

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 86035 Report

This analysis was run 04/05/24 on database version 557.

Pham number 86035 has 36 members, 6 are drafts.

Phages represented in each track:

- Track 1: 8UZL 28, FF47 28, Maco6 26
- Track 2 : Muddy 28
- Track 3: Ichor_42, Boersma_44, Amigo_43, Thunderclap_43, Jaek_42, Yeezus_42
- Track 4 : Rings_42, Amavida_42, Heylee_42, Gorgeous_43, Anansi_43, SorJuana 43
- Track 5 : Molivia 47
- Track 6: Adat 28, Brad 28, GurgleFerb 28, Nellie 28, Casserole 29
- Track 7 : Jasmine 31
- Track 8 : Powerball 21
- Track 9: Piku 14
- Track 10 : Whytu 13
- Track 11 : BlueFeather 15
- Track 12 : Yavru_13
- Track 13 : Che9c_27
- Track 14: Kevin1 28
- Track 15: Rubeelu 28, Butters 28
- Track 16: Bogie_30, Brujita_31, Island3_31
- Track 17 : GMA4 23

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 11 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Amavida_42, Amigo_43, Anansi_43, Boersma_44, Gorgeous_43, Heylee_42, Ichor_42, Jaek_42, Molivia_47, Rings_42, SorJuana_43, Thunderclap_43, Yeezus_42,

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

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

• 8UZL_28, Adat_28, BlueFeather_15, Bogie_30, Brad_28, Brujita_31, Butters_28, Casserole_29, Che9c_27, FF47_28, GMA4_23, GurgleFerb_28, Island3_31, Jasmine_31, Kevin1_28, Maco6_26, Muddy_28, Nellie_28, Piku_14, Powerball_21, Rubeelu_28, Whytu_13, Yavru_13,

Summary by start number:

Start 5:

- Found in 2 of 36 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Piku_14 (FE), Whytu_13 (FE),

Start 7:

- Found in 1 of 36 (2.8%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yavru 13 (FE),

Start 8:

- Found in 1 of 36 (2.8%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueFeather_15 (FE),

Start 9:

- Found in 4 of 36 (11.1%) of genes in pham
- Manual Annotations of this start: 2 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 8UZL_28 (AB), FF47_28 (AB), Maco6_26 (AB), Muddy_28 (AB),

Start 10:

- Found in 13 of 36 (36.1%) of genes in pham
- Manual Annotations of this start: 11 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amavida_42 (AQ), Amigo_43 (AQ), Anansi_43 (AQ), Boersma_44 (AQ), Gorgeous_43 (AQ), Heylee_42 (AQ), Ichor_42 (AQ), Jaek_42 (AQ), Molivia_47 (AQ), Rings_42 (AQ), SorJuana_43 (AQ), Thunderclap_43 (AQ), Yeezus_42 (AQ),

Start 11:

- Found in 3 of 36 (8.3%) of genes in pham
- Manual Annotations of this start: 2 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Che9c_27 (I2), GMA4_23 (singleton), Powerball_21 (CZ4),

Start 12:

- Found in 6 of 36 (16.7%) of genes in pham
- Manual Annotations of this start: 6 of 30
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Bogie_30 (P1), Brujita_31 (I1), Butters_28 (N), Island3_31 (I1), Kevin1_28 (N), Rubeelu_28 (N),

Start 13:

- Found in 18 of 36 (50.0%) of genes in pham
- Manual Annotations of this start: 6 of 30
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Adat_28 (AV), Brad_28 (AV), Casserole_29 (AV), GurgleFerb_28 (AV), Jasmine_31 (AV), Nellie_28 (AV),

Summary by clusters:

There are 10 clusters represented in this pham: singleton, AB, I1, I2, CZ4, N, AQ, P1, FE, AV,

Info for manual annotations of cluster AB:

•Start number 9 was manually annotated 2 times for cluster AB.

Info for manual annotations of cluster AQ:

•Start number 10 was manually annotated 11 times for cluster AQ.

Info for manual annotations of cluster AV:

•Start number 13 was manually annotated 6 times for cluster AV.

Info for manual annotations of cluster CZ4:

•Start number 11 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster FE:

- •Start number 5 was manually annotated 1 time for cluster FE.
- •Start number 7 was manually annotated 1 time for cluster FE.
- •Start number 8 was manually annotated 1 time for cluster FE.

Info for manual annotations of cluster I1:

•Start number 12 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster I2:

•Start number 11 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster N:

•Start number 12 was manually annotated 3 times for cluster N.

Info for manual annotations of cluster P1:

•Start number 12 was manually annotated 1 time for cluster P1.

Gene Information:

Gene: 8UZL 28 Start: 24083, Stop: 24301, Start Num: 9

Candidate Starts for 8UZL 28:

(Start: 9 @24083 has 2 MA's), (17, 24146), (18, 24155), (21, 24167), (31, 24233), (32, 24236), (38, 24275),

Gene: Adat_28 Start: 27242, Stop: 27427, Start Num: 13

Candidate Starts for Adat_28:

(6, 27209), (Start: 13 @27242 has 6 MA's), (25, 27341), (28, 27359),

Gene: Amavida_42 Start: 30744, Stop: 30965, Start Num: 10

Candidate Starts for Amavida 42:

(Start: 10 @30744 has 11 MA's), (Start: 13 @30750 has 6 MA's), (16, 30792), (21, 30819), (28,

30867), (39, 30936), (40, 30939),

Gene: Amigo_43 Start: 30618, Stop: 30839, Start Num: 10

Candidate Starts for Amigo 43:

(Start: 10 @30618 has 11 MA's), (Start: 13 @30624 has 6 MA's), (28, 30741), (39, 30810), (40,

30813),

Gene: Anansi_43 Start: 30618, Stop: 30839, Start Num: 10

Candidate Starts for Anansi_43:

(Start: 10 @30618 has 11 MA's), (Start: 13 @30624 has 6 MA's), (16, 30666), (21, 30693), (28,

30741), (39, 30810), (40, 30813),

Gene: BlueFeather_15 Start: 11595, Stop: 11813, Start Num: 8

Candidate Starts for BlueFeather 15:

(1, 11409), (2, 11412), (3, 11541), (4, 11556), (Start: 8 @11595 has 1 MA's), (16, 11661), (20, 11685),

(24, 11703), (36, 11778),

Gene: Boersma_44 Start: 30618, Stop: 30839, Start Num: 10

Candidate Starts for Boersma_44:

(Start: 10 @30618 has 11 MA's), (Start: 13 @30624 has 6 MA's), (28, 30741), (39, 30810), (40,

30813),

Gene: Bogie_30 Start: 27068, Stop: 27271, Start Num: 12

Candidate Starts for Bogie_30:

(Start: 12 @27068 has 6 MA's), (23, 27152), (29, 27200), (37, 27236),

Gene: Brad 28 Start: 27240, Stop: 27425, Start Num: 13

Candidate Starts for Brad 28:

(6, 27207), (Start: 13 @27240 has 6 MA's), (25, 27339), (28, 27357),

Gene: Brujita_31 Start: 27423, Stop: 27626, Start Num: 12

Candidate Starts for Brujita_31:

(Start: 12 @27423 has 6 MA's), (23, 27507), (29, 27555), (37, 27591),

Gene: Butters_28 Start: 23934, Stop: 24137, Start Num: 12

Candidate Starts for Butters 28:

(Start: 12 @23934 has 6 MA's), (17, 23985), (26, 24042), (29, 24066), (37, 24102),

Gene: Casserole_29 Start: 28530, Stop: 28715, Start Num: 13

Candidate Starts for Casserole_29:

(6, 28497), (Start: 13 @28530 has 6 MA's), (25, 28629), (28, 28647),

Gene: Che9c 27 Start: 25454, Stop: 25657, Start Num: 11

Candidate Starts for Che9c 27:

(Start: 11 @25454 has 2 MA's), (15, 25499), (16, 25502), (23, 25541), (25, 25559),

Gene: FF47_28 Start: 24010, Stop: 24228, Start Num: 9

Candidate Starts for FF47_28:

(Start: 9 @24010 has 2 MA's), (17, 24073), (18, 24082), (21, 24094), (31, 24160), (32, 24163), (38, 24202),

Gene: GMA4_23 Start: 21682, Stop: 21882, Start Num: 11

Candidate Starts for GMA4_23:

(Start: 11 @21682 has 2 MA's), (14, 21697), (21, 21757), (22, 21760), (24, 21772), (27, 21799),

Gene: Gorgeous_43 Start: 30618, Stop: 30839, Start Num: 10

Candidate Starts for Gorgeous 43:

(Start: 10 @30618 has 11 MA's), (Start: 13 @30624 has 6 MA's), (16, 30666), (21, 30693), (28, 30741), (39, 30810), (40, 30813),

Gene: GurgleFerb_28 Start: 27241, Stop: 27426, Start Num: 13

Candidate Starts for GurgleFerb_28:

(6, 27208), (Start: 13 @27241 has 6 MA's), (25, 27340), (28, 27358),

Gene: Heylee 42 Start: 30744, Stop: 30965, Start Num: 10

Candidate Starts for Heylee_42:

(Start: 10 @30744 has 11 MA's), (Start: 13 @30750 has 6 MA's), (16, 30792), (21, 30819), (28, 30867), (39, 30936), (40, 30939),

Gene: Ichor_42 Start: 30618, Stop: 30839, Start Num: 10

Candidate Starts for Ichor 42:

(Start: 10 @30618 has 11 MA's), (Start: 13 @30624 has 6 MA's), (28, 30741), (39, 30810), (40, 30813),

Gene: Island3_31 Start: 27423, Stop: 27626, Start Num: 12

Candidate Starts for Island3_31:

(Start: 12 @27423 has 6 MA's), (23, 27507), (29, 27555), (37, 27591),

Gene: Jaek 42 Start: 30618, Stop: 30839, Start Num: 10

Candidate Starts for Jack 42:

(Start: 10 @30618 has 11 MA's), (Start: 13 @30624 has 6 MA's), (28, 30741), (39, 30810), (40, 30813),

Gene: Jasmine_31 Start: 29111, Stop: 29302, Start Num: 13

Candidate Starts for Jasmine_31:

(Start: 13 @29111 has 6 MA's), (19, 29174), (28, 29228), (34, 29258), (35, 29267),

Gene: Kevin1_28 Start: 23931, Stop: 24134, Start Num: 12

Candidate Starts for Kevin1 28:

(Start: 12 @23931 has 6 MA's), (17, 23982), (23, 24015), (26, 24039), (29, 24063), (37, 24099),

Gene: Maco6_26 Start: 23344, Stop: 23565, Start Num: 9

Candidate Starts for Maco6_26:

(Start: 9 @23344 has 2 MA's), (17, 23407), (18, 23416), (21, 23428), (31, 23494), (32, 23497), (38, 23536),

Gene: Molivia_47 Start: 29639, Stop: 29860, Start Num: 10

Candidate Starts for Molivia 47:

(Start: 10 @29639 has 11 MA's), (33, 29789), (34, 29795), (39, 29834),

Gene: Muddy_28 Start: 24291, Stop: 24509, Start Num: 9

Candidate Starts for Muddy_28:

(Start: 9 @ 24291 has 2 MA's), (17, 24354), (18, 24363), (21, 24375), (31, 24441),

Gene: Nellie_28 Start: 27242, Stop: 27427, Start Num: 13

Candidate Starts for Nellie_28:

(6, 27209), (Start: 13 @27242 has 6 MA's), (25, 27341), (28, 27359),

Gene: Piku_14 Start: 11763, Stop: 12017, Start Num: 5

Candidate Starts for Piku 14:

(Start: 5 @ 11763 has 1 MA's), (32, 11940),

Gene: Powerball_21 Start: 19529, Stop: 19738, Start Num: 11

Candidate Starts for Powerball_21:

(Start: 11 @19529 has 2 MA's), (18, 19592), (22, 19607), (28, 19652), (30, 19667),

Gene: Rings_42 Start: 30740, Stop: 30961, Start Num: 10

Candidate Starts for Rings 42:

(Start: 10 @30740 has 11 MA's), (Start: 13 @30746 has 6 MA's), (16, 30788), (21, 30815), (28, 30863), (39, 30932), (40, 30935),

Gene: Rubeelu_28 Start: 23934, Stop: 24137, Start Num: 12

Candidate Starts for Rubeelu_28:

(Start: 12 @23934 has 6 MA's), (17, 23985), (26, 24042), (29, 24066), (37, 24102),

Gene: SorJuana_43 Start: 30618, Stop: 30839, Start Num: 10

Candidate Starts for SorJuana 43:

(Start: 10 @30618 has 11 MA's), (Start: 13 @30624 has 6 MA's), (16, 30666), (21, 30693), (28, 30741), (39, 30810), (40, 30813),

Gene: Thunderclap_43 Start: 30647, Stop: 30868, Start Num: 10

Candidate Starts for Thunderclap 43:

(Start: 10 @30647 has 11 MA's), (Start: 13 @30653 has 6 MA's), (28, 30770), (39, 30839), (40, 30842),

Gene: Whytu_13 Start: 11841, Stop: 12083, Start Num: 5

Candidate Starts for Whytu_13:

(Start: 5 @ 11841 has 1 MA's), (24, 11964), (29, 12009), (30, 12012),

Gene: Yavru_13 Start: 11742, Stop: 11978, Start Num: 7

Candidate Starts for Yavru_13:

(Start: 7 @11742 has 1 MA's), (24, 11859), (29, 11904), (30, 11907),

Gene: Yeezus_42 Start: 30617, Stop: 30838, Start Num: 10

Candidate Starts for Yeezus_42:

(Start: 10 @30617 has 11 MA's), (Start: 13 @30623 has 6 MA's), (28, 30740), (39, 30809), (40, 30812),