Pham 155091

1: Chargerpower_61	6 1 <sup>1</sup>
2: Steamy_59	
	6 1 9 <sup>1</sup> <sup>1</sup> <sup>1</sup>
B: DarthPhader_60	60 L K K K
4: Refuge_60	
5: Pharaoh_58	φ 1 γ <sup>λ</sup>
6: MyraDee_59	
7: Leviathan_65 + 3	e 1 0 190 2 <sup>h</sup>
B: Colin_61 + 1	
<b>`</b>	
D. ChinMunde CE + 2	
9: ChipMunk_65 + 2	
10: Trixie_61	

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 155091 Report

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

Pham number 155091 has 16 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Chargerpower\_61
- Track 2 : Steamy\_59
- Track 3 : DarthPhader\_60
- Track 4 : Refuge\_60
- Track 5 : Pharaoh\_58
- Track 6 : MyraDee\_59
- Track 7 : Leviathan\_65, Smeagan\_66, Whabigail7\_64, Dignity\_65
- Track 8 : Colin\_61, WeiHuaDA\_63
- Track 9 : ChipMunk\_65, KingCyrus\_64, EvilGenius\_64
- Track 10 : Trixie\_61

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

The start number called the most often in the published annotations is 7, it was called in 12 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• ChipMunk\_65, Colin\_61, DarthPhader\_60, Dignity\_65, EvilGenius\_64, KingCyrus\_64, Leviathan\_65, MyraDee\_59, Pharaoh\_58, Refuge\_60, Smeagan\_66, Steamy\_59, WeiHuaDA\_63, Whabigail7\_64,

Genes that have the "Most Annotated" start but do not call it: • Chargerpower\_61, Trixie\_61,

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

# Summary by start number:

Start 6:

- Found in 9 of 16 (56.2%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Trixie\_61 (A2),

#### Start 7:

- Found in 16 of 16 (100.0%) of genes in pham
- Manual Annotations of this start: 12 of 14
- Called 87.5% of time when present

• Phage (with cluster) where this start called: ChipMunk\_65 (A2), Colin\_61 (A2), DarthPhader\_60 (A12), Dignity\_65 (A2), EvilGenius\_64 (A2), KingCyrus\_64 (A2), Leviathan\_65 (A2), MyraDee\_59 (A18), Pharaoh\_58 (A12), Refuge\_60 (A12), Smeagan\_66 (A2), Steamy\_59 (A12), WeiHuaDA\_63 (A2), Whabigail7\_64 (A2),

Start 8:

- Found in 1 of 16 ( 6.2% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chargerpower\_61 (A),

### Summary by clusters:

There are 4 clusters represented in this pham: A, A2, A18, A12,

Info for manual annotations of cluster A: •Start number 8 was manually annotated 1 time for cluster A.

Info for manual annotations of cluster A12: •Start number 7 was manually annotated 4 times for cluster A12.

Info for manual annotations of cluster A18: •Start number 7 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A2:

•Start number 6 was manually annotated 1 time for cluster A2.

•Start number 7 was manually annotated 7 times for cluster A2.

### Gene Information:

Gene: Chargerpower\_61 Start: 38578, Stop: 38429, Start Num: 8 Candidate Starts for Chargerpower\_61: (4, 38617), (Start: 6 @38602 has 1 MA's), (Start: 7 @38581 has 12 MA's), (Start: 8 @38578 has 1 MA's), (14, 38560), (22, 38518), (24, 38437),

Gene: ChipMunk\_65 Start: 41613, Stop: 41470, Start Num: 7 Candidate Starts for ChipMunk\_65: (3, 41706), (Start: 7 @41613 has 12 MA's), (10, 41604), (19, 41556), (20, 41553),

Gene: Colin\_61 Start: 40164, Stop: 40006, Start Num: 7 Candidate Starts for Colin\_61: (Start: 6 @40185 has 1 MA's), (Start: 7 @40164 has 12 MA's), (10, 40155), (19, 40107), (20, 40104), (24, 40014),

Gene: DarthPhader\_60 Start: 40985, Stop: 40830, Start Num: 7 Candidate Starts for DarthPhader\_60: 40973), (15, 40958), (23, 40907), (24, 40838), Gene: Dignity\_65 Start: 40427, Stop: 40284, Start Num: 7 Candidate Starts for Dignity\_65: (Start: 7 @40427 has 12 MA's), (10, 40418), (16, 40394), (19, 40370), (20, 40367), Gene: EvilGenius 64 Start: 41614, Stop: 41471, Start Num: 7 Candidate Starts for EvilGenius\_64: (3, 41707), (Start: 7 @41614 has 12 MA's), (10, 41605), (19, 41557), (20, 41554), Gene: KingCyrus 64 Start: 41609, Stop: 41466, Start Num: 7 Candidate Starts for KingCyrus\_64: (3, 41702), (Start: 7 @41609 has 12 MA's), (10, 41600), (19, 41552), (20, 41549), Gene: Leviathan\_65 Start: 40476, Stop: 40333, Start Num: 7 Candidate Starts for Leviathan 65: (Start: 7 @40476 has 12 MA's), (10, 40467), (16, 40443), (19, 40419), (20, 40416), Gene: MyraDee\_59 Start: 36819, Stop: 36664, Start Num: 7 Candidate Starts for MyraDee 59: (Start: 6 @ 36840 has 1 MA's), (Start: 7 @ 36819 has 12 MA's), (24, 36672), Gene: Pharaoh\_58 Start: 39859, Stop: 39713, Start Num: 7 Candidate Starts for Pharaoh 58: (4, 39895), (Start: 6 @ 39880 has 1 MA's), (Start: 7 @ 39859 has 12 MA's), (13, 39841), (19, 39814), (20, 39811), (21, 39796), (24, 39721), Gene: Refuge\_60 Start: 41000, Stop: 40842, Start Num: 7 Candidate Starts for Refuge 60: (2, 41144), (5, 41024), (Start: 6 @41021 has 1 MA's), (Start: 7 @41000 has 12 MA's), (15, 40970), (18, 40946), (24, 40850), Gene: Smeagan 66 Start: 40563, Stop: 40420, Start Num: 7 Candidate Starts for Smeagan\_66: (Start: 7 @40563 has 12 MA's), (10, 40554), (16, 40530), (19, 40506), (20, 40503), Gene: Steamy\_59 Start: 39593, Stop: 39441, Start Num: 7 Candidate Starts for Steamy 59: (Start: 6 @39614 has 1 MA's), (Start: 7 @39593 has 12 MA's), (17, 39551), (24, 39449), Gene: Trixie\_61 Start: 40009, Stop: 39833, Start Num: 6 Candidate Starts for Trixie 61: (Start: 6 @40009 has 1 MA's), (Start: 7 @39991 has 12 MA's), (10, 39982), (12, 39970), (19, 39934), (20, 39931), (24, 39841),Gene: WeiHuaDA\_63 Start: 40711, Stop: 40553, Start Num: 7 Candidate Starts for WeiHuaDA\_63: (Start: 6 @40732 has 1 MA's), (Start: 7 @40711 has 12 MA's), (10, 40702), (19, 40654), (20, 40651), (24, 40561),

(1, 41195), (2, 41129), (Start: 6 @41006 has 1 MA's), (Start: 7 @40985 has 12 MA's), (9, 40979), (11,

Gene: Whabigail7\_64 Start: 40282, Stop: 40139, Start Num: 7 Candidate Starts for Whabigail7\_64: (Start: 7 @40282 has 12 MA's), (10, 40273), (16, 40249), (19, 40225), (20, 40222),