Pham 156775

	1 8 9	× ×	Ŷ \$ \$	Ŷ
1: Morrigan_24				
	1 & 9	1,K2 1,M	v v v	Ŷ
2; Luna18_24 + 2				
	1 9 9 	× ×	v v v v	Ŷ
B: Juicer_24 + 1				
т» 	1 3	QV 3		
4: RikSengt <mark>i</mark> pta_37				
	1 9	QV ,3	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
5: TinyMiny 37				
	1 9	QV 13	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
6: Sparcetua_37				
Þ	1		Ŕ	
7: Ajin_38				
	1 9	100 V.	\$ \$ \$ \$ \$ \$	
B: Kors_38				
×	1	~	* ^ /	
9: Hendrix_77 + 1				

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 156775 Report

This analysis was run 04/12/24 on database version 558.

Pham number 156775 has 13 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Morrigan 24
- Track 2 : Luna18\_24, KatChan\_24, Chepli\_24
- Track 3 : Juicer\_24, Jemerald\_24
- Track 4 : RikSengupta\_37
- Track 5 : TinyMiny 37
- Track 6 : Sparcetus\_37 Track 7 : Ajin\_38
- Track 8 : Kors 38
- Track 9 : Hendrix\_77, Rasputia\_78

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

The start number called the most often in the published annotations is 4, it was called in 8 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Ajin 38, Chepli 24, Hendrix 77, Jemerald 24, Juicer 24, KatChan 24, Luna18 24, Morrigan\_24, Rasputia\_78,

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

Genes that do not have the "Most Annotated" start: Kors\_38, RikSengupta\_37, Sparcetus\_37, TinyMiny\_37,

# Summary by start number:

Start 2:

- Found in 3 of 13 (23.1%) of genes in pham
- Manual Annotations of this start: 2 of 11
- Called 66.7% of time when present
- Phage (with cluster) where this start called: RikSengupta\_37 (EF), TinyMiny\_37 (EF),

Start 3:

- Found in 4 of 13 ( 30.8% ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Kors\_38 (EF), Sparcetus\_37 (EF),

Start 4:

- Found in 9 of 13 (69.2%) of genes in pham
- Manual Annotations of this start: 8 of 11
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Ajin\_38 (EF), Chepli\_24 (EA6), Hendrix\_77 (GC), Jemerald\_24 (EA6), Juicer\_24 (EA6), KatChan\_24 (EA6), Luna18\_24 (EA6), Morrigan\_24 (EA6), Rasputia\_78 (GC),

### Summary by clusters:

There are 3 clusters represented in this pham: EF, GC, EA6,

Info for manual annotations of cluster EA6: •Start number 4 was manually annotated 6 times for cluster EA6.

Info for manual annotations of cluster EF: •Start number 2 was manually annotated 2 times for cluster EF. •Start number 3 was manually annotated 1 time for cluster EF.

Info for manual annotations of cluster GC: •Start number 4 was manually annotated 2 times for cluster GC.

### Gene Information:

Gene: Ajin\_38 Start: 23372, Stop: 24145, Start Num: 4 Candidate Starts for Ajin\_38: (Start: 4 @23372 has 8 MA's), (7, 23645), (11, 23807), (18, 23984), (19, 23987),

Gene: Chepli\_24 Start: 17414, Stop: 18301, Start Num: 4 Candidate Starts for Chepli\_24: (Start: 4 @17414 has 8 MA's), (5, 17438), (6, 17585), (7, 17687), (8, 17714), (9, 17747), (11, 17849), (12, 17855), (14, 17912), (22, 18083), (23, 18110), (26, 18149), (28, 18266),

Gene: Hendrix\_77 Start: 51963, Stop: 52802, Start Num: 4 Candidate Starts for Hendrix\_77: (Start: 4 @51963 has 8 MA's), (7, 52236), (11, 52380), (18, 52557), (22, 52596), (27, 52653),

Gene: Jemerald\_24 Start: 18353, Stop: 19237, Start Num: 4 Candidate Starts for Jemerald\_24: (Start: 4 @18353 has 8 MA's), (7, 18626), (8, 18653), (9, 18686), (11, 18785), (12, 18791), (14, 18848), (22, 19019), (23, 19046), (25, 19070), (26, 19085), (28, 19202),

Gene: Juicer\_24 Start: 18353, Stop: 19237, Start Num: 4 Candidate Starts for Juicer\_24: (Start: 4 @18353 has 8 MA's), (7, 18626), (8, 18653), (9, 18686), (11, 18785), (12, 18791), (14, 18848), (22, 19019), (23, 19046), (25, 19070), (26, 19085), (28, 19202),

Gene: KatChan\_24 Start: 17420, Stop: 18307, Start Num: 4 Candidate Starts for KatChan\_24: (Start: 4 @17420 has 8 MA's), (5, 17444), (6, 17591), (7, 17693), (8, 17720), (9, 17753), (11, 17855), (12, 17861), (14, 17918), (22, 18089), (23, 18116), (26, 18155), (28, 18272),

Gene: Kors\_38 Start: 23415, Stop: 24185, Start Num: 3 Candidate Starts for Kors\_38: (Start: 3 @23415 has 1 MA's), (7, 23688), (9, 23748), (10, 23844), (12, 23853), (13, 23880), (15, 23985), (16, 24009), (17, 24036), (21, 24066), (25, 24126),

Gene: Luna18\_24 Start: 17420, Stop: 18307, Start Num: 4 Candidate Starts for Luna18\_24: (Start: 4 @17420 has 8 MA's), (5, 17444), (6, 17591), (7, 17693), (8, 17720), (9, 17753), (11, 17855), (12, 17861), (14, 17918), (22, 18089), (23, 18116), (26, 18155), (28, 18272),

Gene: Morrigan\_24 Start: 18306, Stop: 19190, Start Num: 4 Candidate Starts for Morrigan\_24: (1, 18258), (Start: 4 @18306 has 8 MA's), (7, 18579), (8, 18606), (9, 18639), (11, 18738), (12, 18744), (14, 18801), (22, 18972), (23, 18999), (24, 19002), (25, 19023), (26, 19038), (28, 19155),

Gene: Rasputia\_78 Start: 51931, Stop: 52770, Start Num: 4 Candidate Starts for Rasputia\_78: (Start: 4 @51931 has 8 MA's), (7, 52204), (11, 52348), (18, 52525), (22, 52564), (27, 52621),

Gene: RikSengupta\_37 Start: 23449, Stop: 24222, Start Num: 2 Candidate Starts for RikSengupta\_37: (Start: 2 @23449 has 2 MA's), (Start: 3 @23452 has 1 MA's), (7, 23725), (9, 23785), (10, 23881), (12, 23890), (13, 23917), (15, 24022), (16, 24046), (17, 24073), (21, 24103), (25, 24163),

Gene: Sparcetus\_37 Start: 23331, Stop: 24101, Start Num: 3 Candidate Starts for Sparcetus\_37: (Start: 2 @23328 has 2 MA's), (Start: 3 @23331 has 1 MA's), (7, 23604), (9, 23664), (10, 23760), (12, 23769), (13, 23796), (15, 23901), (16, 23925), (17, 23952), (20, 23970), (21, 23982), (25, 24042),

Gene: TinyMiny\_37 Start: 23347, Stop: 24120, Start Num: 2 Candidate Starts for TinyMiny\_37: (Start: 2 @23347 has 2 MA's), (Start: 3 @23350 has 1 MA's), (7, 23623), (9, 23683), (10, 23779), (12, 23788), (13, 23815), (15, 23920), (16, 23944), (17, 23971), (20, 23989), (21, 24001), (25, 24061),