	<u> </u>		
1: Paschalis_21 + 7			
	3		
2: Ganandorf_21 + 20			
	3 5	6	
D. Javidas 20			
B: Jayden_22	•	'	
	°5 5	6	
4: Metamorphoo_22 + 2			
	9 9	6	
5: Tyrumbra_20 + 2			
	ን		
6: Crisis_23			

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 162021 Report

This analysis was run 05/04/24 on database version 560.

Pham number 162021 has 37 members, 4 are drafts.

Phages represented in each track:

- Track 1: Paschalis_21, Phorgeous_21, PierreOrion_22, Piperis_22, Quhwah_24, Antares_22, Honeyfin_23, Scumberland_23
 Track 2: Ganandorf_21, Shotgun_21, Hermeonysus_21, Gina_22, CrazyRich_21,
- Track 2: Ganandorf_21, Shotgun_21, Hermeonysus_21, Gina_22, CrazyRich_21, LittleFortune_23, Jefe_22, Savannah_21, BrazzalePHS_21, KaiHaiDragon_22, Onika_21, Yeti_22, Selwyn23_23, Ramiel05_21, Cranjis_23, Pulchra_23, Kowalski_21, Jollipop_22, Teamocil_22, EarickHC_22, PiperSansNom_22
- Track 3 : Jayden 22
- Track 4 : Metamorphoo_22, ClearAsMud_24, NoodlelyBoi_21
- Track 5: Tyrumbra_20, RobsFeet_23, Fireman_22
- Track 6 : Crisis_23

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 22 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• BrazzalePHS_21, ClearAsMud_24, Cranjis_23, CrazyRich_21, Crisis_23, EarickHC_22, Ganandorf_21, Gina_22, Hermeonysus_21, Jefe_22, Jollipop_22, KaiHaiDragon_22, Kowalski_21, LittleFortune_23, Metamorphoo_22, NoodlelyBoi_21, Onika_21, PiperSansNom_22, Pulchra_23, Ramiel05_21, Savannah_21, Selwyn23_23, Shotgun_21, Teamocil_22, Yeti_22,

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

Fireman_22, Jayden_22, RobsFeet_23, Tyrumbra_20,

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

• Antares_22, Honeyfin_23, Paschalis_21, Phorgeous_21, PierreOrion_22, Piperis_22, Quhwah_24, Scumberland_23,

Summary by start number:

Start 3:

• Found in 29 of 37 (78.4%) of genes in pham

- Manual Annotations of this start: 22 of 33
- Called 86.2% of time when present
- Phage (with cluster) where this start called: BrazzalePHS_21 (EC), ClearAsMud_24 (EC), Cranjis_23 (EC), CrazyRich_21 (EC), Crisis_23 (EC), EarickHC_22 (EC), Ganandorf_21 (EC), Gina_22 (EC), Hermeonysus_21 (EC), Jefe_22 (EC), Jelipop_22 (EC), KaiHaiDragon_22 (EC), Kowalski_21 (EC), LittleFortune_23 (EC), Metamorphoo_22 (EC), NoodlelyBoi_21 (EC), Onika_21 (EC), PiperSansNom_22 (EC), Pulchra_23 (EC), Ramiel05_21 (EC), Savannah_21 (EC), Selwyn23_23 (EC), Shotgun_21 (EC), Teamocil_22 (EC), Yeti_22 (EC),

Start 4:

- Found in 8 of 37 (21.6%) of genes in pham
- Manual Annotations of this start: 7 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antares_22 (EC), Honeyfin_23 (EC), Paschalis_21 (EC), Phorgeous_21 (EC), PierreOrion_22 (EC), Piperis_22 (EC), Quhwah_24 (EC), Scumberland_23 (EC),

Start 5:

- Found in 7 of 37 (18.9%) of genes in pham
- Manual Annotations of this start: 4 of 33
- Called 57.1% of time when present
- Phage (with cluster) where this start called: Fireman_22 (EC), Jayden_22 (EC), RobsFeet_23 (EC), Tyrumbra_20 (EC),

Summary by clusters:

There is one cluster represented in this pham: EC

Info for manual annotations of cluster EC:

- •Start number 3 was manually annotated 22 times for cluster EC.
- •Start number 4 was manually annotated 7 times for cluster EC.
- •Start number 5 was manually annotated 4 times for cluster EC.

Gene Information:

Gene: Antares_22 Start: 10789, Stop: 10881, Start Num: 4

Candidate Starts for Antares_22: (Start: 4 @ 10789 has 7 MA's),

Gene: BrazzalePHS 21 Start: 10575, Stop: 10673, Start Num: 3

Candidate Starts for BrazzalePHS_21: (Start: 3 @10575 has 22 MA's),

Gene: ClearAsMud_24 Start: 11297, Stop: 11395, Start Num: 3

Candidate Starts for ClearAsMud_24:

(Start: 3 @11297 has 22 MA's), (Start: 5 @11309 has 4 MA's), (6, 11351),

Gene: Cranjis_23 Start: 10738, Stop: 10836, Start Num: 3

Candidate Starts for Cranjis_23: (Start: 3 @10738 has 22 MA's),

Gene: CrazyRich_21 Start: 10548, Stop: 10646, Start Num: 3

Candidate Starts for CrazyRich_21: (Start: 3 @ 10548 has 22 MA's),

Gene: Crisis 23 Start: 10532, Stop: 10630, Start Num: 3

Candidate Starts for Crisis_23:

(2, 10517), (Start: 3 @ 10532 has 22 MA's),

Gene: EarickHC_22 Start: 10459, Stop: 10557, Start Num: 3

Candidate Starts for EarickHC_22: (Start: 3 @10459 has 22 MA's),

Gene: Fireman_22 Start: 10210, Stop: 10299, Start Num: 5

Candidate Starts for Fireman_22:

(Start: 3 @ 10198 has 22 MA's), (Start: 5 @ 10210 has 4 MA's), (6, 10252),

Gene: Ganandorf_21 Start: 10595, Stop: 10693, Start Num: 3

Candidate Starts for Ganandorf_21: (Start: 3 @10595 has 22 MA's),

Gene: Gina_22 Start: 9728, Stop: 9826, Start Num: 3

Candidate Starts for Gina_22: (Start: 3 @9728 has 22 MA's),

Gene: Hermeonysus_21 Start: 10465, Stop: 10563, Start Num: 3

Candidate Starts for Hermeonysus_21:

(Start: 3 @ 10465 has 22 MA's),

Gene: Honeyfin_23 Start: 10786, Stop: 10878, Start Num: 4

Candidate Starts for Honeyfin_23: (Start: 4 @10786 has 7 MA's),

Gene: Jayden_22 Start: 10133, Stop: 10222, Start Num: 5

Candidate Starts for Jayden_22:

(1, 10070), (Start: 3 @10121 has 22 MA's), (Start: 5 @10133 has 4 MA's), (6, 10175),

Gene: Jefe_22 Start: 10518, Stop: 10616, Start Num: 3

Candidate Starts for Jefe_22: (Start: 3 @10518 has 22 MA's),

Gene: Jollipop_22 Start: 10866, Stop: 10964, Start Num: 3

Candidate Starts for Jollipop_22: (Start: 3 @10866 has 22 MA's),

Gene: KaiHaiDragon_22 Start: 10459, Stop: 10557, Start Num: 3

Candidate Starts for KaiHaiDragon_22:

(Start: 3 @ 10459 has 22 MA's),

Gene: Kowalski_21 Start: 10575, Stop: 10673, Start Num: 3

Candidate Starts for Kowalski_21: (Start: 3 @10575 has 22 MA's),

Gene: LittleFortune_23 Start: 10822, Stop: 10920, Start Num: 3

Candidate Starts for LittleFortune_23: (Start: 3 @10822 has 22 MA's),

Gene: Metamorphoo_22 Start: 10184, Stop: 10285, Start Num: 3

Candidate Starts for Metamorphoo_22:

(Start: 3 @ 10184 has 22 MA's), (Start: 5 @ 10196 has 4 MA's), (6, 10238),

Gene: NoodlelyBoi_21 Start: 10604, Stop: 10702, Start Num: 3

Candidate Starts for NoodlelyBoi_21:

(Start: 3 @ 10604 has 22 MA's), (Start: 5 @ 10616 has 4 MA's), (6, 10658),

Gene: Onika_21 Start: 10548, Stop: 10646, Start Num: 3

Candidate Starts for Onika_21: (Start: 3 @10548 has 22 MA's),

Gene: Paschalis_21 Start: 10570, Stop: 10662, Start Num: 4

Candidate Starts for Paschalis_21: (Start: 4 @10570 has 7 MA's),

Gene: Phorgeous_21 Start: 10422, Stop: 10514, Start Num: 4

Candidate Starts for Phorgeous_21:

(Start: 4 @ 10422 has 7 MA's),

Gene: PierreOrion_22 Start: 10725, Stop: 10817, Start Num: 4

Candidate Starts for PierreOrion_22:

(Start: 4 @ 10725 has 7 MA's),

Gene: PiperSansNom_22 Start: 10868, Stop: 10966, Start Num: 3

Candidate Starts for PiperSansNom_22:

(Start: 3 @10868 has 22 MA's),

Gene: Piperis_22 Start: 10547, Stop: 10639, Start Num: 4

Candidate Starts for Piperis_22: (Start: 4 @10547 has 7 MA's),

Gene: Pulchra_23 Start: 10940, Stop: 11038, Start Num: 3

Candidate Starts for Pulchra_23: (Start: 3 @10940 has 22 MA's),

Gene: Quhwah_24 Start: 10925, Stop: 11017, Start Num: 4

Candidate Starts for Quhwah_24: (Start: 4 @10925 has 7 MA's),

Gene: Ramiel05_21 Start: 10575, Stop: 10673, Start Num: 3

Candidate Starts for Ramiel05_21: (Start: 3 @10575 has 22 MA's),

Gene: RobsFeet_23 Start: 10477, Stop: 10566, Start Num: 5

Candidate Starts for RobsFeet 23:

(Start: 3 @10465 has 22 MA's), (Start: 5 @10477 has 4 MA's), (6, 10519),

Gene: Savannah_21 Start: 10599, Stop: 10697, Start Num: 3

Candidate Starts for Savannah_21: (Start: 3 @10599 has 22 MA's),

Gene: Scumberland_23 Start: 10795, Stop: 10887, Start Num: 4

Candidate Starts for Scumberland_23:

(Start: 4 @10795 has 7 MA's),

Gene: Selwyn23_23 Start: 10768, Stop: 10866, Start Num: 3

Candidate Starts for Selwyn23_23: (Start: 3 @10768 has 22 MA's),

Gene: Shotgun_21 Start: 10397, Stop: 10495, Start Num: 3

Candidate Starts for Shotgun_21: (Start: 3 @10397 has 22 MA's),

Gene: Teamocil_22 Start: 9728, Stop: 9826, Start Num: 3

Candidate Starts for Teamocil_22: (Start: 3 @9728 has 22 MA's),

Gene: Tyrumbra_20 Start: 9553, Stop: 9642, Start Num: 5

Candidate Starts for Tyrumbra_20:

(Start: 3 @9541 has 22 MA's), (Start: 5 @9553 has 4 MA's), (6, 9595),

Gene: Yeti_22 Start: 10571, Stop: 10669, Start Num: 3

Candidate Starts for Yeti_22: (Start: 3 @10571 has 22 MA's),