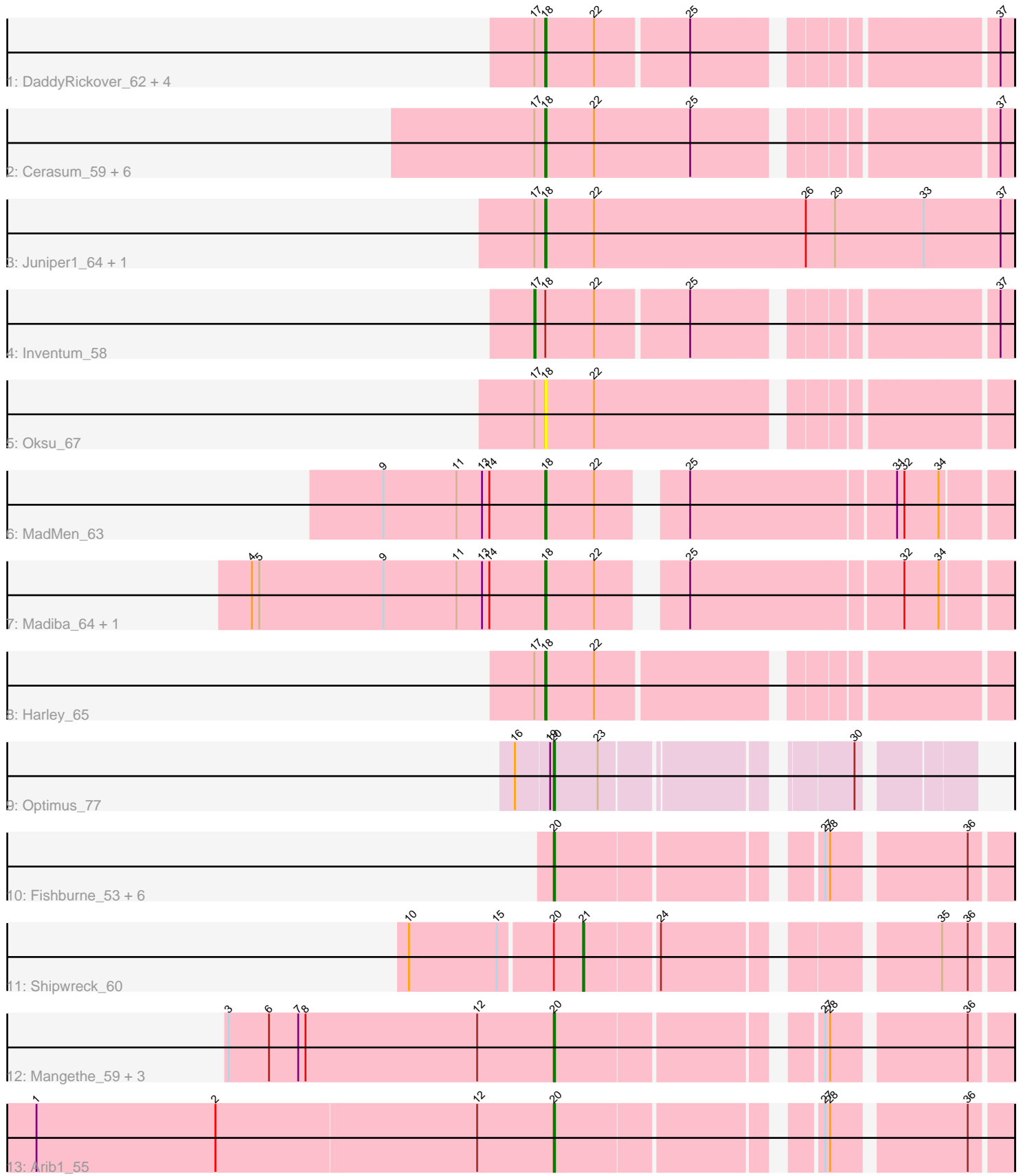


# Pham 159320



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 159320 Report

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

Pham number 159320 has 34 members, 6 are drafts.

Phages represented in each track:

- Track 1 : DaddyRickover\_62, Dorothy\_61, Sassafras\_61, RedBird\_61, Aubs\_63
- Track 2 : Cerasum\_59, Coco12\_62, Velveteen\_58, BigPhil\_59, Kingsley\_60, IbOuu\_64, Sarma624\_61
- Track 3 : Juniper1\_64, Estave1\_66
- Track 4 : Inventum\_58
- Track 5 : Oksu\_67
- Track 6 : MadMen\_63
- Track 7 : Madiba\_64, Mova\_67
- Track 8 : Harley\_65
- Track 9 : Optimus\_77
- Track 10 : Fishburne\_53, Langerak\_54, Polkaroo\_56, Kari\_53, Bartholomew\_53, FirstPlacePfu\_55, Venti\_54
- Track 11 : Shipwreck\_60
- Track 12 : Mangethe\_59, Zilizebeth\_59, Majeke\_59, Phegasus\_59
- Track 13 : Arib1\_55

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

The start number called the most often in the published annotations is 18, it was called in 15 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aubs\_63, BigPhil\_59, Cerasum\_59, Coco12\_62, DaddyRickover\_62, Dorothy\_61, Estave1\_66, Harley\_65, IbOuu\_64, Juniper1\_64, Kingsley\_60, MadMen\_63, Madiba\_64, Mova\_67, Oksu\_67, RedBird\_61, Sarma624\_61, Sassafras\_61, Velveteen\_58,

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

- Inventum\_58,

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

- Arib1\_55, Bartholomew\_53, FirstPlacePfu\_55, Fishburne\_53, Kari\_53, Langerak\_54, Majeke\_59, Mangethe\_59, Optimus\_77, Phegasus\_59, Polkaroo\_56, Shipwreck\_60, Venti\_54, Zilizebeth\_59,

## Summary by start number:

### Start 17:

- Found in 17 of 34 ( 50.0% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Inventum\_58 (F1),

### Start 18:

- Found in 20 of 34 ( 58.8% ) of genes in pham
- Manual Annotations of this start: 15 of 28
- Called 95.0% of time when present
- Phage (with cluster) where this start called: Aubs\_63 (F1), BigPhil\_59 (F1), Cerasum\_59 (F1), Coco12\_62 (F1), DaddyRickover\_62 (F1), Dorothy\_61 (F1), Estave1\_66 (F1), Harley\_65 (F1), IbOuu\_64 (F1), Juniper1\_64 (F1), Kingsley\_60 (F1), MadMen\_63 (F1), Madiba\_64 (F1), Mova\_67 (F1), Oksu\_67 (F1), RedBird\_61 (F1), Sarma624\_61 (F1), Sassafras\_61 (F1), Velveteen\_58 (F1),

### Start 20:

- Found in 14 of 34 ( 41.2% ) of genes in pham
- Manual Annotations of this start: 11 of 28
- Called 92.9% of time when present
- Phage (with cluster) where this start called: Arib1\_55 (P1), Bartholomew\_53 (P1), FirstPlacePfu\_55 (P1), Fishburne\_53 (P1), Kari\_53 (P1), Langerak\_54 (P1), Majeke\_59 (P1), Mangethe\_59 (P1), Optimus\_77 (J), Phegasus\_59 (P1), Polkaroo\_56 (P1), Venti\_54 (P1), Zilizebeth\_59 (P1),

### Start 21:

- Found in 1 of 34 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shipwreck\_60 (P1),

## Summary by clusters:

There are 3 clusters represented in this pham: F1, J, P1,

### Info for manual annotations of cluster F1:

- Start number 17 was manually annotated 1 time for cluster F1.
- Start number 18 was manually annotated 15 times for cluster F1.

### Info for manual annotations of cluster J:

- Start number 20 was manually annotated 1 time for cluster J.

### Info for manual annotations of cluster P1:

- Start number 20 was manually annotated 10 times for cluster P1.
- Start number 21 was manually annotated 1 time for cluster P1.

## Gene Information:

Gene: Arib1\_55 Start: 36318, Stop: 36641, Start Num: 20

Candidate Starts for Arib1\_55:

(1, 35895), (2, 36042), (12, 36255), (Start: 20 @36318 has 11 MA's), (27, 36507), (28, 36510), (36, 36609),

Gene: Aubs\_63 Start: 41384, Stop: 41719, Start Num: 18

Candidate Starts for Aubs\_63:

(Start: 17 @41375 has 1 MA's), (Start: 18 @41384 has 15 MA's), (22, 41423), (25, 41495), (37, 41708),

Gene: Bartholomew\_53 Start: 36260, Stop: 36583, Start Num: 20

Candidate Starts for Bartholomew\_53:

(Start: 20 @36260 has 11 MA's), (27, 36449), (28, 36452), (36, 36551),

Gene: BigPhil\_59 Start: 37375, Stop: 37716, Start Num: 18

Candidate Starts for BigPhil\_59:

(Start: 17 @37366 has 1 MA's), (Start: 18 @37375 has 15 MA's), (22, 37414), (25, 37492), (37, 37705),

Gene: Cerasum\_59 Start: 37393, Stop: 37734, Start Num: 18

Candidate Starts for Cerasum\_59:

(Start: 17 @37384 has 1 MA's), (Start: 18 @37393 has 15 MA's), (22, 37432), (25, 37510), (37, 37723),

Gene: Coco12\_62 Start: 41450, Stop: 41791, Start Num: 18

Candidate Starts for Coco12\_62:

(Start: 17 @41441 has 1 MA's), (Start: 18 @41450 has 15 MA's), (22, 41489), (25, 41567), (37, 41780),

Gene: DaddyRickover\_62 Start: 41176, Stop: 41511, Start Num: 18

Candidate Starts for DaddyRickover\_62:

(Start: 17 @41167 has 1 MA's), (Start: 18 @41176 has 15 MA's), (22, 41215), (25, 41287), (37, 41500),

Gene: Dorothy\_61 Start: 40350, Stop: 40685, Start Num: 18

Candidate Starts for Dorothy\_61:

(Start: 17 @40341 has 1 MA's), (Start: 18 @40350 has 15 MA's), (22, 40389), (25, 40461), (37, 40674),

Gene: Estave1\_66 Start: 42262, Stop: 42642, Start Num: 18

Candidate Starts for Estave1\_66:

(Start: 17 @42253 has 1 MA's), (Start: 18 @42262 has 15 MA's), (22, 42301), (26, 42472), (29, 42496), (33, 42568), (37, 42631),

Gene: FirstPlacePfu\_55 Start: 36292, Stop: 36615, Start Num: 20

Candidate Starts for FirstPlacePfu\_55:

(Start: 20 @36292 has 11 MA's), (27, 36481), (28, 36484), (36, 36583),

Gene: Fishburne\_53 Start: 36260, Stop: 36583, Start Num: 20

Candidate Starts for Fishburne\_53:

(Start: 20 @36260 has 11 MA's), (27, 36449), (28, 36452), (36, 36551),

Gene: Harley\_65 Start: 42034, Stop: 42369, Start Num: 18

Candidate Starts for Harley\_65:

(Start: 17 @42025 has 1 MA's), (Start: 18 @42034 has 15 MA's), (22, 42073),

Gene: IbOuu\_64 Start: 41437, Stop: 41772, Start Num: 18

Candidate Starts for IbOuu\_64:

(Start: 17 @41428 has 1 MA's), (Start: 18 @41437 has 15 MA's), (22, 41476), (25, 41548), (37, 41761),

Gene: Inventum\_58 Start: 40539, Stop: 40883, Start Num: 17

Candidate Starts for Inventum\_58:

(Start: 17 @40539 has 1 MA's), (Start: 18 @40548 has 15 MA's), (22, 40587), (25, 40659), (37, 40872),

Gene: Juniper1\_64 Start: 41298, Stop: 41678, Start Num: 18

Candidate Starts for Juniper1\_64:

(Start: 17 @41289 has 1 MA's), (Start: 18 @41298 has 15 MA's), (22, 41337), (26, 41508), (29, 41532), (33, 41604), (37, 41667),

Gene: Kari\_53 Start: 36257, Stop: 36580, Start Num: 20

Candidate Starts for Kari\_53:

(Start: 20 @36257 has 11 MA's), (27, 36446), (28, 36449), (36, 36548),

Gene: Kingsley\_60 Start: 40183, Stop: 40524, Start Num: 18

Candidate Starts for Kingsley\_60:

(Start: 17 @40174 has 1 MA's), (Start: 18 @40183 has 15 MA's), (22, 40222), (25, 40300), (37, 40513),

Gene: Langerak\_54 Start: 36276, Stop: 36599, Start Num: 20

Candidate Starts for Langerak\_54:

(Start: 20 @36276 has 11 MA's), (27, 36465), (28, 36468), (36, 36567),

Gene: MadMen\_63 Start: 41307, Stop: 41648, Start Num: 18

Candidate Starts for MadMen\_63:

(9, 41175), (11, 41235), (13, 41256), (14, 41262), (Start: 18 @41307 has 15 MA's), (22, 41346), (25, 41400), (31, 41562), (32, 41568), (34, 41595),

Gene: Madiba\_64 Start: 40812, Stop: 41153, Start Num: 18

Candidate Starts for Madiba\_64:

(4, 40572), (5, 40578), (9, 40680), (11, 40740), (13, 40761), (14, 40767), (Start: 18 @40812 has 15 MA's), (22, 40851), (25, 40905), (32, 41073), (34, 41100),

Gene: Majeke\_59 Start: 37835, Stop: 38158, Start Num: 20

Candidate Starts for Majeke\_59:

(3, 37568), (6, 37601), (7, 37625), (8, 37631), (12, 37772), (Start: 20 @37835 has 11 MA's), (27, 38024), (28, 38027), (36, 38126),

Gene: Mangethe\_59 Start: 37835, Stop: 38158, Start Num: 20

Candidate Starts for Mangethe\_59:

(3, 37568), (6, 37601), (7, 37625), (8, 37631), (12, 37772), (Start: 20 @37835 has 11 MA's), (27, 38024), (28, 38027), (36, 38126),

Gene: Mova\_67 Start: 41316, Stop: 41657, Start Num: 18

Candidate Starts for Mova\_67:

(4, 41076), (5, 41082), (9, 41184), (11, 41244), (13, 41265), (14, 41271), (Start: 18 @41316 has 15 MA's), (22, 41355), (25, 41409), (32, 41577), (34, 41604),

Gene: Oksu\_67 Start: 43933, Stop: 44274, Start Num: 18

Candidate Starts for Oksu\_67:

(Start: 17 @43924 has 1 MA's), (Start: 18 @43933 has 15 MA's), (22, 43972),

Gene: Optimus\_77 Start: 51627, Stop: 51340, Start Num: 20

Candidate Starts for Optimus\_77:

(16, 51657), (19, 51630), (Start: 20 @51627 has 11 MA's), (23, 51591), (30, 51420),

Gene: Phegasus\_59 Start: 37802, Stop: 38125, Start Num: 20

Candidate Starts for Phegasus\_59:

(3, 37535), (6, 37568), (7, 37592), (8, 37598), (12, 37739), (Start: 20 @37802 has 11 MA's), (27, 37991), (28, 37994), (36, 38093),

Gene: Polkaroo\_56 Start: 37599, Stop: 37922, Start Num: 20

Candidate Starts for Polkaroo\_56:

(Start: 20 @37599 has 11 MA's), (27, 37788), (28, 37791), (36, 37890),

Gene: RedBird\_61 Start: 40229, Stop: 40564, Start Num: 18

Candidate Starts for RedBird\_61:

(Start: 17 @40220 has 1 MA's), (Start: 18 @40229 has 15 MA's), (22, 40268), (25, 40340), (37, 40553),

Gene: Sarma624\_61 Start: 37375, Stop: 37716, Start Num: 18

Candidate Starts for Sarma624\_61:

(Start: 17 @37366 has 1 MA's), (Start: 18 @37375 has 15 MA's), (22, 37414), (25, 37492), (37, 37705),

Gene: Sassafras\_61 Start: 40547, Stop: 40882, Start Num: 18

Candidate Starts for Sassafras\_61:

(Start: 17 @40538 has 1 MA's), (Start: 18 @40547 has 15 MA's), (22, 40586), (25, 40658), (37, 40871),

Gene: Shipwreck\_60 Start: 40146, Stop: 40448, Start Num: 21

Candidate Starts for Shipwreck\_60:

(10, 40008), (15, 40080), (Start: 20 @40122 has 11 MA's), (Start: 21 @40146 has 1 MA's), (24, 40203), (35, 40395), (36, 40416),

Gene: Velveteen\_58 Start: 37375, Stop: 37716, Start Num: 18

Candidate Starts for Velveteen\_58:

(Start: 17 @37366 has 1 MA's), (Start: 18 @37375 has 15 MA's), (22, 37414), (25, 37492), (37, 37705),

Gene: Venti\_54 Start: 36260, Stop: 36583, Start Num: 20

Candidate Starts for Venti\_54:

(Start: 20 @36260 has 11 MA's), (27, 36449), (28, 36452), (36, 36551),

Gene: Zilizebeth\_59 Start: 37826, Stop: 38149, Start Num: 20

Candidate Starts for Zilizebeth\_59:

(3, 37559), (6, 37592), (7, 37616), (8, 37622), (12, 37763), (Start: 20 @37826 has 11 MA's), (27, 38015), (28, 38018), (36, 38117),

