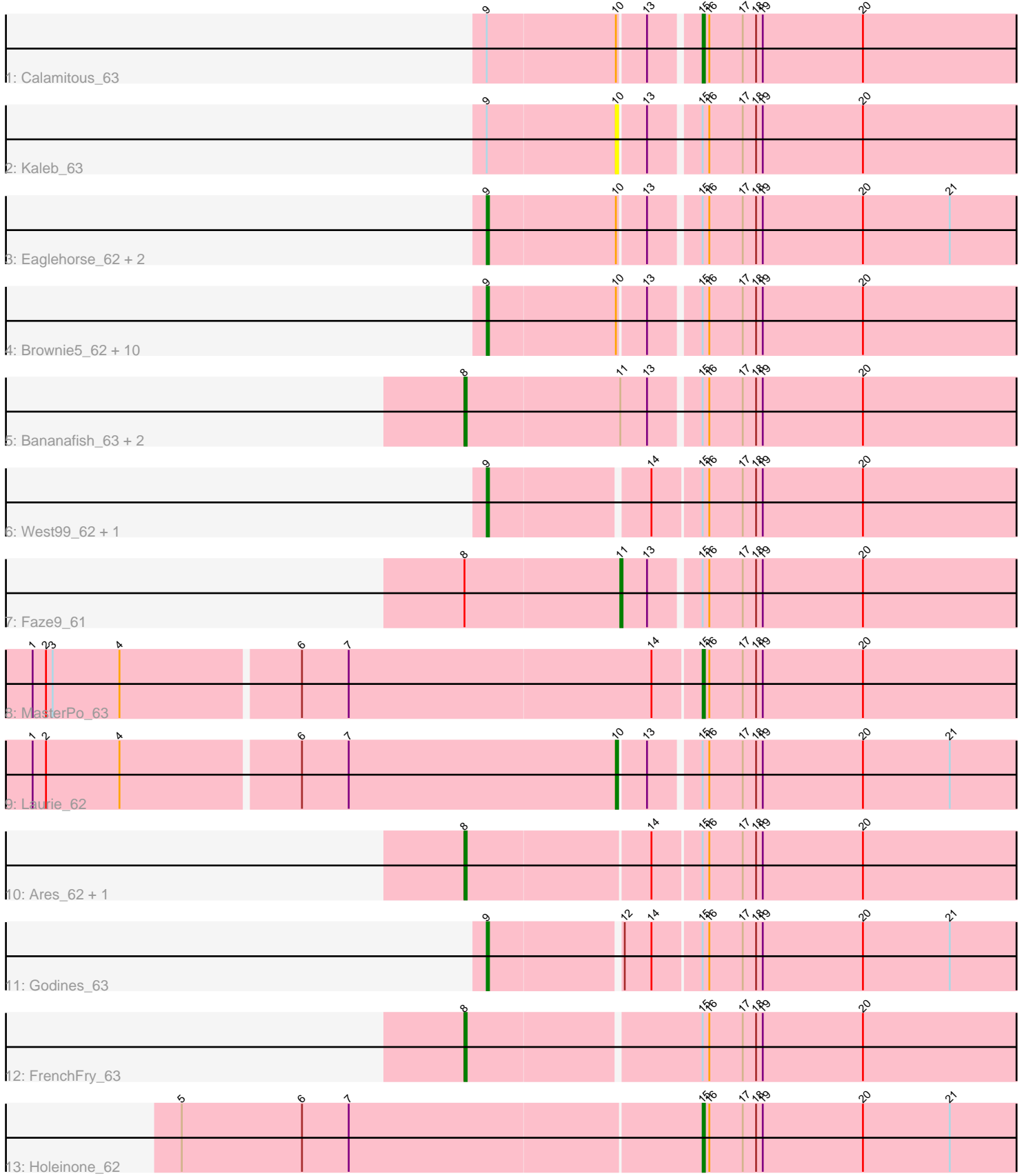


Pham 179333



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 179333 Report

This analysis was run 11/02/24 on database version 579.

Pham number 179333 has 29 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Calamitous\_63
- Track 2 : Kaleb\_63
- Track 3 : Eaglehorse\_62, Tres\_62, Vic9\_64
- Track 4 : Brownie5\_62, Boyle\_62, LizLemon\_62, Kheth\_62, Rhinoforte\_62, Lephleur\_62, Rosebush\_61, Coffee\_62, Opia\_63, Tinciduntolum\_63, Hedgerow\_62
- Track 5 : Bananafish\_63, Allegro\_62, Glass\_63
- Track 6 : West99\_62, Sabella\_62
- Track 7 : Faze9\_61
- Track 8 : MasterPo\_63
- Track 9 : Laurie\_62
- Track 10 : Ares\_62, Blocker23\_62
- Track 11 : Godines\_63
- Track 12 : FrenchFry\_63
- Track 13 : Holeinone\_62

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

The start number called the most often in the published annotations is 9, it was called in 16 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Boyle\_62, Brownie5\_62, Coffee\_62, Eaglehorse\_62, Godines\_63, Hedgerow\_62, Kheth\_62, Lephleur\_62, LizLemon\_62, Opia\_63, Rhinoforte\_62, Rosebush\_61, Sabella\_62, Tinciduntolum\_63, Tres\_62, Vic9\_64, West99\_62,

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

- Calamitous\_63, Kaleb\_63,

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

- Allegro\_62, Ares\_62, Bananafish\_63, Blocker23\_62, Faze9\_61, FrenchFry\_63, Glass\_63, Holeinone\_62, Laurie\_62, MasterPo\_63,

### **Summary by start number:**

Start 8:

- Found in 7 of 29 ( 24.1% ) of genes in pham
- Manual Annotations of this start: 6 of 27
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Allegro\_62 (B2), Ares\_62 (B2), Bananafish\_63 (B2), Blocker23\_62 (B2), FrenchFry\_63 (B2), Glass\_63 (B2),

Start 9:

- Found in 19 of 29 ( 65.5% ) of genes in pham
- Manual Annotations of this start: 16 of 27
- Called 89.5% of time when present
- Phage (with cluster) where this start called: Boyle\_62 (B2), Brownie5\_62 (B2), Coffee\_62 (B2), Eaglehorse\_62 (B2), Godines\_63 (B2), Hedgerow\_62 (B2), Kheth\_62 (B2), Lephleur\_62 (B2), LizLemon\_62 (B2), Opia\_63 (B2), Rhinoforte\_62 (B2), Rosebush\_61 (B2), Sabella\_62 (B2), Tinciduntolum\_63 (B2), Tres\_62 (B2), Vic9\_64 (B2), West99\_62 (B2),

Start 10:

- Found in 17 of 29 ( 58.6% ) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 11.8% of time when present
- Phage (with cluster) where this start called: Kaleb\_63 (B2), Laurie\_62 (B2),

Start 11:

- Found in 4 of 29 ( 13.8% ) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Faze9\_61 (B2),

Start 15:

- Found in 29 of 29 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 3 of 27
- Called 10.3% of time when present
- Phage (with cluster) where this start called: Calamitous\_63 (B2), Holeinone\_62 (B2), MasterPo\_63 (B2),

**Summary by clusters:**

There is one cluster represented in this pham: B2

Info for manual annotations of cluster B2:

- Start number 8 was manually annotated 6 times for cluster B2.
- Start number 9 was manually annotated 16 times for cluster B2.
- Start number 10 was manually annotated 1 time for cluster B2.
- Start number 11 was manually annotated 1 time for cluster B2.
- Start number 15 was manually annotated 3 times for cluster B2.

**Gene Information:**

Gene: Allegro\_62 Start: 54483, Stop: 54764, Start Num: 8

Candidate Starts for Allegro\_62:

(Start: 8 @54483 has 6 MA's), (Start: 11 @54552 has 1 MA's), (13, 54564), (Start: 15 @54585 has 3 MA's), (16, 54588), (17, 54603), (18, 54609), (19, 54612), (20, 54657),

Gene: Ares\_62 Start: 54561, Stop: 54842, Start Num: 8

Candidate Starts for Ares\_62:

(Start: 8 @54561 has 6 MA's), (14, 54642), (Start: 15 @54663 has 3 MA's), (16, 54666), (17, 54681), (18, 54687), (19, 54690), (20, 54735),

Gene: Bananafish\_63 Start: 54491, Stop: 54772, Start Num: 8

Candidate Starts for Bananafish\_63:

(Start: 8 @54491 has 6 MA's), (Start: 11 @54560 has 1 MA's), (13, 54572), (Start: 15 @54593 has 3 MA's), (16, 54596), (17, 54611), (18, 54617), (19, 54620), (20, 54665),

Gene: Blocker23\_62 Start: 54558, Stop: 54839, Start Num: 8

Candidate Starts for Blocker23\_62:

(Start: 8 @54558 has 6 MA's), (14, 54639), (Start: 15 @54660 has 3 MA's), (16, 54663), (17, 54678), (18, 54684), (19, 54687), (20, 54732),

Gene: Boyle\_62 Start: 54611, Stop: 54880, Start Num: 9

Candidate Starts for Boyle\_62:

(Start: 9 @54611 has 16 MA's), (Start: 10 @54668 has 1 MA's), (13, 54680), (Start: 15 @54701 has 3 MA's), (16, 54704), (17, 54719), (18, 54725), (19, 54728), (20, 54773),

Gene: Brownie5\_62 Start: 54613, Stop: 54882, Start Num: 9

Candidate Starts for Brownie5\_62:

(Start: 9 @54613 has 16 MA's), (Start: 10 @54670 has 1 MA's), (13, 54682), (Start: 15 @54703 has 3 MA's), (16, 54706), (17, 54721), (18, 54727), (19, 54730), (20, 54775),

Gene: Calamitous\_63 Start: 54591, Stop: 54770, Start Num: 15

Candidate Starts for Calamitous\_63:

(Start: 9 @54501 has 16 MA's), (Start: 10 @54558 has 1 MA's), (13, 54570), (Start: 15 @54591 has 3 MA's), (16, 54594), (17, 54609), (18, 54615), (19, 54618), (20, 54663),

Gene: Coffee\_62 Start: 54605, Stop: 54874, Start Num: 9

Candidate Starts for Coffee\_62:

(Start: 9 @54605 has 16 MA's), (Start: 10 @54662 has 1 MA's), (13, 54674), (Start: 15 @54695 has 3 MA's), (16, 54698), (17, 54713), (18, 54719), (19, 54722), (20, 54767),

Gene: Eaglehorse\_62 Start: 54491, Stop: 54760, Start Num: 9

Candidate Starts for Eaglehorse\_62:

(Start: 9 @54491 has 16 MA's), (Start: 10 @54548 has 1 MA's), (13, 54560), (Start: 15 @54581 has 3 MA's), (16, 54584), (17, 54599), (18, 54605), (19, 54608), (20, 54653), (21, 54692),

Gene: Faze9\_61 Start: 54687, Stop: 54899, Start Num: 11

Candidate Starts for Faze9\_61:

(Start: 8 @54618 has 6 MA's), (Start: 11 @54687 has 1 MA's), (13, 54699), (Start: 15 @54720 has 3 MA's), (16, 54723), (17, 54738), (18, 54744), (19, 54747), (20, 54792),

Gene: FrenchFry\_63 Start: 54604, Stop: 54885, Start Num: 8

Candidate Starts for FrenchFry\_63:

(Start: 8 @54604 has 6 MA's), (Start: 15 @54706 has 3 MA's), (16, 54709), (17, 54724), (18, 54730), (19, 54733), (20, 54778),

Gene: Glass\_63 Start: 54606, Stop: 54887, Start Num: 8

Candidate Starts for Glass\_63:

(Start: 8 @54606 has 6 MA's), (Start: 11 @54675 has 1 MA's), (13, 54687), (Start: 15 @54708 has 3 MA's), (16, 54711), (17, 54726), (18, 54732), (19, 54735), (20, 54780),

Gene: Godines\_63 Start: 54877, Stop: 55146, Start Num: 9

Candidate Starts for Godines\_63:

(Start: 9 @54877 has 16 MA's), (12, 54934), (14, 54946), (Start: 15 @54967 has 3 MA's), (16, 54970), (17, 54985), (18, 54991), (19, 54994), (20, 55039), (21, 55078),

Gene: Hedgerow\_62 Start: 54588, Stop: 54857, Start Num: 9

Candidate Starts for Hedgerow\_62:

(Start: 9 @54588 has 16 MA's), (Start: 10 @54645 has 1 MA's), (13, 54657), (Start: 15 @54678 has 3 MA's), (16, 54681), (17, 54696), (18, 54702), (19, 54705), (20, 54750),

Gene: Holeinone\_62 Start: 54566, Stop: 54745, Start Num: 15

Candidate Starts for Holeinone\_62:

(5, 54335), (6, 54389), (7, 54410), (Start: 15 @54566 has 3 MA's), (16, 54569), (17, 54584), (18, 54590), (19, 54593), (20, 54638), (21, 54677),

Gene: Kaleb\_63 Start: 54680, Stop: 54892, Start Num: 10

Candidate Starts for Kaleb\_63:

(Start: 9 @54623 has 16 MA's), (Start: 10 @54680 has 1 MA's), (13, 54692), (Start: 15 @54713 has 3 MA's), (16, 54716), (17, 54731), (18, 54737), (19, 54740), (20, 54785),

Gene: Kheth\_62 Start: 54535, Stop: 54804, Start Num: 9

Candidate Starts for Kheth\_62:

(Start: 9 @54535 has 16 MA's), (Start: 10 @54592 has 1 MA's), (13, 54604), (Start: 15 @54625 has 3 MA's), (16, 54628), (17, 54643), (18, 54649), (19, 54652), (20, 54697),

Gene: Laurie\_62 Start: 54353, Stop: 54565, Start Num: 10

Candidate Starts for Laurie\_62:

(1, 54095), (2, 54101), (4, 54134), (6, 54212), (7, 54233), (Start: 10 @54353 has 1 MA's), (13, 54365), (Start: 15 @54386 has 3 MA's), (16, 54389), (17, 54404), (18, 54410), (19, 54413), (20, 54458), (21, 54497),

Gene: Lephleur\_62 Start: 54461, Stop: 54730, Start Num: 9

Candidate Starts for Lephleur\_62:

(Start: 9 @54461 has 16 MA's), (Start: 10 @54518 has 1 MA's), (13, 54530), (Start: 15 @54551 has 3 MA's), (16, 54554), (17, 54569), (18, 54575), (19, 54578), (20, 54623),

Gene: LizLemon\_62 Start: 54623, Stop: 54892, Start Num: 9

Candidate Starts for LizLemon\_62:

(Start: 9 @54623 has 16 MA's), (Start: 10 @54680 has 1 MA's), (13, 54692), (Start: 15 @54713 has 3 MA's), (16, 54716), (17, 54731), (18, 54737), (19, 54740), (20, 54785),

Gene: MasterPo\_63 Start: 54583, Stop: 54762, Start Num: 15

Candidate Starts for MasterPo\_63:

(1, 54289), (2, 54295), (3, 54298), (4, 54328), (6, 54406), (7, 54427), (14, 54562), (Start: 15 @54583 has 3 MA's), (16, 54586), (17, 54601), (18, 54607), (19, 54610), (20, 54655),

Gene: Opia\_63 Start: 54513, Stop: 54782, Start Num: 9

Candidate Starts for Opia\_63:

(Start: 9 @54513 has 16 MA's), (Start: 10 @54570 has 1 MA's), (13, 54582), (Start: 15 @54603 has 3 MA's), (16, 54606), (17, 54621), (18, 54627), (19, 54630), (20, 54675),

Gene: Rhinoforte\_62 Start: 54546, Stop: 54815, Start Num: 9

Candidate Starts for Rhinoforte\_62:

(Start: 9 @54546 has 16 MA's), (Start: 10 @54603 has 1 MA's), (13, 54615), (Start: 15 @54636 has 3 MA's), (16, 54639), (17, 54654), (18, 54660), (19, 54663), (20, 54708),

Gene: Rosebush\_61 Start: 54609, Stop: 54878, Start Num: 9

Candidate Starts for Rosebush\_61:

(Start: 9 @54609 has 16 MA's), (Start: 10 @54666 has 1 MA's), (13, 54678), (Start: 15 @54699 has 3 MA's), (16, 54702), (17, 54717), (18, 54723), (19, 54726), (20, 54771),

Gene: Sabella\_62 Start: 54445, Stop: 54714, Start Num: 9

Candidate Starts for Sabella\_62:

(Start: 9 @54445 has 16 MA's), (14, 54514), (Start: 15 @54535 has 3 MA's), (16, 54538), (17, 54553), (18, 54559), (19, 54562), (20, 54607),

Gene: Tinciduntolum\_63 Start: 54612, Stop: 54881, Start Num: 9

Candidate Starts for Tinciduntolum\_63:

(Start: 9 @54612 has 16 MA's), (Start: 10 @54669 has 1 MA's), (13, 54681), (Start: 15 @54702 has 3 MA's), (16, 54705), (17, 54720), (18, 54726), (19, 54729), (20, 54774),

Gene: Tres\_62 Start: 54466, Stop: 54735, Start Num: 9

Candidate Starts for Tres\_62:

(Start: 9 @54466 has 16 MA's), (Start: 10 @54523 has 1 MA's), (13, 54535), (Start: 15 @54556 has 3 MA's), (16, 54559), (17, 54574), (18, 54580), (19, 54583), (20, 54628), (21, 54667),

Gene: Vic9\_64 Start: 55317, Stop: 55586, Start Num: 9

Candidate Starts for Vic9\_64:

(Start: 9 @55317 has 16 MA's), (Start: 10 @55374 has 1 MA's), (13, 55386), (Start: 15 @55407 has 3 MA's), (16, 55410), (17, 55425), (18, 55431), (19, 55434), (20, 55479), (21, 55518),

Gene: West99\_62 Start: 54639, Stop: 54908, Start Num: 9

Candidate Starts for West99\_62:

(Start: 9 @54639 has 16 MA's), (14, 54708), (Start: 15 @54729 has 3 MA's), (16, 54732), (17, 54747), (18, 54753), (19, 54756), (20, 54801),