Pham 158130


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 158130 Report

This analysis was run 04/13/24 on database version 558.
Pham number 158130 has 26 members, 0 are drafts.
Phages represented in each track:

- Track 1 : Bricole_13, Dulcita_14, IPhane7_13, Bongo_13, Skinny_14, Glaske16_14, SlimJimmy_12, Dīminimus_14, LilhomieP_12, PegLeg_13, TyDawg_13, Auspice_13
- Track 2 : $\bar{R}$ eindeer_11
- Track 3 : GardenSālsa_17, Aziz_17, GenevaB15_17, MrMagoo_17, Estes_18
- Track 4 : Rey_17
- Track 5 : Nanosmite_17
- Track 6 : Azrael100_24, EniyanLRS_22, Cosmo_25, MaryV_25, Wildcat_25
- Track 7 : Kumao_12


## 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 13 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Auspice_13, Bongo_13, Bricole_13, Diminimus_14, Dulcita_14, Glaske16_14, IPhane7_13, LilhomiēP_12, PegLeg_13, Reindeer_11, Skinny_14, SlimJimmy_12, TyDawg_13,

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

- Aziz_17, Estes_18, GardenSalsa_17, GenevaB15_17, MrMagoo_17,

Nanos̄mite_17, R̄ey_17,
Genes that do not have the "Most Annotated" start:

- Azrael100_24, Cosmo_25, EniyanLRS_22, Kumao_12, MaryV_25, Wildcat_25,


## Summary by start number:

Start 5:

- Found in 20 of 26 ( 76.9\% ) of genes in pham
- Manual Annotations of this start: 13 of 26
- Called $65.0 \%$ of time when present
- Phage (with cluster) where this start called: Auspice_13 (M1), Bongo_13 (M1),

Bricole_13 (M1), Diminimus_14 (M1), Dulcita_14 (M1), Glaske16_14 (M1),

IPhane7_13 (M1), LilhomieP_12 (M1), PegLeg_13 (M1), Reindeer_11 (M1), Skinny_14 (M1), SlimJimmy_12 (M1), TyDawg_13 (M1),

Start 7:

- Found in 5 of 26 ( $19.2 \%$ ) of genes in pham
- Manual Annotations of this start: 5 of 26
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Azrael100_24 (V), Cosmo_25 (V),

EniyanLRS_22 (V), MaryV_25 (V), Wildcat_25 (V),

## Start 9:

- Found in 7 of 26 ( $26.9 \%$ ) of genes in pham
- Manual Annotations of this start: 7 of 26
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Aziz_17 (M2), Estes_18 (M2), GardenSalsa_17 (M2), GenevaB15_17 (M2), MrMagoo_17 (M2), Nanosmite_17 (M3), Rey_17 (M2),

Start 10:

- Found in 6 of 26 ( $23.1 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called $16.7 \%$ of time when present
- Phage (with cluster) where this start called: Kumao_12 (singleton),


## Summary by clusters:

There are 5 clusters represented in this pham: singleton, $\mathrm{M} 2, \mathrm{M} 1, \mathrm{M} 3, \mathrm{~V}$,
Info for manual annotations of cluster M1:

- Start number 5 was manually annotated 13 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 9 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 9 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster V :
-Start number 7 was manually annotated 5 times for cluster V.

## Gene Information:

Gene: Auspice_13 Start: 4298, Stop: 4693, Start Num: 5
Candidate Starts for Auspice_13:
(Start: 5 @4298 has 13 MA's), $(13,4475),(23,4664),(24,4667)$,
Gene: Aziz_17 Start: 4947, Stop: 5294, Start Num: 9
Candidate Starts for Aziz_17:
(Start: 5 @4899 has 13 MA's), (Start: 9 @4947 has 7 MA's), (13, 5076), (14, 5082), (15, 5121), (18, 5145), (23, 5265), (24, 5268),

Gene: Azrael100_24 Start: 7714, Stop: 8103, Start Num: 7
Candidate Starts for Azrael100_24:
(Start: 7 @7714 has 5 MA's), (Start: $10 @ 7765$ has 1 MA's), (11, 7837), (12, 7846), (13, 7882), (14, 7888), (15, 7921), (17, 7933), (18, 7936), (19, 7951), (20, 7990), (21, 8002), (25, 8068), (26, 8086),

Gene: Bongo_13 Start: 4298, Stop: 4693, Start Num: 5
Candidate Starts for Bongo_13:
(Start: 5 @4298 has 13 MA's), (13, 4475), (23, 4664), (24, 4667),
Gene: Bricole_13 Start: 4297, Stop: 4692, Start Num: 5
Candidate Starts for Bricole_13:
(Start: 5 @4297 has 13 MA's), (13, 4474), (23, 4663), (24, 4666),
Gene: Cosmo_25 Start: 7720, Stop: 8109, Start Num: 7
Candidate Starts for Cosmo_25:
(Start: 7 @7720 has 5 MA's), (Start: 10 @7771 has 1 MA's), (11, 7843), (12, 7852), (13, 7888), (14, 7894), (15, 7927), (17, 7939), (18, 7942), (19, 7957), (20, 7996), (21, 8008), (25, 8074), (26, 8092),

Gene: Diminimus_14 Start: 4297, Stop: 4692, Start Num: 5
Candidate Starts for Diminimus_14:
(Start: 5 @4297 has 13 MA's), (13, 4474), (23, 4663), (24, 4666),
Gene: Dulcita_14 Start: 4297, Stop: 4692, Start Num: 5
Candidate Starts for Dulcita_14:
(Start: 5 @4297 has 13 MA's), (13, 4474), (23, 4663), (24, 4666),
Gene: EniyanLRS_22 Start: 7412, Stop: 7801, Start Num: 7
Candidate Starts for EniyanLRS_22:
(Start: 7 @7412 has 5 MA's), (Start: $10 @ 7463$ has 1 MA's), (11, 7535), (12, 7544), (13, 7580), (14, 7586), (15, 7619), (17, 7631), (18, 7634), (19, 7649), (20, 7688), (21, 7700), (25, 7766), (26, 7784),

Gene: Estes_18 Start: 5092, Stop: 5439, Start Num: 9
Candidate Starts for Estes_18:
(Start: 5 @5044 has 13 MA's), (Start: 9 @5092 has 7 MA's), (13, 5221), (14, 5227), (15, 5266), (18, 5290), (23, 5410), (24, 5413),

Gene: GardenSalsa_17 Start: 4926, Stop: 5273, Start Num: 9
Candidate Starts for GardenSalsa_17:
(Start: 5 @4878 has 13 MA's), (Start: 9 @4926 has 7 MA's), (13, 5055), (14, 5061), (15, 5100), (18,
5124), (23, 5244), (24, 5247),

Gene: GenevaB15_17 Start: 4947, Stop: 5294, Start Num: 9
Candidate Starts for GenevaB15_17:
(Start: 5 @4899 has 13 MA's), (Start: 9 @4947 has 7 MA's), (13, 5076), (14, 5082), (15, 5121), (18, 5145), (23, 5265), (24, 5268),

Gene: Glaske16_14 Start: 4297, Stop: 4692, Start Num: 5
Candidate Starts for Glaske16_14:
(Start: 5 @4297 has 13 MA's), (13, 4474), (23, 4663), (24, 4666),
Gene: IPhane7_13 Start: 4298, Stop: 4693, Start Num: 5
Candidate Starts for IPhane7_13:
(Start: 5 @4298 has 13 MA's), (13, 4475), (23, 4664), (24, 4667),

Gene: Kumao_12 Start: 3923, Stop: 4243, Start Num: 10
Candidate Starts for Kumao_12:
( 6,3869 ), ( 8,3890 ), (Start: 10 @3923 has 1 MA's), (21, 4163), (22, 4205), (24, 4220),
Gene: LilhomieP_12 Start: 4298, Stop: 4693, Start Num: 5
Candidate Starts for LilhomieP_12:
(Start: 5 @4298 has 13 MA's), ( 13,4475 ), ( 23,4664 ), ( 24,4667 ),
Gene: MaryV_25 Start: 7684, Stop: 8073, Start Num: 7
Candidate Starts for MaryV_25:
(Start: 7 @7684 has 5 MA's), (Start: 10 @ 7735 has 1 MA's), (11, 7807), (12, 7816), (13, 7852), (14, 7858), (15, 7891), (17, 7903), (18, 7906), (19, 7921), (20, 7960), (21, 7972), (25, 8038), (26, 8056),

Gene: MrMagoo_17 Start: 4926, Stop: 5273, Start Num: 9
Candidate Starts for MrMagoo_17:
(Start: 5 @4878 has 13 MA's), (Start: 9 @4926 has 7 MA's), ( 13,5055 ), ( 14,5061 ), ( 15,5100 ), ( 18 , $5124),(23,5244),(24,5247)$,

Gene: Nanosmite_17 Start: 5093, Stop: 5440, Start Num: 9
Candidate Starts for Nanosmite_17:
(1, 4883), (Start: 5 @5045 has 13 MA's), (Start: 9 @5093 has 7 MA's), (16, 5273), (23, 5411), (24, 5414),

Gene: PegLeg_13 Start: 4297, Stop: 4692, Start Num: 5
Candidate Starts for PegLeg_13:
(Start: 5 @4297 has 13 MA's), ( 13,4474 ), ( 23,4663 ), ( 24,4666 ),
Gene: Reindeer_11 Start: 4169, Stop: 4564, Start Num: 5
Candidate Starts for Reindeer_11:
(2, 4010), (4, 4151), (Start: 5 @4169 has 13 MA's), (23, 4535), (24, 4538),
Gene: Rey_17 Start: 5157, Stop: 5504, Start Num: 9
Candidate Starts for Rey_17:
(1, 4950), (3, 4965), (Start: 5 @5109 has 13 MA's), (Start: 9 @5157 has 7 MA's), (13, 5286), (15, $5331),(18,5355),(23,5475),(24,5478)$,

Gene: Skinny_14 Start: 4297, Stop: 4692, Start Num: 5
Candidate Starts for Skinny_14:
(Start: 5 @4297 has 13 MA's), ( 13,4474 ), ( 23,4663 ), ( 24,4666 ),
Gene: SlimJimmy_12 Start: 4297, Stop: 4692, Start Num: 5
Candidate Starts for SlimJimmy_12:
(Start: 5 @4297 has 13 MA's), ( 13,4474 ), ( 23,4663 ), ( 24,4666 ),
Gene: TyDawg_13 Start: 4298, Stop: 4693, Start Num: 5
Candidate Starts for TyDawg_13:
(Start: 5 @4298 has 13 MA's), ( 13,4475 ), ( 23,4664 ), (24, 4667),
Gene: Wildcat_25 Start: 7694, Stop: 8083, Start Num: 7
Candidate Starts for Wildcat_25:
(Start: 7 @ 7694 has 5 MA's), (Start: 10 @ 7745 has 1 MA's), (11, 7817), (12, 7826), (13, 7862), (14, 7868), (15, 7901), (17, 7913), (18, 7916), (19, 7931), (20, 7970), (21, 7982), (25, 8048), (26, 8066),

