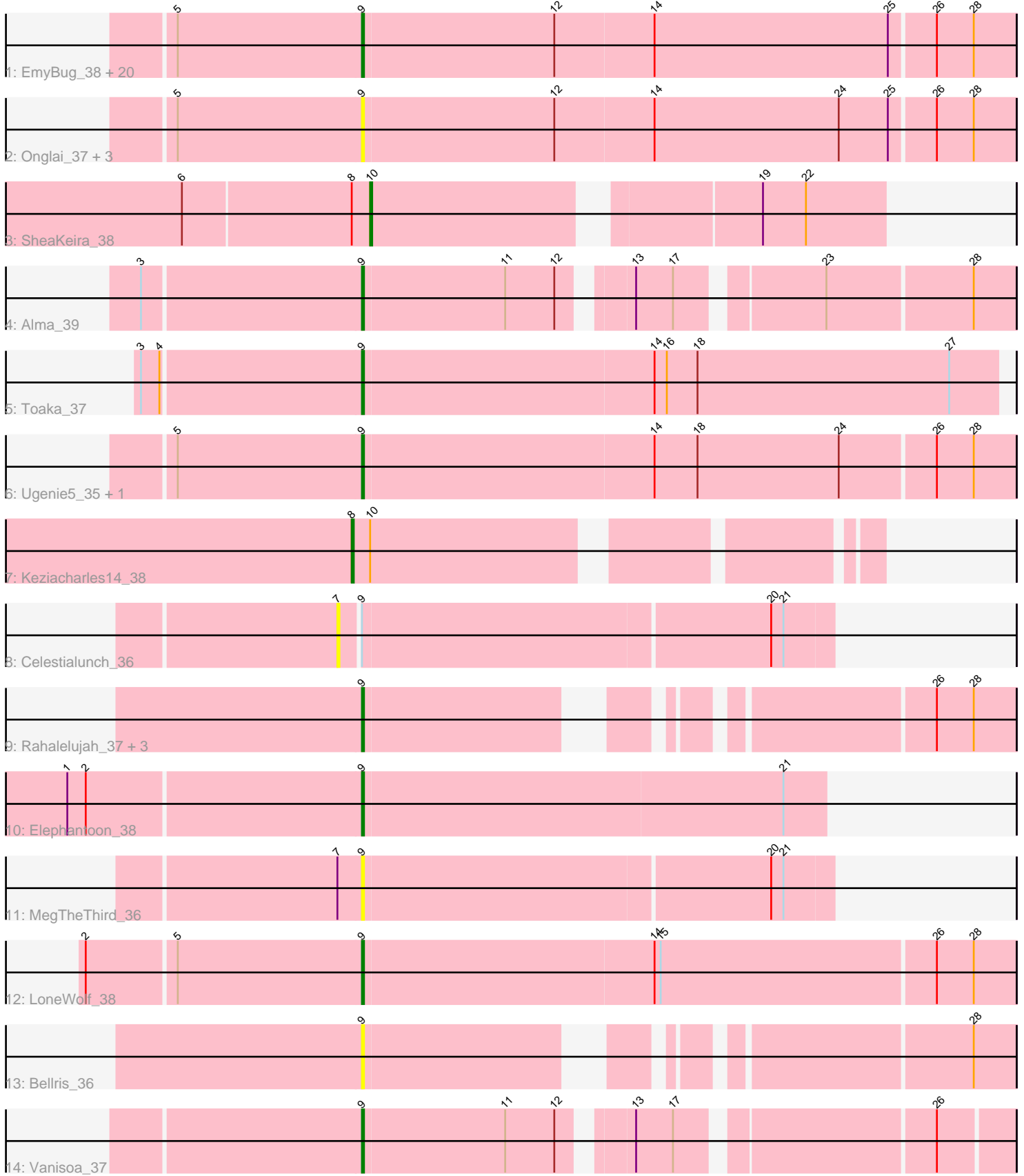


Pham 301525



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 301525 Report

This analysis was run 06/08/26 on database version 649.

Pham number 301525 has 41 members, 13 are drafts.

Phages represented in each track:

- Track 1 : EmyBug\_38, Spouty\_39, Fayely\_39, Aliter\_39, Conquerage\_39, Pioneer\_39, Phaeder\_39, Catalina\_40, Ayanochan\_40, Myxus\_39, Phonnegut\_39, Priya\_39, Beemo\_39, RyeScarlet\_40, Tubs\_39, HortumSL17\_39, PackMan\_38, ExplosioNervosa\_39, Eidsmoe\_39, Horex\_38, Qobbit\_39
- Track 2 : Onglai\_37, Hanray\_37, EdogawaKiddo\_37, Jiawan\_37
- Track 3 : SheaKeira\_38
- Track 4 : Alma\_39
- Track 5 : Toaka\_37
- Track 6 : Ugenie5\_35, Scherzo\_38
- Track 7 : Keziacharles14\_38
- Track 8 : Celestiallunch\_36
- Track 9 : Rahalelujah\_37, CogOmlette\_36, Minispark\_36, WorldCup\_36
- Track 10 : Elephantoon\_38
- Track 11 : MegTheThird\_36
- Track 12 : LoneWolf\_38
- Track 13 : Bellris\_36
- Track 14 : Vanisoa\_37

### ***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 26 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aliter\_39, Alma\_39, Ayanochan\_40, Beemo\_39, Bellris\_36, Catalina\_40, CogOmlette\_36, Conquerage\_39, EdogawaKiddo\_37, Eidsmoe\_39, Elephantoon\_38, EmyBug\_38, ExplosioNervosa\_39, Fayely\_39, Hanray\_37, Horex\_38, HortumSL17\_39, Jiawan\_37, LoneWolf\_38, MegTheThird\_36, Minispark\_36, Myxus\_39, Onglai\_37, PackMan\_38, Phaeder\_39, Phonnegut\_39, Pioneer\_39, Priya\_39, Qobbit\_39, Rahalelujah\_37, RyeScarlet\_40, Scherzo\_38, Spouty\_39, Toaka\_37, Tubs\_39, Ugenie5\_35, Vanisoa\_37, WorldCup\_36,

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

- Celestiallunch\_36,

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

- Keziacharles14\_38, SheaKeira\_38,

### Summary by start number:

Start 7:

- Found in 2 of 41 ( 4.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Celestialunch\_36 (A9),

Start 8:

- Found in 2 of 41 ( 4.9% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Keziacharles14\_38 (A9),

Start 9:

- Found in 39 of 41 ( 95.1% ) of genes in pham
- Manual Annotations of this start: 26 of 28
- Called 97.4% of time when present
- Phage (with cluster) where this start called: Aliter\_39 (A9), Alma\_39 (A9), Ayanochan\_40 (A9), Beemo\_39 (A9), Bellris\_36 (A9), Catalina\_40 (A9), CogOmlette\_36 (A9), Conquerage\_39 (A9), EdogawaKiddo\_37 (A9), Eidsmoe\_39 (A9), Elephantoon\_38 (A9), EmyBug\_38 (A9), ExplosioNervosa\_39 (A9), Fayely\_39 (A9), Hanray\_37 (A9), Horex\_38 (A9), HortumSL17\_39 (A9), Jiawan\_37 (A9), LoneWolf\_38 (A9), MegTheThird\_36 (A9), Minispark\_36 (A9), Myxus\_39 (A9), Onglai\_37 (A9), PackMan\_38 (A9), Phaeder\_39 (A9), Phonnegut\_39 (A9), Pioneer\_39 (A9), Priya\_39 (A9), Qobbit\_39 (A9), Rahalelujah\_37 (A9), RyeScarlet\_40 (A9), Scherzo\_38 (A9), Spouty\_39 (A9), Toaka\_37 (A9), Tubs\_39 (A9), Ugenie5\_35 (A9), Vanisoa\_37 (A9), WorldCup\_36 (A9),

Start 10:

- Found in 2 of 41 ( 4.9% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 50.0% of time when present
- Phage (with cluster) where this start called: SheaKeira\_38 (A9),

### Summary by clusters:

There is one cluster represented in this pham: A9

Info for manual annotations of cluster A9:

- Start number 8 was manually annotated 1 time for cluster A9.
- Start number 9 was manually annotated 26 times for cluster A9.
- Start number 10 was manually annotated 1 time for cluster A9.

### Gene Information:

Gene: Aliter\_39 Start: 28439, Stop: 28125, Start Num: 9

Candidate Starts for Aliter\_39:

(5, 28526), (Start: 9 @28439 has 26 MA's), (12, 28346), (14, 28298), (25, 28184), (26, 28163), (28, 28145),

Gene: Alma\_39 Start: 28523, Stop: 28233, Start Num: 9

Candidate Starts for Alma\_39:

(3, 28625), (Start: 9 @28523 has 26 MA's), (11, 28454), (12, 28430), (13, 28403), (17, 28385), (23, 28322), (28, 28253),

Gene: Ayanochan\_40 Start: 28566, Stop: 28252, Start Num: 9

Candidate Starts for Ayanochan\_40:

(5, 28653), (Start: 9 @28566 has 26 MA's), (12, 28473), (14, 28425), (25, 28311), (26, 28290), (28, 28272),

Gene: Beemo\_39 Start: 28567, Stop: 28253, Start Num: 9

Candidate Starts for Beemo\_39:

(5, 28654), (Start: 9 @28567 has 26 MA's), (12, 28474), (14, 28426), (25, 28312), (26, 28291), (28, 28273),

Gene: Bellris\_36 Start: 27555, Stop: 27286, Start Num: 9

Candidate Starts for Bellris\_36:

(Start: 9 @27555 has 26 MA's), (28, 27306),

Gene: Catalina\_40 Start: 28512, Stop: 28198, Start Num: 9

Candidate Starts for Catalina\_40:

(5, 28599), (Start: 9 @28512 has 26 MA's), (12, 28419), (14, 28371), (25, 28257), (26, 28236), (28, 28218),

Gene: Celestiallunch\_36 Start: 27575, Stop: 27342, Start Num: 7

Candidate Starts for Celestiallunch\_36:

(7, 27575), (Start: 9 @27566 has 26 MA's), (20, 27371), (21, 27365),

Gene: CogOmlette\_36 Start: 27552, Stop: 27289, Start Num: 9

Candidate Starts for CogOmlette\_36:

(Start: 9 @27552 has 26 MA's), (26, 27327), (28, 27309),

Gene: Conquerage\_39 Start: 28541, Stop: 28227, Start Num: 9

Candidate Starts for Conquerage\_39:

(5, 28628), (Start: 9 @28541 has 26 MA's), (12, 28448), (14, 28400), (25, 28286), (26, 28265), (28, 28247),

Gene: EdogawaKiddo\_37 Start: 28518, Stop: 28204, Start Num: 9

Candidate Starts for EdogawaKiddo\_37:

(5, 28605), (Start: 9 @28518 has 26 MA's), (12, 28425), (14, 28377), (24, 28287), (25, 28263), (26, 28242), (28, 28224),

Gene: Eidsmoe\_39 Start: 28575, Stop: 28261, Start Num: 9

Candidate Starts for Eidsmoe\_39:

(5, 28662), (Start: 9 @28575 has 26 MA's), (12, 28482), (14, 28434), (25, 28320), (26, 28299), (28, 28281),

Gene: Elephantoon\_38 Start: 27852, Stop: 27628, Start Num: 9

Candidate Starts for Elephantoon\_38:

(1, 27990), (2, 27981), (Start: 9 @27852 has 26 MA's), (21, 27648),

Gene: EmyBug\_38 Start: 28577, Stop: 28263, Start Num: 9

Candidate Starts for EmyBug\_38:

(5, 28664), (Start: 9 @28577 has 26 MA's), (12, 28484), (14, 28436), (25, 28322), (26, 28301), (28, 28283),

Gene: ExplosioNervosa\_39 Start: 28601, Stop: 28287, Start Num: 9

Candidate Starts for ExplosioNervosa\_39:

(5, 28688), (Start: 9 @28601 has 26 MA's), (12, 28508), (14, 28460), (25, 28346), (26, 28325), (28, 28307),

Gene: Fayely\_39 Start: 28544, Stop: 28230, Start Num: 9

Candidate Starts for Fayely\_39:

(5, 28631), (Start: 9 @28544 has 26 MA's), (12, 28451), (14, 28403), (25, 28289), (26, 28268), (28, 28250),

Gene: Hanray\_37 Start: 28522, Stop: 28208, Start Num: 9

Candidate Starts for Hanray\_37:

(5, 28609), (Start: 9 @28522 has 26 MA's), (12, 28429), (14, 28381), (24, 28291), (25, 28267), (26, 28246), (28, 28228),

Gene: Horex\_38 Start: 28535, Stop: 28221, Start Num: 9

Candidate Starts for Horex\_38:

(5, 28622), (Start: 9 @28535 has 26 MA's), (12, 28442), (14, 28394), (25, 28280), (26, 28259), (28, 28241),

Gene: HortumSL17\_39 Start: 28511, Stop: 28197, Start Num: 9

Candidate Starts for HortumSL17\_39:

(5, 28598), (Start: 9 @28511 has 26 MA's), (12, 28418), (14, 28370), (25, 28256), (26, 28235), (28, 28217),

Gene: Jiawan\_37 Start: 28554, Stop: 28240, Start Num: 9

Candidate Starts for Jiawan\_37:

(5, 28641), (Start: 9 @28554 has 26 MA's), (12, 28461), (14, 28413), (24, 28323), (25, 28299), (26, 28278), (28, 28260),

Gene: Keziacharles14\_38 Start: 29187, Stop: 28960, Start Num: 8

Candidate Starts for Keziacharles14\_38:

(Start: 8 @29187 has 1 MA's), (Start: 10 @29178 has 1 MA's),

Gene: LoneWolf\_38 Start: 28100, Stop: 27786, Start Num: 9

Candidate Starts for LoneWolf\_38:

(2, 28229), (5, 28187), (Start: 9 @28100 has 26 MA's), (14, 27959), (15, 27956), (26, 27824), (28, 27806),

Gene: MegTheThird\_36 Start: 27565, Stop: 27341, Start Num: 9

Candidate Starts for MegTheThird\_36:

(7, 27574), (Start: 9 @27565 has 26 MA's), (20, 27370), (21, 27364),

Gene: Minispark\_36 Start: 27549, Stop: 27286, Start Num: 9

Candidate Starts for Minispark\_36:

(Start: 9 @27549 has 26 MA's), (26, 27324), (28, 27306),

Gene: Myxus\_39 Start: 28511, Stop: 28197, Start Num: 9

Candidate Starts for Myxus\_39:

(5, 28598), (Start: 9 @28511 has 26 MA's), (12, 28418), (14, 28370), (25, 28256), (26, 28235), (28, 28217),

Gene: Onglai\_37 Start: 26852, Stop: 26538, Start Num: 9

Candidate Starts for Onglai\_37:

(5, 26939), (Start: 9 @26852 has 26 MA's), (12, 26759), (14, 26711), (24, 26621), (25, 26597), (26, 26576), (28, 26558),

Gene: PackMan\_38 Start: 28511, Stop: 28197, Start Num: 9

Candidate Starts for PackMan\_38:

(5, 28598), (Start: 9 @28511 has 26 MA's), (12, 28418), (14, 28370), (25, 28256), (26, 28235), (28, 28217),

Gene: Phaeder\_39 Start: 28511, Stop: 28197, Start Num: 9

Candidate Starts for Phaeder\_39:

(5, 28598), (Start: 9 @28511 has 26 MA's), (12, 28418), (14, 28370), (25, 28256), (26, 28235), (28, 28217),

Gene: Phonnegut\_39 Start: 28566, Stop: 28252, Start Num: 9

Candidate Starts for Phonnegut\_39:

(5, 28653), (Start: 9 @28566 has 26 MA's), (12, 28473), (14, 28425), (25, 28311), (26, 28290), (28, 28272),

Gene: Pioneer\_39 Start: 28566, Stop: 28252, Start Num: 9

Candidate Starts for Pioneer\_39:

(5, 28653), (Start: 9 @28566 has 26 MA's), (12, 28473), (14, 28425), (25, 28311), (26, 28290), (28, 28272),

Gene: Priya\_39 Start: 28578, Stop: 28264, Start Num: 9

Candidate Starts for Priya\_39:

(5, 28665), (Start: 9 @28578 has 26 MA's), (12, 28485), (14, 28437), (25, 28323), (26, 28302), (28, 28284),

Gene: Qobbit\_39 Start: 28540, Stop: 28226, Start Num: 9

Candidate Starts for Qobbit\_39:

(5, 28627), (Start: 9 @28540 has 26 MA's), (12, 28447), (14, 28399), (25, 28285), (26, 28264), (28, 28246),

Gene: Rahalelujah\_37 Start: 27558, Stop: 27289, Start Num: 9

Candidate Starts for Rahalelujah\_37:

(Start: 9 @27558 has 26 MA's), (26, 27327), (28, 27309),

Gene: RyeScarlet\_40 Start: 28535, Stop: 28221, Start Num: 9

Candidate Starts for RyeScarlet\_40:

(5, 28622), (Start: 9 @28535 has 26 MA's), (12, 28442), (14, 28394), (25, 28280), (26, 28259), (28, 28241),

Gene: Scherzo\_38 Start: 28523, Stop: 28209, Start Num: 9

Candidate Starts for Scherzo\_38:

(5, 28610), (Start: 9 @28523 has 26 MA's), (14, 28382), (18, 28361), (24, 28292), (26, 28247), (28, 28229),

Gene: SheaKeira\_38 Start: 27879, Stop: 27649, Start Num: 10

Candidate Starts for SheaKeira\_38:

(6, 27969), (Start: 8 @27888 has 1 MA's), (Start: 10 @27879 has 1 MA's), (19, 27708), (22, 27687),

Gene: Spouty\_39 Start: 28577, Stop: 28263, Start Num: 9

Candidate Starts for Spouty\_39:

(5, 28664), (Start: 9 @28577 has 26 MA's), (12, 28484), (14, 28436), (25, 28322), (26, 28301), (28, 28283),

Gene: Toaka\_37 Start: 27809, Stop: 27501, Start Num: 9

Candidate Starts for Toaka\_37:

(3, 27911), (4, 27902), (Start: 9 @27809 has 26 MA's), (14, 27668), (16, 27662), (18, 27647), (27, 27524),

Gene: Tubs\_39 Start: 28511, Stop: 28197, Start Num: 9

Candidate Starts for Tubs\_39:

(5, 28598), (Start: 9 @28511 has 26 MA's), (12, 28418), (14, 28370), (25, 28256), (26, 28235), (28, 28217),

Gene: Ugenie5\_35 Start: 28522, Stop: 28208, Start Num: 9

Candidate Starts for Ugenie5\_35:

(5, 28609), (Start: 9 @28522 has 26 MA's), (14, 28381), (18, 28360), (24, 28291), (26, 28246), (28, 28228),

Gene: Vanisoa\_37 Start: 28822, Stop: 28535, Start Num: 9

Candidate Starts for Vanisoa\_37:

(Start: 9 @28822 has 26 MA's), (11, 28753), (12, 28729), (13, 28702), (17, 28684), (26, 28570),

Gene: WorldCup\_36 Start: 27549, Stop: 27286, Start Num: 9

Candidate Starts for WorldCup\_36:

(Start: 9 @27549 has 26 MA's), (26, 27324), (28, 27306),