<u>م</u>	1 9	2	
1: KSunshine22_136	Ŷ	Ŷ	
2: Panchaali_140		÷ .	
B: Ellewin_135	1	\$ \$ \$	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
4: Chilliams_140			
5: Atuin_134			
	1 9 10		1
6: Racecar_144	1 9	Ŷ	
7: DunneganBoMo_137 + 1	1. 9.	х ₁ 2	Ţ.
B: Bloom_146 + 2			
9: LeoJr_144 + 1	1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	\$ \$
10: Rockabye_145			
11: SJReid_146		* *	
12: Phrampa_137	1 0 2		ŕ
13: GoldenEssence_131			
14: Patbob_142	۱ o	\$ \$ \$	<u>ŕ</u>
	ъ ъ	·^	∲∳
15: Dodo_183 + 1	ծ 	ng.	3
16: PauloDiaboli_181	۰ ۲	\$ \$	
17: Big4_173	ۍ م	r ² r ²	
18: Zooman_159	8 v.b	~	ŕ
19: Cece_168	€ \X×× \	р р р р	η ^ρ
20: Pumpernickel_175			

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 214594 Report

This analysis was run 02/22/25 on database version 588.

Pham number 214594 has 25 members, 15 are drafts.

Phages represented in each track:

- Track 1 : KSunshine22 136
- Track 2 : Panchaali 140
- Track 3 : Ellewin 135
- Track 4 : Chilliams 140
- Track 5 : Atuin 134
- Track 6 : Racecar 144
- Track 7 : DunneganBoMo 137, WaddleDee 137
- Track 8 : Bloom_146, Talia1610_145, Mimi_143
- Track 9 : LeoJr_144, ReginaGlobina_143
- Track 10 : Rockabye 145
- Track 11 : SJReid 146
- Track 12 : Phrampa 137
- Track 13 : Golden Essence_131
 Track 14 : Patbob_142
- Track 15 : Dodo 183, A3Wally 182
- Track 16 : PauloDiaboli 181
- Track 17 : Big4_173
- Track 18 : Zooman 159
- Track 19 : Cece 168
- Track 20 : Pumpernickel_175

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 7 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start: • A3Wally_182, Atuin_134, Big4_173, Cece_168, Dodo_183, Ellewin_135, LeoJr_144, PauloDiaboli_181, Pumpernickel_175, ReginaGlobina_143, SJReid_146, Zooman_159,

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

Genes that do not have the "Most Annotated" start: • Bloom_146, Chilliams_140, DunneganBoMo_137, GoldenEssence_131, KSunshine22_136, Mimi_143, Panchaali_140, Patbob_142, Phrampa_137, Racecar_144, Rockabye_145, Talia1610_145, WaddleDee_137,

Summary by start number:

Start 3:

- Found in 13 of 25 (52.0%) of genes in pham
- Manual Annotations of this start: 3 of 10
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Bloom_146 (FC), Chilliams_140 (FC), DunneganBoMo_137 (FC), GoldenEssence_131 (FC), KSunshine22_136 (FC), Mimi_143 (FC), Panchaali_140 (FC), Patbob_142 (FC), Phrampa_137 (FC), Racecar_144 (FC), Rockabye_145 (FC), Talia1610_145 (FC), WaddleDee_137 (FC),

Start 4:

- Found in 12 of 25 (48.0%) of genes in pham
- Manual Annotation's of this start: 7 of 10
- Called 100.0% of time when present

• Phage (with cluster) where this start called: A3Wally_182 (GD1), Atuin_134 (FC), Big4_173 (GD2), Cece_168 (GD3), Dodo_183 (GD1), Ellewin_135 (FC), LeoJr_144 (FC), PauloDiaboli_181 (GD1), Pumpernickel_175 (GD4), ReginaGlobina_143 (FC), SJReid_146 (FC), Zooman_159 (GD2),

Summary by clusters:

There are 5 clusters represented in this pham: GD3, GD1, GD2, FC, GD4,

Info for manual annotations of cluster FC:

- •Start number 3 was manually annotated 3 times for cluster FC.
- •Start number 4 was manually annotated 1 time for cluster FC.

Info for manual annotations of cluster GD1: •Start number 4 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster GD2: •Start number 4 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3: •Start number 4 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4: •Start number 4 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_182 Start: 100432, Stop: 100740, Start Num: 4 Candidate Starts for A3Wally_182: (Start: 4 @100432 has 7 MA's), (6, 100456), (8, 100483), (23, 100600), (26, 100666), (30, 100705), Gene: Atuin 134 Start: 97267, Stop: 97545, Start Num: 4 Candidate Starts for Atuin_134: (Start: 4 @ 97267 has 7 MA's), (20, 97414), Gene: Big4_173 Start: 97536, Stop: 97844, Start Num: 4 Candidate Starts for Big4 173: (1, 97461), (2, 97470), (Start: 4 @97536 has 7 MA's), (5, 97557), (8, 97587), (11, 97614), (23, 97704), (25, 97746),Gene: Bloom_146 Start: 97813, Stop: 98154, Start Num: 3 Candidate Starts for Bloom 146: (Start: 3 @97813 has 3 MA's), (7, 97870), (9, 97888), (17, 97966), (22, 97990), (27, 98071), Gene: Cece_168 Start: 102563, Stop: 102877, Start Num: 4 Candidate Starts for Cece_168: (Start: 4 @102563 has 7 MA's), (6, 102587), (8, 102614), (14, 102656), (16, 102698), (29, 102830), Gene: Chilliams_140 Start: 88443, Stop: 88751, Start Num: 3 Candidate Starts for Chilliams 140: (Start: 3 @88443 has 3 MA's), (7, 88500), (18, 88599), (21, 88611), (24, 88653), (26, 88686), (31, 88731), Gene: Dodo 183 Start: 100044, Stop: 100352, Start Num: 4 Candidate Starts for Dodo_183: (Start: 4 @100044 has 7 MA's), (6, 100068), (8, 100095), (23, 100212), (26, 100278), (30, 100317), Gene: DunneganBoMo_137 Start: 93823, Stop: 94128, Start Num: 3 Candidate Starts for DunneganBoMo 137: (Start: 3 @ 93823 has 3 MA's), (7, 93880), (9, 93898), (21, 93991), Gene: Ellewin_135 Start: 93437, Stop: 93703, Start Num: 4 Candidate Starts for Ellewin_135: (Start: 4 @93437 has 7 MA's), (15, 93545), (16, 93569), (20, 93584), Gene: GoldenEssence_131 Start: 91511, Stop: 91852, Start Num: 3 Candidate Starts for GoldenEssence_131: (Start: 3 @91511 has 3 MA's), (7, 91568), (9, 91586), (10, 91598), (22, 91688), (27, 91769), Gene: KSunshine22 136 Start: 94974, Stop: 95279, Start Num: 3 Candidate Starts for KSunshine22 136: (Start: 3 @94974 has 3 MA's), (7, 95031), (9, 95049), (21, 95142), Gene: LeoJr_144 Start: 97868, Stop: 98146, Start Num: 4 Candidate Starts for LeoJr 144: (Start: 4 @97868 has 7 MA's), (19, 98012), (20, 98015), Gene: Mimi_143 Start: 96878, Stop: 97219, Start Num: 3 Candidate Starts for Mimi_143: (Start: 3 @96878 has 3 MA's), (7, 96935), (9, 96953), (17, 97031), (22, 97055), (27, 97136), Gene: Panchaali_140 Start: 94170, Stop: 94463, Start Num: 3 Candidate Starts for Panchaali 140: (Start: 3 @94170 has 3 MA's), (8, 94224), (20, 94320),

Gene: Patbob_142 Start: 97640, Stop: 97981, Start Num: 3 Candidate Starts for Patbob_142: (Start: 3 @97640 has 3 MA's), (7, 97697), (9, 97715), (17, 97793), (21, 97808), (22, 97817), (27, 97898),

Gene: PauloDiaboli_181 Start: 98479, Stop: 98787, Start Num: 4 Candidate Starts for PauloDiaboli_181: (Start: 4 @98479 has 7 MA's), (6, 98503), (8, 98530), (23, 98647), (30, 98752),

Gene: Phrampa_137 Start: 99174, Stop: 99506, Start Num: 3 Candidate Starts for Phrampa_137: (Start: 3 @99174 has 3 MA's), (21, 99339), (22, 99348),

Gene: Pumpernickel_175 Start: 100142, Stop: 100450, Start Num: 4 Candidate Starts for Pumpernickel_175: (Start: 4 @100142 has 7 MA's), (5, 100163), (6, 100166), (8, 100193), (12, 100229), (13, 100232), (14, 100235), (15, 100253), (22, 100307), (25, 100352), (28, 100400),

Gene: Racecar_144 Start: 97866, Stop: 98207, Start Num: 3 Candidate Starts for Racecar_144: (Start: 3 @97866 has 3 MA's), (7, 97923), (9, 97941), (10, 97953), (22, 98043), (27, 98124),

Gene: ReginaGlobina_143 Start: 98090, Stop: 98368, Start Num: 4 Candidate Starts for ReginaGlobina_143: (Start: 4 @98090 has 7 MA's), (19, 98234), (20, 98237),

Gene: Rockabye_145 Start: 89730, Stop: 90038, Start Num: 3 Candidate Starts for Rockabye_145: (Start: 3 @89730 has 3 MA's), (7, 89787), (18, 89886), (24, 89940), (26, 89973), (31, 90018),

Gene: SJReid_146 Start: 88739, Stop: 88987, Start Num: 4 Candidate Starts for SJReid_146: (Start: 4 @88739 has 7 MA's), (18, 88880), (19, 88883), (20, 88886),

Gene: Talia1610_145 Start: 97881, Stop: 98222, Start Num: 3 Candidate Starts for Talia1610_145: (Start: 3 @97881 has 3 MA's), (7, 97938), (9, 97956), (17, 98034), (22, 98058), (27, 98139),

Gene: WaddleDee_137 Start: 93009, Stop: 93314, Start Num: 3 Candidate Starts for WaddleDee_137: (Start: 3 @ 93009 has 3 MA's), (7, 93066), (9, 93084), (21, 93177),

Gene: Zooman_159 Start: 94719, Stop: 95027, Start Num: 4 Candidate Starts for Zooman_159: (Start: 4 @94719 has 7 MA's), (5, 94740), (8, 94770), (13, 94809), (23, 94887), (25, 94929),