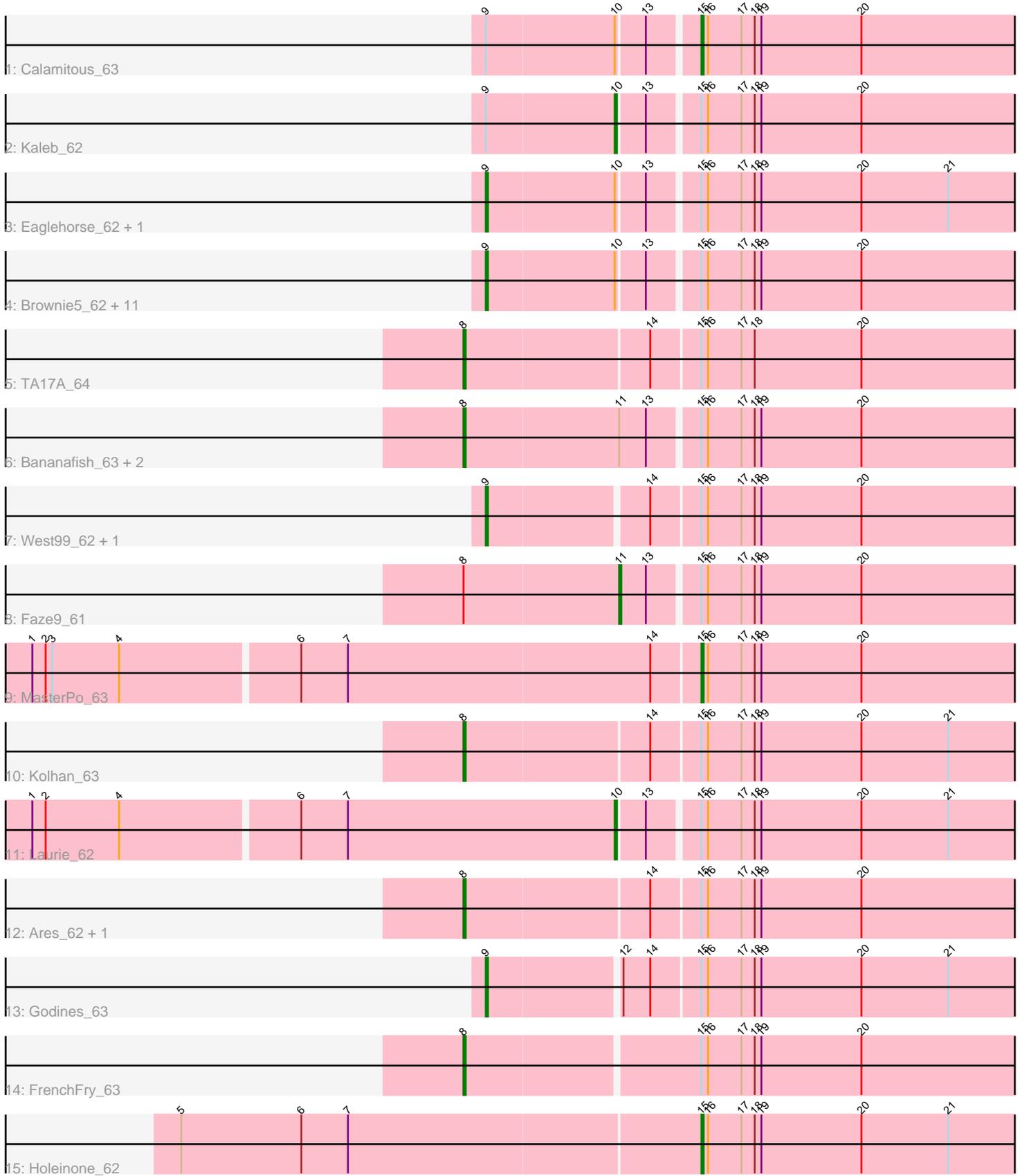


Pham 291401



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 291401 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291401 has 31 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Calamitous_63
- Track 2 : Kaleb_62
- Track 3 : Eaglehorse_62, Tres_62
- Track 4 : Brownie5_62, Boyle_62, LizLemon_62, Kheth_62, Rhinoforte_62, Lephleur_62, Rosebush_61, Coffee_62, Opia_63, Hedgerow_62, Tinciduntolum_63, PrinceCharming_63
- Track 5 : TA17A_64
- Track 6 : Bananafish_63, Allegro_62, Glass_63
- Track 7 : West99_62, Sabella_62
- Track 8 : Faze9_61
- Track 9 : MasterPo_63
- Track 10 : Kolhan_63
- Track 11 : Laurie_62
- Track 12 : Ares_62, Blocker23_62
- Track 13 : Godines_63
- Track 14 : FrenchFry_63
- Track 15 : 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 17 of the 31 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, PrinceCharming_63, Rhinoforte_62, Rosebush_61, Sabella_62, Tinciduntolum_63, Tres_62, West99_62,

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

- Calamitous_63, Kaleb_62,

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, Kolhan_63, Laurie_62, MasterPo_63, TA17A_64,

Summary by start number:

Start 8:

- Found in 9 of 31 (29.0%) of genes in pham
- Manual Annotations of this start: 8 of 31
- Called 88.9% 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), Kolhan_63 (B2), TA17A_64 (B2),

Start 9:

- Found in 19 of 31 (61.3%) of genes in pham
- Manual Annotations of this start: 17 of 31
- 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), PrinceCharming_63 (B2), Rhinoforte_62 (B2), Rosebush_61 (B2), Sabella_62 (B2), Tinciduntolum_63 (B2), Tres_62 (B2), West99_62 (B2),

Start 10:

- Found in 17 of 31 (54.8%) of genes in pham
- Manual Annotations of this start: 2 of 31
- Called 11.8% of time when present
- Phage (with cluster) where this start called: Kaleb_62 (B2), Laurie_62 (B2),

Start 11:

- Found in 4 of 31 (12.9%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Faze9_61 (B2),

Start 15:

- Found in 31 of 31 (100.0%) of genes in pham
- Manual Annotations of this start: 3 of 31
- Called 9.7% 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 8 times for cluster B2.
- Start number 9 was manually annotated 17 times for cluster B2.
- Start number 10 was manually annotated 2 times 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 8 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 8 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 8 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 8 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 17 MA's), (Start: 10 @54668 has 2 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 17 MA's), (Start: 10 @54670 has 2 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 17 MA's), (Start: 10 @54558 has 2 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 17 MA's), (Start: 10 @54662 has 2 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 17 MA's), (Start: 10 @54548 has 2 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 8 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 8 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 8 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 17 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 17 MA's), (Start: 10 @54645 has 2 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_62 Start: 54680, Stop: 54892, Start Num: 10

Candidate Starts for Kaleb_62:

(Start: 9 @54623 has 17 MA's), (Start: 10 @54680 has 2 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 17 MA's), (Start: 10 @54592 has 2 MA's), (13, 54604), (Start: 15 @54625 has 3 MA's), (16, 54628), (17, 54643), (18, 54649), (19, 54652), (20, 54697),

Gene: Kolhan_63 Start: 54500, Stop: 54781, Start Num: 8

Candidate Starts for Kolhan_63:

(Start: 8 @54500 has 8 MA's), (14, 54581), (Start: 15 @54602 has 3 MA's), (16, 54605), (17, 54620), (18, 54626), (19, 54629), (20, 54674), (21, 54713),

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 2 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 17 MA's), (Start: 10 @54518 has 2 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 17 MA's), (Start: 10 @54680 has 2 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 17 MA's), (Start: 10 @54570 has 2 MA's), (13, 54582), (Start: 15 @54603 has 3 MA's), (16, 54606), (17, 54621), (18, 54627), (19, 54630), (20, 54675),

Gene: PrinceCharming_63 Start: 54548, Stop: 54817, Start Num: 9

Candidate Starts for PrinceCharming_63:

(Start: 9 @54548 has 17 MA's), (Start: 10 @54605 has 2 MA's), (13, 54617), (Start: 15 @54638 has 3 MA's), (16, 54641), (17, 54656), (18, 54662), (19, 54665), (20, 54710),

Gene: Rhinoforte_62 Start: 54546, Stop: 54815, Start Num: 9

Candidate Starts for Rhinoforte_62:

(Start: 9 @54546 has 17 MA's), (Start: 10 @54603 has 2 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 17 MA's), (Start: 10 @54666 has 2 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 17 MA's), (14, 54514), (Start: 15 @54535 has 3 MA's), (16, 54538), (17, 54553), (18, 54559), (19, 54562), (20, 54607),

Gene: TA17A_64 Start: 54439, Stop: 54720, Start Num: 8

Candidate Starts for TA17A_64:

(Start: 8 @54439 has 8 MA's), (14, 54520), (Start: 15 @54541 has 3 MA's), (16, 54544), (17, 54559), (18, 54565), (20, 54613),

Gene: Tinciduntolum_63 Start: 54612, Stop: 54881, Start Num: 9

Candidate Starts for Tinciduntolum_63:

(Start: 9 @54612 has 17 MA's), (Start: 10 @54669 has 2 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 17 MA's), (Start: 10 @54523 has 2 MA's), (13, 54535), (Start: 15 @54556 has 3 MA's), (16, 54559), (17, 54574), (18, 54580), (19, 54583), (20, 54628), (21, 54667),

Gene: West99_62 Start: 54639, Stop: 54908, Start Num: 9

Candidate Starts for West99_62:

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