

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 170463 Report

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

Pham number 170463 has 12 members, 0 are drafts.

Phages represented in each track:

• Track 1 : Lucky10_63

Track 2 : ODay_96

Track 3 : Babsiella_64

Track 4: Brujita_63, Island3_64

Track 5 : HC 59

• Track 6 : Che9c_72

• Track 7 : Panchino 57

Track 8 : Xeno_61

• Track 9 : Xavia 64

Track 10 : BigNuz_63, Nazo_64

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

The start number called the most often in the published annotations is 6, it was called in 9 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Babsiella_64, BigNuz_63, Brujita_63, Che9c_72, HC_59, Island3_64, Nazo_64, Xavia_64, Xeno_61,

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:

Lucky10_63, ODay_96, Panchino_57,

Summary by start number:

Start 5:

- Found in 1 of 12 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Panchino_57 (N),

Start 6:

- Found in 9 of 12 (75.0%) of genes in pham
- Manual Annotations of this start: 9 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Babsiella_64 (I1), BigNuz_63 (P4), Brujita_63 (I1), Che9c_72 (I2), HC_59 (I1), Island3_64 (I1), Nazo_64 (P4), Xavia_64 (P3), Xeno_61 (N),

Start 7:

- Found in 3 of 12 (25.0%) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Lucky10_63 (DH), ODay_96 (DN),

Summary by clusters:

There are 7 clusters represented in this pham: DN, P3, P4, DH, I1, I2, N,

Info for manual annotations of cluster DH:

•Start number 7 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DN:

•Start number 7 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster I1:

•Start number 6 was manually annotated 4 times for cluster I1.

Info for manual annotations of cluster I2:

•Start number 6 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster N:

- •Start number 5 was manually annotated 1 time for cluster N.
- •Start number 6 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster P3:

•Start number 6 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster P4:

•Start number 6 was manually annotated 2 times for cluster P4.

Gene Information:

Gene: Babsiella_64 Start: 40664, Stop: 41602, Start Num: 6

Candidate Starts for Babsiella_64:

 $\begin{array}{l} (4,\,40604),\,(Start:\,6\,\,@\,40664\,\,has\,\,9\,\,MA's),\,(10,\,40739),\,(18,\,40871),\,(19,\,40880),\,(22,\,40901),\,(27,\,41009),\,(30,\,41093),\,(31,\,41126),\,(32,\,41201),\,(33,\,41216),\,(35,\,41309),\,(36,\,41336),\,(37,\,41357),\\ \end{array}$

Gene: BigNuz 63 Start: 41443, Stop: 42339, Start Num: 6

Candidate Starts for BigNuz 63:

(Start: 6 @41443 has 9 MA's), (10, 41518), (14, 41578), (15, 41593), (16, 41608), (17, 41641), (20, 41677), (21, 41680), (32, 41905), (33, 41920), (35, 42040), (36, 42067), (43, 42328),

Gene: Brujita_63 Start: 40794, Stop: 41660, Start Num: 6

Candidate Starts for Brujita 63:

(Start: 6 @ 40794 has 9 MA's), (8, 40848), (10, 40869), (14, 40929), (15, 40944), (16, 40959), (17, 40992), (25, 41088), (27, 41142), (32, 41256), (33, 41271), (35, 41367), (36, 41394), (37, 41415), (39, 41565),

Gene: Che9c 72 Start: 50505, Stop: 51371, Start Num: 6

Candidate Starts for Che9c_72:

(Start: 6 @50505 has 9 MA's), (10, 50580), (12, 50619), (14, 50640), (15, 50655), (16, 50670), (17, 50703), (24, 50781), (27, 50853), (32, 50967), (33, 50982), (35, 51078), (36, 51105), (37, 51126), (39, 51276).

Gene: HC_59 Start: 38210, Stop: 39148, Start Num: 6

Candidate Starts for HC_59:

(4, 38150), (Start: 6 @38210 has 9 MA's), (10, 38285), (18, 38417), (19, 38426), (22, 38447), (27, 38555), (30, 38639), (31, 38672), (32, 38747), (33, 38762), (35, 38855), (36, 38882), (37, 38903),

Gene: Island3 64 Start: 40794, Stop: 41660, Start Num: 6

Candidate Starts for Island3_64:

(Start: 6 @ 40794 has 9 MA's), (8, 40848), (10, 40869), (14, 40929), (15, 40944), (16, 40959), (17, 40992), (25, 41088), (27, 41142), (32, 41256), (33, 41271), (35, 41367), (36, 41394), (37, 41415), (39, 41565),

Gene: Lucky10_63 Start: 39691, Stop: 40488, Start Num: 7

Candidate Starts for Lucky10_63:

(2, 39604), (Start: 7 @39691 has 2 MA's), (8, 39745), (9, 39763), (17, 39889), (21, 39928), (24, 39967), (26, 40018), (27, 40039), (34, 40207),

Gene: Nazo_64 Start: 41628, Stop: 42524, Start Num: 6

Candidate Starts for Nazo_64:

(Start: 6 @41628 has 9 MA's), (10, 41703), (14, 41763), (15, 41778), (16, 41793), (17, 41826), (20, 41862), (21, 41865), (32, 42090), (33, 42105), (35, 42225), (36, 42252), (43, 42513),

Gene: ODay_96 Start: 51151, Stop: 51972, Start Num: 7

Candidate Starts for ODay 96:

(3, 51088), (Start: 7 @51151 has 2 MA's), (12, 51265), (16, 51316), (23, 51421), (34, 51661), (41, 51898),

Gene: Panchino_57 Start: 39053, Stop: 39931, Start Num: 5

Candidate Starts for Panchino 57:

(1, 38876), (Start: 5 @39053 has 1 MA's), (Start: 7 @39059 has 2 MA's), (11, 39149), (13, 39191), (17, 39260), (18, 39272), (28, 39422), (29, 39449), (32, 39533), (33, 39548), (35, 39641), (36, 39668), (37, 39689), (42, 39914),

Gene: Xavia_64 Start: 45674, Stop: 46540, Start Num: 6

Candidate Starts for Xavia_64:

(Start: 6 @ 45674 has 9 MA's), (10, 45749), (12, 45788), (14, 45809), (15, 45824), (16, 45839), (17, 45872), (24, 45950), (27, 46022), (32, 46136), (33, 46151), (35, 46247), (36, 46274), (37, 46295), (40, 46451).

Gene: Xeno 61 Start: 38162, Stop: 39100, Start Num: 6

Candidate Starts for Xeno_61:

(4, 38102), (Start: 6 @38162 has 9 MA's), (10, 38237), (18, 38369), (19, 38378), (22, 38399), (27, 38507), (30, 38591), (31, 38624), (32, 38699), (33, 38714), (35, 38807), (36, 38834), (37, 38855), (38, 38903),