start: 15 @99366 has 5 MA's), (Start: 19 @99378 has 1 MA's), (26, 99417), (30, 99453), (32, 99462), (33, 99468), (52, 99687),

Gene: Sicarius2_7 Start: 6118, Stop: 6459, Start Num: 22

Candidate Starts for Sicarius2_7:

(Start: 22 @6118 has 3 MA's), (51, 6406),

Gene: Sonali_28 Start: 27905, Stop: 28276, Start Num: 17

Candidate Starts for Sonali_28:

(Start: 17 @27905 has 1 MA's), (42, 28127),

Gene: Talia1610_152 Start: 99939, Stop: 100352, Start Num: 11

Candidate Starts for Talia1610_152:

(4, 99903), (Start: 11 @99939 has 1 MA's), (21, 99981), (38, 100104), (44, 100212), (48, 100278), (53, 100305),

Gene: TunaTartare_192 Start: 101415, Stop: 101783, Start Num: 15

Candidate Starts for TunaTartare_192:

(Start: 15 @101415 has 5 MA's), (Start: 19 @101427 has 1 MA's), (26, 101466), (30, 101502), (32, 101511), (33, 101517), (52, 101736),

Gene: Wakanda_159 Start: 86971, Stop: 87333, Start Num: 15

Candidate Starts for Wakanda_159:

(9, 86935), (Start: 15 @86971 has 5 MA's), (30, 87046), (31, 87049), (32, 87055), (33, 87061), (43, 87196), (52, 87286), (53, 87289),

Gene: Wyborn_7 Start: 5979, Stop: 6320, Start Num: 22

Candidate Starts for Wyborn_7:

(Start: 22 @5979 has 3 MA's), (51, 6267),