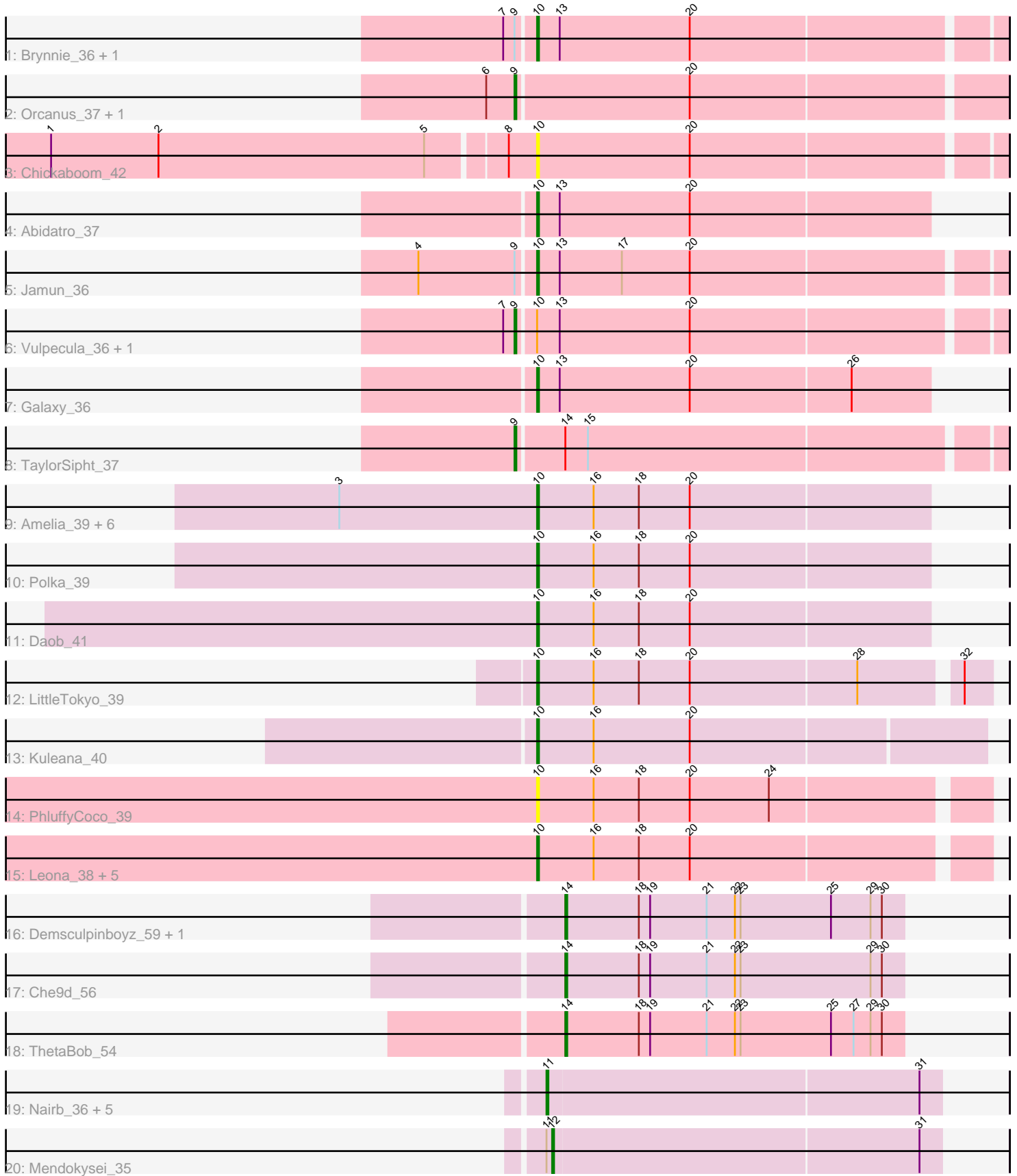


# Pham 163735



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 163735 Report

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

Pham number 163735 has 40 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Brynnie\_36, Basilisk\_37
- Track 2 : Orcanus\_37, Eesa\_36
- Track 3 : Chickaboom\_42
- Track 4 : Abidatro\_37
- Track 5 : Jamun\_36
- Track 6 : Vulpecula\_36, Ruchi\_36
- Track 7 : Galaxy\_36
- Track 8 : TaylorSipht\_37
- Track 9 : Amelia\_39, Cote\_41, Lunar\_41, Kepler\_41, HannahPhantana\_47, Melons\_41, Coral\_39
- Track 10 : Polka\_39
- Track 11 : Daob\_41
- Track 12 : LittleTokyo\_39
- Track 13 : Kuleana\_40
- Track 14 : PhluffyCoco\_39
- Track 15 : Leona\_38, Juno112\_39, Andrew\_40, KHumphrey\_38, Renna12\_38, RedFox\_39
- Track 16 : Demsculpinboyz\_59, Yoshi\_61
- Track 17 : Che9d\_56
- Track 18 : ThetaBob\_54
- Track 19 : Nairb\_36, Whitty\_37, ZenTime222\_36, Bernal13\_37, Ibrahim\_37, RonRayGun\_37
- Track 20 : Mendokysei\_35

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

The start number called the most often in the published annotations is 10, it was called in 19 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abidatro\_37, Amelia\_39, Andrew\_40, Basilisk\_37, Brynnie\_36, Chickaboom\_42, Coral\_39, Cote\_41, Daob\_41, Galaxy\_36, HannahPhantana\_47, Jamun\_36, Juno112\_39, KHumphrey\_38, Kepler\_41, Kuleana\_40, Leona\_38, LittleTokyo\_39, Lunar\_41, Melons\_41, PhluffyCoco\_39, Polka\_39, RedFox\_39, Renna12\_38,

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

- Ruchi\_36, Vulpecula\_36,

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

- Bernal13\_37, Che9d\_56, Demsculpinboyz\_59, Eesa\_36, Ibrahim\_37, Mendokysei\_35, Nairb\_36, Orcanus\_37, RonRayGun\_37, TaylorSipht\_37, ThetaBob\_54, Whitty\_37, Yoshi\_61, ZenTime222\_36,

### Summary by start number:

Start 9:

- Found in 8 of 40 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 5 of 35
- Called 62.5% of time when present
- Phage (with cluster) where this start called: Eesa\_36 (AS1), Orcanus\_37 (AS1), Ruchi\_36 (AS1), TaylorSipht\_37 (AS1), Vulpecula\_36 (AS1),

Start 10:

- Found in 26 of 40 ( 65.0% ) of genes in pham
- Manual Annotations of this start: 19 of 35
- Called 92.3% of time when present
- Phage (with cluster) where this start called: Abidatro\_37 (AS1), Amelia\_39 (AS2), Andrew\_40 (AS3), Basilisk\_37 (AS1), Brynnie\_36 (AS1), Chickaboom\_42 (AS1), Coral\_39 (AS2), Cote\_41 (AS2), Daob\_41 (AS2), Galaxy\_36 (AS1), HannahPhantana\_47 (AS2), Jamun\_36 (AS1), Juno112\_39 (AS3), KHumphrey\_38 (AS3), Kepler\_41 (AS2), Kuleana\_40 (AS2), Leona\_38 (AS3), LittleTokyo\_39 (AS2), Lunar\_41 (AS2), Melons\_41 (AS2), PhluffyCoco\_39 (AS3), Polka\_39 (AS2), RedFox\_39 (AS3), Renn12\_38 (AS3),

Start 11:

- Found in 7 of 40 ( 17.5% ) of genes in pham
- Manual Annotations of this start: 6 of 35
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Bernal13\_37 (T), Ibrahim\_37 (T), Nairb\_36 (T), RonRayGun\_37 (T), Whitty\_37 (T), ZenTime222\_36 (T),

Start 12:

- Found in 1 of 40 ( 2.5% ) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mendokysei\_35 (T),

Start 14:

- Found in 5 of 40 ( 12.5% ) of genes in pham
- Manual Annotations of this start: 4 of 35
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Che9d\_56 (F2), Demsculpinboyz\_59 (F2), ThetaBob\_54 (F4), Yoshi\_61 (F2),

### Summary by clusters:

There are 6 clusters represented in this pham: AS3, AS2, AS1, F4, F2, T,

Info for manual annotations of cluster AS1:

- Start number 9 was manually annotated 5 times for cluster AS1.
- Start number 10 was manually annotated 5 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 10 was manually annotated 10 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 10 was manually annotated 4 times for cluster AS3.

Info for manual annotations of cluster F2:

- Start number 14 was manually annotated 3 times for cluster F2.

Info for manual annotations of cluster F4:

- Start number 14 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster T:

- Start number 11 was manually annotated 6 times for cluster T.
- Start number 12 was manually annotated 1 time for cluster T.

### ***Gene Information:***

Gene: Abidatro\_37 Start: 25098, Stop: 25304, Start Num: 10

Candidate Starts for Abidatro\_37:

(Start: 10 @25098 has 19 MA's), (13, 25110), (20, 25179),

Gene: Amelia\_39 Start: 24861, Stop: 25067, Start Num: 10

Candidate Starts for Amelia\_39:

(3, 24756), (Start: 10 @24861 has 19 MA's), (16, 24891), (18, 24915), (20, 24942),

Gene: Andrew\_40 Start: 24666, Stop: 24896, Start Num: 10

Candidate Starts for Andrew\_40:

(Start: 10 @24666 has 19 MA's), (16, 24696), (18, 24720), (20, 24747),

Gene: Basilisk\_37 Start: 25576, Stop: 25815, Start Num: 10

Candidate Starts for Basilisk\_37:

(7, 25561), (Start: 9 @25567 has 5 MA's), (Start: 10 @25576 has 19 MA's), (13, 25588), (20, 25657),

Gene: Bernal13\_37 Start: 30311, Stop: 30517, Start Num: 11

Candidate Starts for Bernal13\_37:

(Start: 11 @30311 has 6 MA's), (31, 30506),

Gene: Brynnie\_36 Start: 25454, Stop: 25693, Start Num: 10

Candidate Starts for Brynnie\_36:

(7, 25439), (Start: 9 @25445 has 5 MA's), (Start: 10 @25454 has 19 MA's), (13, 25466), (20, 25535),

Gene: Che9d\_56 Start: 35970, Stop: 36149, Start Num: 14

Candidate Starts for Che9d\_56:

(Start: 14 @35970 has 4 MA's), (18, 36009), (19, 36015), (21, 36045), (22, 36060), (23, 36063), (29, 36132), (30, 36138),

Gene: Chickaboom\_42 Start: 25076, Stop: 25315, Start Num: 10  
Candidate Starts for Chickaboom\_42:  
(1, 24824), (2, 24881), (5, 25022), (8, 25061), (Start: 10 @25076 has 19 MA's), (20, 25157),

Gene: Coral\_39 Start: 24709, Stop: 24915, Start Num: 10  
Candidate Starts for Coral\_39:  
(3, 24604), (Start: 10 @24709 has 19 MA's), (16, 24739), (18, 24763), (20, 24790),

Gene: Cote\_41 Start: 25186, Stop: 25392, Start Num: 10  
Candidate Starts for Cote\_41:  
(3, 25081), (Start: 10 @25186 has 19 MA's), (16, 25216), (18, 25240), (20, 25267),

Gene: Daob\_41 Start: 25194, Stop: 25400, Start Num: 10  
Candidate Starts for Daob\_41:  
(Start: 10 @25194 has 19 MA's), (16, 25224), (18, 25248), (20, 25275),

Gene: Demsculpinboyz\_59 Start: 36079, Stop: 36258, Start Num: 14  
Candidate Starts for Demsculpinboyz\_59:  
(Start: 14 @36079 has 4 MA's), (18, 36118), (19, 36124), (21, 36154), (22, 36169), (23, 36172), (25, 36220), (29, 36241), (30, 36247),

Gene: Eesa\_36 Start: 25937, Stop: 26194, Start Num: 9  
Candidate Starts for Eesa\_36:  
(6, 25922), (Start: 9 @25937 has 5 MA's), (20, 26027),

Gene: Galaxy\_36 Start: 24864, Stop: 25070, Start Num: 10  
Candidate Starts for Galaxy\_36:  
(Start: 10 @24864 has 19 MA's), (13, 24876), (20, 24945), (26, 25029),

Gene: HannahPhantana\_47 Start: 24856, Stop: 25062, Start Num: 10  
Candidate Starts for HannahPhantana\_47:  
(3, 24751), (Start: 10 @24856 has 19 MA's), (16, 24886), (18, 24910), (20, 24937),

Gene: Ibrahim\_37 Start: 30757, Stop: 30963, Start Num: 11  
Candidate Starts for Ibrahim\_37:  
(Start: 11 @30757 has 6 MA's), (31, 30952),

Gene: Jamun\_36 Start: 25116, Stop: 25355, Start Num: 10  
Candidate Starts for Jamun\_36:  
(4, 25056), (Start: 9 @25107 has 5 MA's), (Start: 10 @25116 has 19 MA's), (13, 25128), (17, 25161), (20, 25197),

Gene: Juno112\_39 Start: 24776, Stop: 25006, Start Num: 10  
Candidate Starts for Juno112\_39:  
(Start: 10 @24776 has 19 MA's), (16, 24806), (18, 24830), (20, 24857),

Gene: KHumphrey\_38 Start: 24775, Stop: 25005, Start Num: 10  
Candidate Starts for KHumphrey\_38:  
(Start: 10 @24775 has 19 MA's), (16, 24805), (18, 24829), (20, 24856),

Gene: Kepler\_41 Start: 25604, Stop: 25810, Start Num: 10  
Candidate Starts for Kepler\_41:

(3, 25499), (Start: 10 @25604 has 19 MA's), (16, 25634), (18, 25658), (20, 25685),

Gene: Kuleana\_40 Start: 25028, Stop: 25261, Start Num: 10

Candidate Starts for Kuleana\_40:

(Start: 10 @25028 has 19 MA's), (16, 25058), (20, 25109),

Gene: Leona\_38 Start: 24847, Stop: 25077, Start Num: 10

Candidate Starts for Leona\_38:

(Start: 10 @24847 has 19 MA's), (16, 24877), (18, 24901), (20, 24928),

Gene: LittleTokyo\_39 Start: 24706, Stop: 24936, Start Num: 10

Candidate Starts for LittleTokyo\_39:

(Start: 10 @24706 has 19 MA's), (16, 24736), (18, 24760), (20, 24787), (28, 24874), (32, 24922),

Gene: Lunar\_41 Start: 25520, Stop: 25726, Start Num: 10

Candidate Starts for Lunar\_41:

(3, 25415), (Start: 10 @25520 has 19 MA's), (16, 25550), (18, 25574), (20, 25601),

Gene: Melons\_41 Start: 25334, Stop: 25540, Start Num: 10

Candidate Starts for Melons\_41:

(3, 25229), (Start: 10 @25334 has 19 MA's), (16, 25364), (18, 25388), (20, 25415),

Gene: Mendokysei\_35 Start: 29852, Stop: 30055, Start Num: 12

Candidate Starts for Mendokysei\_35:

(Start: 11 @29849 has 6 MA's), (Start: 12 @29852 has 1 MA's), (31, 30044),

Gene: Nairb\_36 Start: 30311, Stop: 30517, Start Num: 11

Candidate Starts for Nairb\_36:

(Start: 11 @30311 has 6 MA's), (31, 30506),

Gene: Orcanus\_37 Start: 25466, Stop: 25717, Start Num: 9

Candidate Starts for Orcanus\_37:

(6, 25451), (Start: 9 @25466 has 5 MA's), (20, 25556),

Gene: PhluffyCoco\_39 Start: 24772, Stop: 25002, Start Num: 10

Candidate Starts for PhluffyCoco\_39:

(Start: 10 @24772 has 19 MA's), (16, 24802), (18, 24826), (20, 24853), (24, 24895),

Gene: Polka\_39 Start: 24710, Stop: 24916, Start Num: 10

Candidate Starts for Polka\_39:

(Start: 10 @24710 has 19 MA's), (16, 24740), (18, 24764), (20, 24791),

Gene: RedFox\_39 Start: 24771, Stop: 25001, Start Num: 10

Candidate Starts for RedFox\_39:

(Start: 10 @24771 has 19 MA's), (16, 24801), (18, 24825), (20, 24852),

Gene: Renna12\_38 Start: 24811, Stop: 25059, Start Num: 10

Candidate Starts for Renna12\_38:

(Start: 10 @24811 has 19 MA's), (16, 24841), (18, 24865), (20, 24892),

Gene: RonRayGun\_37 Start: 30757, Stop: 30963, Start Num: 11

Candidate Starts for RonRayGun\_37:

(Start: 11 @30757 has 6 MA's), (31, 30952),

Gene: Ruchi\_36 Start: 25513, Stop: 25761, Start Num: 9

Candidate Starts for Ruchi\_36:

(7, 25507), (Start: 9 @25513 has 5 MA's), (Start: 10 @25522 has 19 MA's), (13, 25534), (20, 25603),

Gene: TaylorSipht\_37 Start: 24886, Stop: 25134, Start Num: 9

Candidate Starts for TaylorSipht\_37:

(Start: 9 @24886 has 5 MA's), (Start: 14 @24910 has 4 MA's), (15, 24922),

Gene: ThetaBob\_54 Start: 36886, Stop: 37065, Start Num: 14

Candidate Starts for ThetaBob\_54:

(Start: 14 @36886 has 4 MA's), (18, 36925), (19, 36931), (21, 36961), (22, 36976), (23, 36979), (25, 37027), (27, 37039), (29, 37048), (30, 37054),

Gene: Vulpecula\_36 Start: 25190, Stop: 25438, Start Num: 9

Candidate Starts for Vulpecula\_36:

(7, 25184), (Start: 9 @25190 has 5 MA's), (Start: 10 @25199 has 19 MA's), (13, 25211), (20, 25280),

Gene: Whitty\_37 Start: 30311, Stop: 30517, Start Num: 11

Candidate Starts for Whitty\_37:

(Start: 11 @30311 has 6 MA's), (31, 30506),

Gene: Yoshi\_61 Start: 38120, Stop: 38299, Start Num: 14

Candidate Starts for Yoshi\_61:

(Start: 14 @38120 has 4 MA's), (18, 38159), (19, 38165), (21, 38195), (22, 38210), (23, 38213), (25, 38261), (29, 38282), (30, 38288),

Gene: ZenTime222\_36 Start: 30311, Stop: 30517, Start Num: 11

Candidate Starts for ZenTime222\_36:

(Start: 11 @30311 has 6 MA's), (31, 30506),