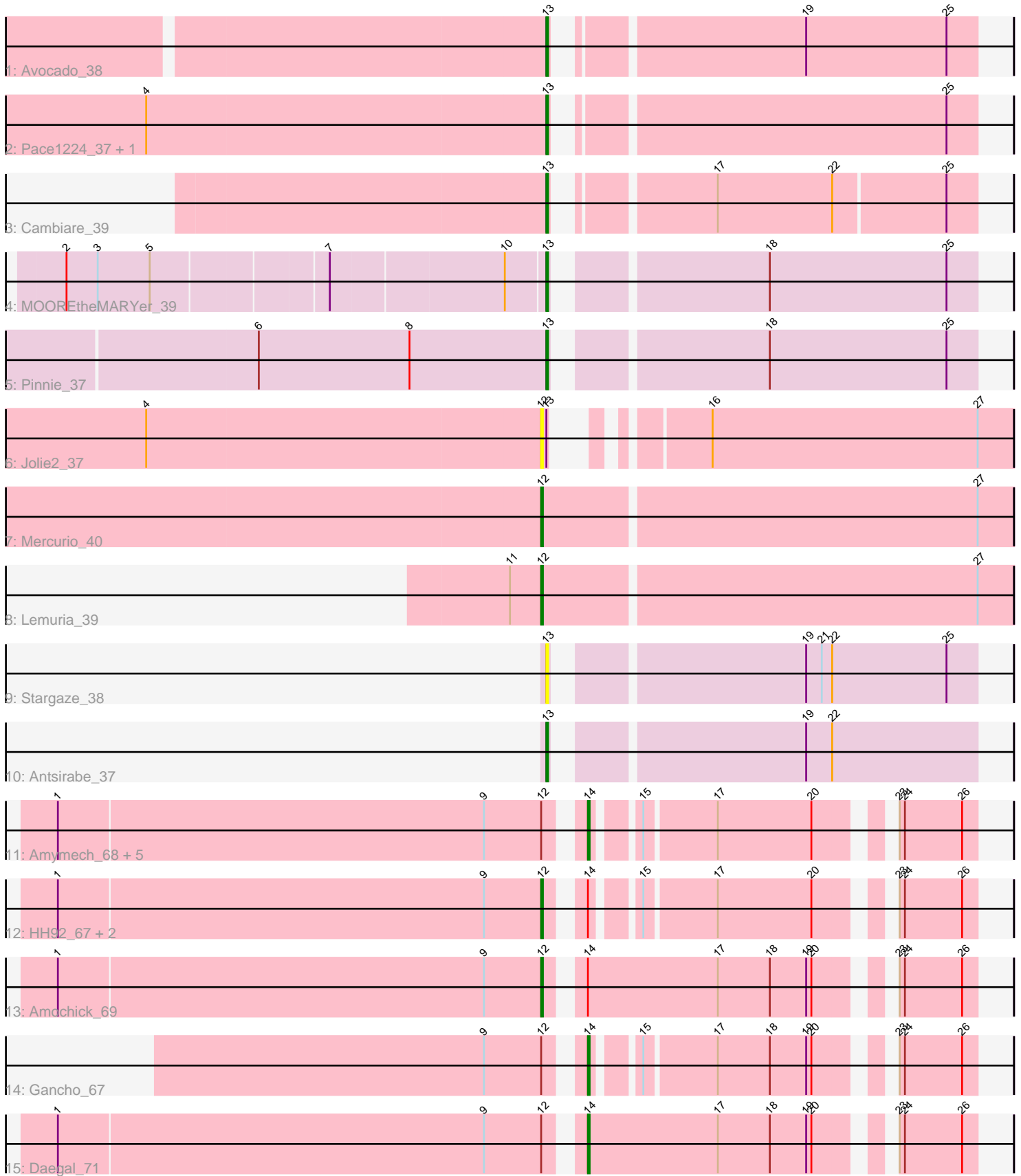


Pham 159393



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 159393 Report

This analysis was run 04/28/24 on database version 559.

Pham number 159393 has 23 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Avocado\_38
- Track 2 : Pace1224\_37, FlagStaff\_37
- Track 3 : Cambiare\_39
- Track 4 : MOOREtheMARYer\_39
- Track 5 : Pinnie\_37
- Track 6 : Jolie2\_37
- Track 7 : Mercurio\_40
- Track 8 : Lemuria\_39
- Track 9 : Stargaze\_38
- Track 10 : Antsirabe\_37
- Track 11 : Amymech\_68, Ein37\_68, Ubuntu\_68, Kinbote\_66, Evanesce\_67, DeepSoil15\_68
- Track 12 : HH92\_67, LilHazelNut\_68, Webster2\_68
- Track 13 : Amochick\_69
- Track 14 : Gancho\_67
- Track 15 : Daegal\_71

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

The start number called the most often in the published annotations is 14, it was called in 8 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amymech\_68, Daegal\_71, DeepSoil15\_68, Ein37\_68, Evanesce\_67, Gancho\_67, Kinbote\_66, Ubuntu\_68,

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

- Amochick\_69, HH92\_67, LilHazelNut\_68, Webster2\_68,

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

- Antsirabe\_37, Avocado\_38, Cambiare\_39, FlagStaff\_37, Jolie2\_37, Lemuria\_39, MOOREtheMARYer\_39, Mercurio\_40, Pace1224\_37, Pinnie\_37, Stargaze\_38,

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

Start 12:

- Found in 15 of 23 ( 65.2% ) of genes in pham
- Manual Annotations of this start: 6 of 20
- Called 46.7% of time when present
- Phage (with cluster) where this start called: Amochick\_69 (Q), HH92\_67 (Q), Jolie2\_37 (G4), Lemuria\_39 (G4), LilHazelNut\_68 (Q), Mercurio\_40 (G4), Webster2\_68 (Q),

Start 13:

- Found in 9 of 23 ( 39.1% ) of genes in pham
- Manual Annotations of this start: 6 of 20
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Antsirabe\_37 (G5), Avocado\_38 (G2), Cambiare\_39 (G2), FlagStaff\_37 (G2), MOOREtheMARYer\_39 (G3), Pace1224\_37 (G2), Pinnie\_37 (G3), Stargaze\_38 (G5),

Start 14:

- Found in 12 of 23 ( 52.2% ) of genes in pham
- Manual Annotations of this start: 8 of 20
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Amymech\_68 (Q), Daegal\_71 (Q), DeepSoil15\_68 (Q), Ein37\_68 (Q), Evanesce\_67 (Q), Gancho\_67 (Q), Kinbote\_66 (Q), Ubuntu\_68 (Q),

**Summary by clusters:**

There are 5 clusters represented in this pham: Q, G5, G4, G3, G2,

Info for manual annotations of cluster G2:

- Start number 13 was manually annotated 3 times for cluster G2.

Info for manual annotations of cluster G3:

- Start number 13 was manually annotated 2 times for cluster G3.

Info for manual annotations of cluster G4:

- Start number 12 was manually annotated 2 times for cluster G4.

Info for manual annotations of cluster G5:

- Start number 13 was manually annotated 1 time for cluster G5.

Info for manual annotations of cluster Q:

- Start number 12 was manually annotated 4 times for cluster Q.
- Start number 14 was manually annotated 8 times for cluster Q.

**Gene Information:**

Gene: Amochick\_69 Start: 46041, Stop: 46259, Start Num: 12

Candidate Starts for Amochick\_69:

(1, 45765), (9, 46008), (Start: 12 @46041 has 6 MA's), (Start: 14 @46056 has 8 MA's), (17, 46131), (18, 46161), (19, 46182), (20, 46185), (23, 46215), (24, 46218), (26, 46251),

Gene: Amymech\_68 Start: 45575, Stop: 45763, Start Num: 14

Candidate Starts for Amymech\_68:

(1, 45284), (9, 45527), (Start: 12 @45560 has 6 MA's), (Start: 14 @45575 has 8 MA's), (15, 45596), (17, 45635), (20, 45689), (23, 45719), (24, 45722), (26, 45755),

Gene: Antsirabe\_37 Start: 31643, Stop: 31870, Start Num: 13

Candidate Starts for Antsirabe\_37:

(Start: 13 @31643 has 6 MA's), (19, 31772), (22, 31787),

Gene: Avocado\_38 Start: 32303, Stop: 32527, Start Num: 13

Candidate Starts for Avocado\_38:

(Start: 13 @32303 has 6 MA's), (19, 32429), (25, 32510),

Gene: Cambiare\_39 Start: 32576, Stop: 32797, Start Num: 13

Candidate Starts for Cambiare\_39:

(Start: 13 @32576 has 6 MA's), (17, 32651), (22, 32717), (25, 32780),

Gene: Daegal\_71 Start: 46618, Stop: 46821, Start Num: 14

Candidate Starts for Daegal\_71:

(1, 46327), (9, 46570), (Start: 12 @46603 has 6 MA's), (Start: 14 @46618 has 8 MA's), (17, 46693), (18, 46723), (19, 46744), (20, 46747), (23, 46777), (24, 46780), (26, 46813),

Gene: DeepSoil15\_68 Start: 45575, Stop: 45763, Start Num: 14

Candidate Starts for DeepSoil15\_68:

(1, 45284), (9, 45527), (Start: 12 @45560 has 6 MA's), (Start: 14 @45575 has 8 MA's), (15, 45596), (17, 45635), (20, 45689), (23, 45719), (24, 45722), (26, 45755),

Gene: Ein37\_68 Start: 45575, Stop: 45763, Start Num: 14

Candidate Starts for Ein37\_68:

(1, 45284), (9, 45527), (Start: 12 @45560 has 6 MA's), (Start: 14 @45575 has 8 MA's), (15, 45596), (17, 45635), (20, 45689), (23, 45719), (24, 45722), (26, 45755),

Gene: Evanesce\_67 Start: 45575, Stop: 45763, Start Num: 14

Candidate Starts for Evanesce\_67:

(1, 45284), (9, 45527), (Start: 12 @45560 has 6 MA's), (Start: 14 @45575 has 8 MA's), (15, 45596), (17, 45635), (20, 45689), (23, 45719), (24, 45722), (26, 45755),

Gene: FlagStaff\_37 Start: 31731, Stop: 31955, Start Num: 13

Candidate Starts for FlagStaff\_37:

(4, 31503), (Start: 13 @31731 has 6 MA's), (25, 31938),

Gene: Gancho\_67 Start: 45302, Stop: 45490, Start Num: 14

Candidate Starts for Gancho\_67:

(9, 45254), (Start: 12 @45287 has 6 MA's), (Start: 14 @45302 has 8 MA's), (15, 45323), (17, 45362), (18, 45392), (19, 45413), (20, 45416), (23, 45446), (24, 45449), (26, 45482),

Gene: HH92\_67 Start: 45560, Stop: 45763, Start Num: 12

Candidate Starts for HH92\_67:

(1, 45284), (9, 45527), (Start: 12 @45560 has 6 MA's), (Start: 14 @45575 has 8 MA's), (15, 45596), (17, 45635), (20, 45689), (23, 45719), (24, 45722), (26, 45755),

Gene: Jolie2\_37 Start: 30669, Stop: 30899, Start Num: 12

Candidate Starts for Jolie2\_37:

(4, 30444), (Start: 12 @30669 has 6 MA's), (Start: 13 @30672 has 6 MA's), (16, 30726), (27, 30879),

Gene: Kinbote\_66 Start: 45575, Stop: 45763, Start Num: 14

Candidate Starts for Kinbote\_66:

(1, 45284), (9, 45527), (Start: 12 @45560 has 6 MA's), (Start: 14 @45575 has 8 MA's), (15, 45596), (17, 45635), (20, 45689), (23, 45719), (24, 45722), (26, 45755),

Gene: Lemuria\_39 Start: 32014, Stop: 32280, Start Num: 12

Candidate Starts for Lemuria\_39:

(11, 31996), (Start: 12 @32014 has 6 MA's), (27, 32260),

Gene: LilHazelnut\_68 Start: 45560, Stop: 45763, Start Num: 12

Candidate Starts for LilHazelnut\_68:

(1, 45284), (9, 45527), (Start: 12 @45560 has 6 MA's), (Start: 14 @45575 has 8 MA's), (15, 45596), (17, 45635), (20, 45689), (23, 45719), (24, 45722), (26, 45755),

Gene: MOOREtheMARYer\_39 Start: 32267, Stop: 32494, Start Num: 13

Candidate Starts for MOOREtheMARYer\_39:

(2, 32006), (3, 32024), (5, 32054), (7, 32150), (10, 32246), (Start: 13 @32267 has 6 MA's), (18, 32375), (25, 32477),

Gene: Mercurio\_40 Start: 32511, Stop: 32777, Start Num: 12

Candidate Starts for Mercurio\_40:

(Start: 12 @32511 has 6 MA's), (27, 32757),

Gene: Pace1224\_37 Start: 31731, Stop: 31955, Start Num: 13

Candidate Starts for Pace1224\_37:

(4, 31503), (Start: 13 @31731 has 6 MA's), (25, 31938),

Gene: Pinnie\_37 Start: 31975, Stop: 32202, Start Num: 13

Candidate Starts for Pinnie\_37:

(6, 31810), (8, 31897), (Start: 13 @31975 has 6 MA's), (18, 32083), (25, 32185),

Gene: Stargaze\_38 Start: 31966, Stop: 32193, Start Num: 13

Candidate Starts for Stargaze\_38:

(Start: 13 @31966 has 6 MA's), (19, 32095), (21, 32104), (22, 32110), (25, 32176),

Gene: Ubuntu\_68 Start: 45575, Stop: 45763, Start Num: 14

Candidate Starts for Ubuntu\_68:

(1, 45284), (9, 45527), (Start: 12 @45560 has 6 MA's), (Start: 14 @45575 has 8 MA's), (15, 45596), (17, 45635), (20, 45689), (23, 45719), (24, 45722), (26, 45755),

Gene: Webster2\_68 Start: 45560, Stop: 45763, Start Num: 12

Candidate Starts for Webster2\_68:

(1, 45284), (9, 45527), (Start: 12 @45560 has 6 MA's), (Start: 14 @45575 has 8 MA's), (15, 45596), (17, 45635), (20, 45689), (23, 45719), (24, 45722), (26, 45755),