	3	20	<sup>2</sup> 0		<sub>ა</sub> ზ	к <sup>у</sup>
1: Abidatro_64		N 12	ې م <sup>ل</sup> کې	- <b>\</b> -\-		kite es
	<u>ر</u> ۹۵	N N	) <sub>1</sub> 10	\$` \$P	ന്ന് ന്	царан сул При сул
2: Basilisk_64			ŕ	\$° \$`	<u>ئ</u>	\$ <del>}</del> }
B: KendraB23_74 + 1	, Þ	° ↑	× 23 24	જે જેજે		6 <sup>j</sup> r
4: Jamur_61						
+. Janun_01	<i>۲</i> ۴ <i>۲</i> 6	~ vi	r 5,20,20	\$` \$ <sup>3</sup>		6 <sup>j</sup>
5: Brynnie_61						
	5			n'		\$ \$
6: TaylorSipht_62	2		ę,	~%`		AS AS
						<u> </u>
7: Chickaboom_63 + 1	1.3k	N 1	r 1× 10	s` sr	ર્જ જે	KAKO 624
B: Ruchi_62						
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D: Galaxy_63						
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10: Gravel_74 + 2		ŕ	r h	\$ \$	\$ % \$	
11: Toad24_65 + 1	<u>,</u> б	<i>\</i> <sup>9</sup>	٦Þ	∱ 1		જે જે જે
12: Lunar_65						
IZ. LUIIAI_03	N 15	<i>\</i> ?	٦Þ	Ŷ		No No
13: Daob_64						
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14: Kepler_64	<i>\</i> 6	.∾		Ŷ		\$
15: Bibble12_67 + 1	,¢	.∾		ŕ		\$ <sup>\$</sup>
16: Coral_63						
16: Coral_63	, <del>\</del> \	N 1	ŀ			6
17: Andrew_68						
ф	۸, ۶,	\$ 	r to		P0	K K 44
18: StuartMinion_56						

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 219917 Report

This analysis was run 03/28/25 on database version 593.

Pham number 219917 has 24 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Abidatro 64
- Track 2 : Basilisk 64
- Track 3 : KendraB23 74, Eesa 63
- Track 4 : Jamun 61
- Track 5 : Brynnie 61
- Track 6 : TaylorSipht\_62
- Track 7 : Chickaboom 63, WileyE 67
- Track 8 : Ruchi 62
- Track 9 : Galaxy\_63
- Track 10 : Gravel\_74, Pelletreau\_74, Orcanus\_63
- Track 11 : Toad24\_65, Westrich\_72
- Track 12 : Lunar 65
- Track 13 : Daob\_64 Track 14 : Kepler\_64
- Track 15 : Bibble12 67, Cote 66
- Track 16 : Coral 63
- Track 17 : Andrew\_68
- Track 18 : StuartMinion 56

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

The start number called the most often in the published annotations is 16, it was called in 3 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start: • Bibble12\_67, Coral\_63, Cote\_66, Lunar\_65,

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

Genes that do not have the "Most Annotated" start: • Abidatro\_64, Andrew\_68, Basilisk\_64, Chickaboom\_63, Daob\_64, Eesa\_63, Galaxy\_63, Gravel\_74, Jamun\_61, KendraB23\_74, Kepler\_64, Orcanus\_63, Pelletreau\_74, Ruchi\_62, StuartMinion\_56, TaylorSipht\_62, Toad24\_65,

Westrich\_72, WileyE\_67,

# Summary by start number:

## Start 6:

- Found in 7 of 24 (29.2%) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Eesa\_63 (AS1), Gravel\_74 (AS1), KendraB23\_74 (AS1), Orcanus\_63 (AS1), Pelletreau\_74 (AS1), Toad24\_65 (AS1), Westrich\_72 (AS1),

## Start 7:

- Found in 3 of 24 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 33.3% of time when present
- Phage (with cluster) where this start called: TaylorSipht\_62 (AS1),

### Start 8:

- Found in 2 of 24 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chickaboom\_63 (AS1), WileyE\_67 (AS1),

## Start 10:

- Found in 5 of 24 (20.8%) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Abidatro\_64 (AS1), Galaxy\_63 (AS1),

# Start 12:

- Found in 1 of 24 (4.2%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daob\_64 (AS2),

### Start 13:

- Found in 3 of 24 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Ruchi\_62 (AS1),

### Start 14:

- Found in 4 of 24 (16.7%) of genes in pham
- Manual Annotations of this start: 3 of 16
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Basilisk\_64 (AS1), Brynnie\_61 (AS1), Jamun\_61 (AS1),

# Start 15:

- Found in 2 of 24 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 16

- Called 50.0% of time when present
- Phage (with cluster) where this start called: Kepler\_64 (AS2),

#### Start 16:

- Found in 5 of 24 (20.8%) of genes in pham
- Manual Annotations of this start: 3 of 16
- Called 80.0% of time when present

• Phage (with cluster) where this start called: Bibble12\_67 (AS2), Coral\_63 (AS2), Cote\_66 (AS2), Lunar\_65 (AS2),

Start 18:

- Found in 2 of 24 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Andrew\_68 (AS3), StuartMinion\_56 (AS3),

## Summary by clusters:

There are 3 clusters represented in this pham: AS3, AS2, AS1,

Info for manual annotations of cluster AS1:

•Start number 6 was manually annotated 2 times for cluster AS1.

•Start number 7 was manually annotated 1 time for cluster AS1.

•Start number 8 was manually annotated 1 time for cluster AS1.

•Start number 10 was manually annotated 2 times for cluster AS1.

•Start number 13 was manually annotated 1 time for cluster AS1.

•Start number 14 was manually annotated 3 times for cluster AS1.

Info for manual annotations of cluster AS2:

•Start number 12 was manually annotated 1 time for cluster AS2.

•Start number 15 was manually annotated 1 time for cluster AS2.

•Start number 16 was manually annotated 3 times for cluster AS2.

Info for manual annotations of cluster AS3: •Start number 18 was manually annotated 1 time for cluster AS3.

### Gene Information:

Gene: Abidatro\_64 Start: 37871, Stop: 38137, Start Num: 10 Candidate Starts for Abidatro\_64: (Start: 7 @37868 has 1 MA's), (Start: 10 @37871 has 2 MA's), (20, 37931), (26, 37988), (38, 38069), (42, 38084),

Gene: Andrew\_68 Start: 37133, Stop: 37360, Start Num: 18 Candidate Starts for Andrew\_68: (2, 37028), (3, 37031), (5, 37073), (Start: 18 @37133 has 1 MA's), (19, 37148), (22, 37175), (51, 37343),

Gene: Basilisk\_64 Start: 37561, Stop: 37818, Start Num: 14 Candidate Starts for Basilisk\_64:

(Start: 13 @37558 has 1 MA's), (Start: 14 @37561 has 3 MA's), (19, 37597), (22, 37624), (24, 37645), (26, 37657), (31, 37690), (32, 37699), (35, 37729), (39, 37750), (43, 37765), (45, 37768), (52, 37810), Gene: Bibble12\_67 Start: 36185, Stop: 36433, Start Num: 16 Candidate Starts for Bibble12\_67: (Start: 16 @36185 has 3 MA's), (19, 36212), (27, 36278), (48, 36398), Gene: Brynnie 61 Start: 37395, Stop: 37631, Start Num: 14 Candidate Starts for Brynnie\_61: (4, 37341), (Start: 14 @37395 has 3 MA's), (Start: 16 @37401 has 3 MA's), (19, 37425), (21, 37449), (22, 37452), (24, 37473), (25, 37479), (26, 37485), (31, 37518), (33, 37533), (52, 37623), Gene: Chickaboom\_63 Start: 37496, Stop: 37771, Start Num: 8 Candidate Starts for Chickaboom 63: (Start: 8 @37496 has 1 MA's), (Start: 10 @37499 has 2 MA's), (25, 37610), (30, 37646), (31, 37649), (42, 37718), (44, 37721), (52, 37763), Gene: Coral\_63 Start: 36092, Stop: 36337, Start Num: 16 Candidate Starts for Coral 63: (Start: 16 @36092 has 3 MA's), (19, 36119), (27, 36185), (48, 36305), (53, 36332), Gene: Cote 66 Start: 36528, Stop: 36776, Start Num: 16 Candidate Starts for Cote 66: (Start: 16 @36528 has 3 MA's), (19, 36555), (27, 36621), (48, 36741), Gene: Daob\_64 Start: 35856, Stop: 36119, Start Num: 12 Candidate Starts for Daob\_64: (Start: 12 @35856 has 1 MA's), (Start: 15 @35865 has 1 MA's), (19, 35898), (24, 35946), (27, 35964), (46, 36075), (48, 36084), Gene: Eesa\_63 Start: 38775, Stop: 39053, Start Num: 6 Candidate Starts for Eesa 63: (Start: 6 @38775 has 2 MA's), (23, 38871), (29, 38925), (31, 38931), (37, 38976), (50, 39033), (52, 39045), (53, 39048), Gene: Galaxy\_63 Start: 36697, Stop: 36963, Start Num: 10 Candidate Starts for Galaxy\_63: (Start: 7 @36694 has 1 MA's), (Start: 10 @36697 has 2 MA's), (Start: 13 @36718 has 1 MA's), (26, 36814), (42, 36913), (52, 36955), (53, 36958), Gene: Gravel 74 Start: 39031, Stop: 39309, Start Num: 6 Candidate Starts for Gravel\_74: (Start: 6 @ 39031 has 2 MA's), (27, 39160), (29, 39181), (31, 39187), (37, 39232), (50, 39289), (52, 39301), (53, 39304), Gene: Jamun\_61 Start: 37765, Stop: 38004, Start Num: 14 Candidate Starts for Jamun 61: (1, 37639), (Start: 14 @37765 has 3 MA's), (19, 37795), (22, 37822), (23, 37828), (24, 37843), (28, 37870), (32, 37897), (33, 37903), (52, 37996),

Gene: KendraB23\_74 Start: 38736, Stop: 39014, Start Num: 6 Candidate Starts for KendraB23\_74: (Start: 6 @38736 has 2 MA's), (23, 38832), (29, 38886), (31, 38892), (37, 38937), (50, 38994), (52, 39006), (53, 39009),

Gene: Kepler\_64 Start: 35869, Stop: 36123, Start Num: 15 Candidate Starts for Kepler\_64: (9, 35839), (11, 35854), (Start: 15 @35869 has 1 MA's), (19, 35902), (24, 35950), (27, 35968), (46, 36079), (48, 36088), (52, 36115),

Gene: Lunar\_65 Start: 36215, Stop: 36460, Start Num: 16 Candidate Starts for Lunar\_65: (Start: 16 @36215 has 3 MA's), (19, 36242), (24, 36290), (27, 36308), (46, 36419), (48, 36428), (53, 36455),

Gene: Orcanus\_63 Start: 38262, Stop: 38540, Start Num: 6 Candidate Starts for Orcanus\_63: (Start: 6 @38262 has 2 MA's), (27, 38391), (29, 38412), (31, 38418), (37, 38463), (50, 38520), (52, 38532), (53, 38535),

Gene: Pelletreau\_74 Start: 39031, Stop: 39309, Start Num: 6 Candidate Starts for Pelletreau\_74: (Start: 6 @39031 has 2 MA's), (27, 39160), (29, 39181), (31, 39187), (37, 39232), (50, 39289), (52, 39301), (53, 39304),

Gene: Ruchi\_62 Start: 37480, Stop: 37740, Start Num: 13 Candidate Starts for Ruchi\_62: (Start: 13 @37480 has 1 MA's), (Start: 14 @37483 has 3 MA's), (19, 37519), (22, 37546), (24, 37567), (26, 37579), (31, 37612), (32, 37621), (35, 37651), (39, 37672), (43, 37687), (45, 37690), (52, 37732),

Gene: StuartMinion\_56 Start: 33055, Stop: 33285, Start Num: 18 Candidate Starts for StuartMinion\_56: (2, 32950), (3, 32953), (5, 32995), (17, 33046), (Start: 18 @33055 has 1 MA's), (19, 33070), (22, 33097), (25, 33124), (40, 33223), (47, 33250), (49, 33262), (52, 33277),

Gene: TaylorSipht\_62 Start: 37850, Stop: 38122, Start Num: 7 Candidate Starts for TaylorSipht\_62: (Start: 7 @37850 has 1 MA's), (Start: 10 @37853 has 2 MA's), (31, 38003), (50, 38102), (52, 38114), (53, 38117),

Gene: Toad24\_65 Start: 38788, Stop: 39063, Start Num: 6 Candidate Starts for Toad24\_65: (Start: 6 @38788 has 2 MA's), (22, 38878), (25, 38905), (28, 38926), (32, 38953), (34, 38977), (36, 38983), (41, 39004),

Gene: Westrich\_72 Start: 38955, Stop: 39230, Start Num: 6 Candidate Starts for Westrich\_72: (Start: 6 @38955 has 2 MA's), (22, 39045), (25, 39072), (28, 39093), (32, 39120), (34, 39144), (36, 39150), (41, 39171),

Gene: WileyE\_67 Start: 37496, Stop: 37771, Start Num: 8 Candidate Starts for WileyE\_67: (Start: 8 @37496 has 1 MA's), (Start: 10 @37499 has 2 MA's), (25, 37610), (30, 37646), (31, 37649), (42, 37718), (44, 37721), (52, 37763),