

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 86319 Report

This analysis was run 03/30/24 on database version 556.

Pham number 86319 has 26 members, 4 are drafts.

Phages represented in each track:

- Track 1: Conboy_83, Chocolat_85, Kabreeze_85, MoyaNatalis_84, Scavito_86, Chipper1996_860, Mordred_85, JaNo_84, JayCookie_85, Linus_85, Tophat_86, HumptyDumpty_85, RosiePosie_85
- Track 2 : ArV1_072
- Track 3: Lymara_82
- Track 4 : Colucci 88
- Track 5: PrincessTrina 86, EdgarPoe 84
- Track 6 : Chubster_86
- Track 7 : Globfish 42
- Track 8 : Auxilium 54
- Track 9 : EvePickles_45
- Track 10 : Kumotta 39
- Track 11 : Leaf_29, Dewdrop_29
- Track 12 : Hendrix_28

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 15 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• ArV1_072, Chipper1996_860, Chocolat_85, Chubster_86, Conboy_83, EdgarPoe_84, HumptyDumpty_85, JaNo_84, JayCookie_85, Kabreeze_85, Linus_85, Lymara_82, Mordred_85, MoyaNatalis_84, PrincessTrina_86, RosiePosie_85, Scavito_86, Tophat_86,

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

Colucci 88.

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

• Auxilium_54, Dewdrop_29, EvePickles_45, Globfish_42, Hendrix_28, Kumotta_39, Leaf_29,

Summary by start number:

Start 10:

- Found in 19 of 26 (73.1%) of genes in pham
- Manual Annotations of this start: 15 of 22
- Called 94.7% of time when present
- Phage (with cluster) where this start called: ArV1_072 (AR), Chipper1996_860 (AR), Chocolat_85 (AR), Chubster_86 (AR), Conboy_83 (AR), EdgarPoe_84 (AR), HumptyDumpty_85 (AR), JaNo_84 (AR), JayCookie_85 (AR), Kabreeze_85 (AR), Linus_85 (AR), Lymara_82 (AR), Mordred_85 (AR), MoyaNatalis_84 (AR), PrincessTrina_86 (AR), RosiePosie_85 (AR), Scavito_86 (AR), Tophat_86 (AR),

Start 12:

- Found in 4 of 26 (15.4%) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Hendrix_28 (GC),

Start 13:

- Found in 1 of 26 (3.8%) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumotta_39 (FB),

Start 14:

- Found in 6 of 26 (23.1%) of genes in pham
- Manual Annotations of this start: 3 of 22
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Dewdrop_29 (GC), EvePickles_45 (AY), Globfish_42 (AY), Leaf_29 (GC),

Start 15:

- Found in 1 of 26 (3.8%) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Colucci_88 (AR),

Start 17:

- Found in 4 of 26 (15.4%) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Auxilium_54 (AY),

Summary by clusters:

There are 4 clusters represented in this pham: AY, FB, AR, GC,

Info for manual annotations of cluster AR:

- •Start number 10 was manually annotated 15 times for cluster AR.
- •Start number 15 was manually annotated 1 time for cluster AR.

Info for manual annotations of cluster AY:

- Start number 14 was manually annotated 1 time for cluster AY.
- •Start number 17 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster FB:

•Start number 13 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster GC:

- •Start number 12 was manually annotated 1 time for cluster GC.
- •Start number 14 was manually annotated 2 times for cluster GC.

Gene Information:

Gene: ArV1 072 Start: 55543, Stop: 55902, Start Num: 10

Candidate Starts for ArV1_072:

(9, 55531), (Start: 10 @55543 has 15 MA's), (Start: 17 @55591 has 1 MA's), (19, 55648), (23, 55696),

(28, 55816), (29, 55825),

Gene: Auxilium_54 Start: 31211, Stop: 31540, Start Num: 17

Candidate Starts for Auxilium 54:

(Start: 12 @31172 has 1 MA's), (Start: 14 @31184 has 3 MA's), (16, 31193), (Start: 17 @31211 has 1

MA's), (19, 31268), (30, 31490), (32, 31508), (33, 31529),

Gene: Chipper1996_860 Start: 57178, Stop: 57537, Start Num: 10

Candidate Starts for Chipper1996_860:

(4, 57097), (5, 57124), (8, 57160), (Start: 10 @57178 has 15 MA's), (19, 57283), (29, 57460),

Gene: Chocolat_85 Start: 56885, Stop: 57244, Start Num: 10

Candidate Starts for Chocolat_85:

(4, 56804), (5, 56831), (8, 56867), (Start: 10 @56885 has 15 MA's), (19, 56990), (29, 57167),

Gene: Chubster_86 Start: 57534, Stop: 57893, Start Num: 10

Candidate Starts for Chubster_86:

(1, 57285), (2, 57354), (3, 57360), (5, 57480), (8, 57516), (Start: 10 @57534 has 15 MA's), (19,

57639), (29, 57816),

Gene: Colucci_88 Start: 57566, Stop: 57904, Start Num: 15

Candidate Starts for Colucci_88:

(4, 57458), (5, 57485), (8, 57521), (Start: 10 @57539 has 15 MA's), (Start: 15 @57566 has 1 MA's),

(19, 57644), (20, 57650), (21, 57662),

Gene: Conboy 83 Start: 56634, Stop: 56993, Start Num: 10

Candidate Starts for Conboy_83:

(4, 56553), (5, 56580), (8, 56616), (Start: 10 @56634 has 15 MA's), (19, 56739), (29, 56916),

Gene: Dewdrop_29 Start: 11945, Stop: 12295, Start Num: 14

Candidate Starts for Dewdrop_29:

(Start: 12 @11933 has 1 MA's), (Start: 14 @11945 has 3 MA's), (27, 12194), (31, 12251), (33, 12287),

Gene: EdgarPoe 84 Start: 57042, Stop: 57401, Start Num: 10

Candidate Starts for EdgarPoe 84:

(4, 56961), (5, 56988), (8, 57024), (Start: 10 @57042 has 15 MA's), (19, 57147), (28, 57315),

Gene: EvePickles_45 Start: 30673, Stop: 31053, Start Num: 14

Candidate Starts for EvePickles 45:

(Start: 14 @30673 has 3 MA's), (19, 30754),

Gene: Globfish_42 Start: 28195, Stop: 27848, Start Num: 14

Candidate Starts for Globfish_42:

(Start: 14 @28195 has 3 MA's), (26, 27979), (33, 27856),

Gene: Hendrix_28 Start: 12396, Stop: 12767, Start Num: 12

Candidate Starts for Hendrix_28:

(6, 12345), (7, 12354), (Start: 12 @12396 has 1 MA's), (18, 12462), (33, 12750),

Gene: HumptyDumpty_85 Start: 56845, Stop: 57204, Start Num: 10

Candidate Starts for HumptyDumpty_85:

(4, 56764), (5, 56791), (8, 56827), (Start: 10 @56845 has 15 MA's), (19, 56950), (29, 57127),

Gene: JaNo_84 Start: 56816, Stop: 57175, Start Num: 10

Candidate Starts for JaNo 84:

(4, 56735), (5, 56762), (8, 56798), (Start: 10 @56816 has 15 MA's), (19, 56921), (29, 57098),

Gene: JayCookie_85 Start: 57378, Stop: 57737, Start Num: 10

Candidate Starts for JayCookie 85:

(4, 57297), (5, 57324), (8, 57360), (Start: 10 @57378 has 15 MA's), (19, 57483), (29, 57660),

Gene: Kabreeze_85 Start: 56902, Stop: 57261, Start Num: 10

Candidate Starts for Kabreeze 85:

(4, 56821), (5, 56848), (8, 56884), (Start: 10 @56902 has 15 MA's), (19, 57007), (29, 57184),

Gene: Kumotta 39 Start: 27591, Stop: 27944, Start Num: 13

Candidate Starts for Kumotta_39:

(11, 27576), (Start: 13 @27591 has 1 MA's), (Start: 14 @27594 has 3 MA's), (Start: 17 @27621 has 1 MA's), (22, 27708), (24, 27765), (32, 27909),

Gene: Leaf 29 Start: 11945, Stop: 12295, Start Num: 14

Candidate Starts for Leaf 29:

(Start: 12 @11933 has 1 MA's), (Start: 14 @11945 has 3 MA's), (27, 12194), (31, 12251), (33, 12287),

Gene: Linus_85 Start: 57350, Stop: 57709, Start Num: 10

Candidate Starts for Linus_85:

(4, 57269), (5, 57296), (8, 57332), (Start: 10 @57350 has 15 MA's), (19, 57455), (29, 57632),

Gene: Lymara_82 Start: 55871, Stop: 56230, Start Num: 10

Candidate Starts for Lymara_82:

(8, 55853), (Start: 10 @55871 has 15 MA's), (Start: 17 @55919 has 1 MA's), (19, 55976), (25, 56084), (29, 56153),

Gene: Mordred_85 Start: 56941, Stop: 57300, Start Num: 10

Candidate Starts for Mordred_85:

(4, 56860), (5, 56887), (8, 56923), (Start: 10 @56941 has 15 MA's), (19, 57046), (29, 57223),

Gene: MoyaNatalis_84 Start: 56824, Stop: 57183, Start Num: 10

Candidate Starts for MoyaNatalis_84:

(4, 56743), (5, 56770), (8, 56806), (Start: 10 @56824 has 15 MA's), (19, 56929), (29, 57106),

Gene: PrincessTrina_86 Start: 57126, Stop: 57485, Start Num: 10

Candidate Starts for PrincessTrina_86:

(4, 57045), (5, 57072), (8, 57108), (Start: 10 @57126 has 15 MA's), (19, 57231), (28, 57399),

Gene: RosiePosie_85 Start: 56997, Stop: 57356, Start Num: 10

Candidate Starts for RosiePosie 85:

(4, 56916), (5, 56943), (8, 56979), (Start: 10 @56997 has 15 MA's), (19, 57102), (29, 57279),

Gene: Scavito_86 Start: 56990, Stop: 57349, Start Num: 10

Candidate Starts for Scavito_86:

(4, 56909), (5, 56936), (8, 56972), (Start: 10 @56990 has 15 MA's), (19, 57095), (29, 57272),

Gene: Tophat_86 Start: 57179, Stop: 57538, Start Num: 10

Candidate Starts for Tophat_86:

(4, 57098), (5, 57125), (8, 57161), (Start: 10 @57179 has 15 MA's), (19, 57284), (29, 57461),