

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 153487 Report

This analysis was run 04/05/24 on database version 557.
Pham number 153487 has 22 members, 2 are drafts.
Phages represented in each track:

- Track 1 : Elsa_66, Arcadia_66, GoCrazy_63, Tribby_69, Nason_66, Xenomorph_62, Cheesy_66, Cōrrea_64, KeaneyLin_62, Circum_67
- Track 2 : Kardesai_66, Benllo_66, NapoleonB_67, Dynamite_66, Mooshroom_66, JEGGS_65, Hankly_65, Mudcat_62, Heisenberger_65, BenitoĀntonio_64
- Track $\overline{3}$ : Truckee_58, Makai_ $\overline{60}$


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

The start number called the most often in the published annotations is 3 , it was called in 18 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arcadia_66, BenitoAntonio_64, Benllo_66, Cheesy_66, Circum_67, Correa_64, Dynamite_66, Elsa_66, GoCrazy_63, Hankly_65, Heisenberger_65, JEGGS_65, Kardesai_66, KeaneyLin_62, Mooshroom_66, Mudcat_62, NapoleonB_67, Nason_6 $\overline{6}$, Tribby_69, Xēnomorph_62,

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

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

- Makai_60, Truckee_58,


## Summary by start number:

Start 2:

- Found in 2 of 22 ( $9.1 \%$ ) of genes in pham
- Manual Annotations of this start: 2 of 20
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Makai_60 (AU5), Truckee_58 (AU5),

Start 3:

- Found in 20 of 22 ( $90.9 \%$ ) of genes in pham
- Manual Annotations of this start: 18 of 20
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Arcadia_66 (AM), BenitoAntonio_64
(AM), Benllo_66 (AM), Cheesy_66 (AM), Circum_67 (AM), Correa_64 (AM), Dynamite_6 $\overline{6}$ (AM), Elsa_66 (AM), GoCrazy_63 (AM), Hankly_65 (AM), Heisenberger_65 (AM), JEGGS_65 (AM), Kārdesai_66 (AM), KeaneyLin_62 (AM), Mooshroom $\overline{6} 6$ (AM), Mudcat_ 62 (AM), NapoleonB_67 (AM), Nason_66 (AM), Tribby_69 (А̄M), Xenomorph_ $\overline{6} 2$ (AM),


## Summary by clusters:

There are 2 clusters represented in this pham: AU5, AM,
Info for manual annotations of cluster AM:

- Start number 3 was manually annotated 18 times for cluster AM.

Info for manual annotations of cluster AU5:

- Start number 2 was manually annotated 2 times for cluster AU5.


## Gene Information:

Gene: Arcadia_66 Start: 42435, Stop: 42563, Start Num: 3
Candidate Starts for Arcadia_66:
(Start: 3 @42435 has 18 MA's), (4, 42438), (5, 42498),
Gene: BenitoAntonio_64 Start: 41457, Stop: 41585, Start Num: 3
Candidate Starts for BenitoAntonio_64:
(Start: 3 @41457 has 18 MA's), ( 5,41520 ), ( 6,41538 ),
Gene: Benllo_66 Start: 42135, Stop: 42263, Start Num: 3
Candidate Starts for Benllo_66:
(Start: 3 @42135 has 18 MA's), (5, 42198), (6, 42216),
Gene: Cheesy_66 Start: 41658, Stop: 41786, Start Num: 3 Candidate Starts for Cheesy_66:
(Start: 3 @41658 has 18 MA's), (4, 41661), (5, 41721),
Gene: Circum_67 Start: 42225, Stop: 42353, Start Num: 3
Candidate Starts for Circum_67:
(Start: 3 @42225 has 18 MA's), (4, 42228), (5, 42288),
Gene: Correa_64 Start: 41229, Stop: 41357, Start Num: 3
Candidate Starts for Correa_64:
(Start: 3 @41229 has 18 MA's), (4, 41232), (5, 41292),
Gene: Dynamite_66 Start: 42238, Stop: 42366, Start Num: 3
Candidate Starts for Dynamite_66:
(Start: 3 @42238 has 18 MA's), (5, 42301), (6, 42319),
Gene: Elsa_66 Start: 42435, Stop: 42563, Start Num: 3
Candidate Starts for Elsa_66:
(Start: 3 @42435 has 18 MA's), (4, 42438), (5, 42498),

Gene: GoCrazy_63 Start: 41690, Stop: 41818, Start Num: 3 Candidate Starts for GoCrazy_63:
(Start: 3 @41690 has 18 MA's), (4, 41693), (5, 41753),
Gene: Hankly_65 Start: 41306, Stop: 41434, Start Num: 3
Candidate Starts for Hankly_65:
(Start: 3 @41306 has 18 MA's), ( 5,41369 ), ( 6,41387 ),
Gene: Heisenberger_65 Start: 41644, Stop: 41772, Start Num: 3 Candidate Starts for Heisenberger_65:
(Start: 3 @41644 has 18 MA's), (5, 41707), (6, 41725),
Gene: JEGGS_65 Start: 41723, Stop: 41851, Start Num: 3
Candidate Starts for JEGGS_65:
(Start: 3 @41723 has 18 MA's), $(5,41786),(6,41804)$,
Gene: Kardesai_66 Start: 42032, Stop: 42160, Start Num: 3
Candidate Starts for Kardesai_66:
(Start: 3 @42032 has 18 MA's), (5, 42095), (6, 42113),
Gene: KeaneyLin_62 Start: 41690, Stop: 41818, Start Num: 3
Candidate Starts for KeaneyLin_62:
(Start: 3 @41690 has 18 MA's), (4, 41693), (5, 41753),
Gene: Makai_60 Start: 43038, Stop: 43187, Start Num: 2 Candidate Starts for Makai_60:
(1, 43032), (Start: 2 @43038 has 2 MA's), (7, 43149),
Gene: Mooshroom_66 Start: 42032, Stop: 42160, Start Num: 3 Candidate Starts for Mooshroom_66:
(Start: 3 @42032 has 18 MA's), (5, 42095), (6, 42113),
Gene: Mudcat_62 Start: 43081, Stop: 43209, Start Num: 3
Candidate Starts for Mudcat_62:
(Start: 3 @43081 has 18 MA's), (5, 43144), (6, 43162),
Gene: NapoleonB_67 Start: 42238, Stop: 42366, Start Num: 3 Candidate Starts for NapoleonB_67:
(Start: 3 @42238 has 18 MA's), (5, 42301), ( 6,42319 ),
Gene: Nason_66 Start: 42435, Stop: 42563, Start Num: 3 Candidate Starts for Nason_66:
(Start: 3 @ 42435 has 18 MA's), (4, 42438), (5, 42498),
Gene: Tribby_69 Start: 42615, Stop: 42743, Start Num: 3
Candidate Starts for Tribby_69:
(Start: 3 @42615 has 18 MA's), (4, 42618), (5, 42678),
Gene: Truckee_58 Start: 42828, Stop: 42977, Start Num: 2
Candidate Starts for Truckee_58:
(1, 42822), (Start: 2 @42828 has 2 MA's), (7, 42939),

Gene: Xenomorph_62 Start: 42106, Stop: 42234, Start Num: 3
Candidate Starts for Xenomorph_62:
(Start: 3 @42106 has 18 MA's), (4, 42109), (5, 42169),

