

# Pham 298419



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 298419 Report

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

Pham number 298419 has 68 members, 18 are drafts.

Phages represented in each track:

- Track 1 : Brynnie\_36, Basilisk\_37
- Track 2 : Toad24\_39, Gravel\_46, Orcanus\_37, Shen\_36, Pelletreau\_46, Westrich\_45, Eesa\_36, KendraB23\_47, Zixiang\_36, Amanises\_39
- Track 3 : Abidatro\_37
- Track 4 : WileyE\_38, Chickaboom\_38
- Track 5 : Vulpecula\_36, Ruchi\_36
- Track 6 : Chicken\_36
- Track 7 : Jamun\_36
- Track 8 : Niblet\_36
- Track 9 : Galaxy\_36
- Track 10 : TaylorSipht\_37
- Track 11 : Colusalem\_40, PhirstandPhine\_48, Amelia\_39, GramZayde\_41, Cote\_41, Pineda\_42, Damocles\_43, Kepler\_41, Bedetta\_44, Bibble12\_43, Lunar\_41, Jerole\_40, HannahPhantana\_40, Melons\_41, Coral\_39
- Track 12 : Polka\_39, OtsoOtso\_40
- Track 13 : LittleTokyo\_39
- Track 14 : Daob\_41
- Track 15 : Cygnet\_39
- Track 16 : Zhuangyuan\_41
- Track 17 : Kuleana\_40
- Track 18 : Antrice\_42
- Track 19 : Amphitrite\_39, Glotell\_40, PhluffyCoco\_39, HamCheese\_39, Laphuphu24k\_38, Rattail\_39
- Track 20 : AlexMinion\_41, Leona\_38, Fingolfin\_39, AdoptaAdorbs\_38, AmiCi24\_38, Juno112\_38, Atlantica\_39, Andrew\_40, Azaz\_40, Camara\_39, KHumphrey\_39, RedFox\_39, Renna12\_38, StuartMinion\_31, DanHam62\_39, Babushka\_36, Oppalora\_38

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

The start number called the most often in the published annotations is 11, it was called in 38 of the 50 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abidatro\_37, AdoptaAdorbs\_38, AlexMinion\_41, Amelia\_39, AmiCi24\_38, Amphitrite\_39, Andrew\_40, Atlantica\_39, Azaz\_40, Babushka\_36, Basilisk\_37, Bedetta\_44, Bibble12\_43, Brynnie\_36, Camara\_39, Chickaboom\_38, Colusalem\_40, Coral\_39, Cote\_41, Damocles\_43, DanHam62\_39, Daob\_41, Fingolfin\_39, Galaxy\_36, Glotell\_40, GramZayde\_41, HamCheese\_39, HannahPhantana\_40, Jamun\_36, Jerole\_40, Juno112\_38, KHumphrey\_39, Kepler\_41, Kuleana\_40, Laphuphu24k\_38, Leona\_38, LittleTokyo\_39, Lunar\_41, Melons\_41, Oppalora\_38, OtsoOtso\_40, PhirstandPhine\_48, PhluffyCoco\_39, Pineda\_42, Polka\_39, Rattail\_39, RedFox\_39, Renna12\_38, StuartMinion\_31, WileyE\_38, Zhuangyuan\_41,

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:

- Amanises\_39, Antrice\_42, Chicken\_36, Cygnet\_39, Eesa\_36, Gravel\_46, KendraB23\_47, Niblet\_36, Orcanus\_37, Pelletreau\_46, Shen\_36, TaylorSipht\_37, Toad24\_39, Westrich\_45, Zixiang\_36,

### Summary by start number:

Start 9:

- Found in 18 of 68 ( 26.5% ) of genes in pham
- Manual Annotations of this start: 10 of 50
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Amanises\_39 (AS1), Chicken\_36 (AS1), Eesa\_36 (AS1), Gravel\_46 (AS1), KendraB23\_47 (AS1), Niblet\_36 (AS1), Orcanus\_37 (AS1), Pelletreau\_46 (AS1), Ruchi\_36 (AS1), Shen\_36 (AS1), TaylorSipht\_37 (AS1), Toad24\_39 (AS1), Vulpecula\_36 (AS1), Westrich\_45 (AS1), Zixiang\_36 (AS1),

Start 10:

- Found in 2 of 68 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 2 of 50
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antrice\_42 (AS2), Cygnet\_39 (AS2),

Start 11:

- Found in 53 of 68 ( 77.9% ) of genes in pham
- Manual Annotations of this start: 38 of 50
- Called 96.2% of time when present
- Phage (with cluster) where this start called: Abidatro\_37 (AS1), AdoptaAdorbs\_38 (AS3), AlexMinion\_41 (AS3), Amelia\_39 (AS2), AmiCi24\_38 (AS3), Amphitrite\_39 (AS3), Andrew\_40 (AS3), Atlantica\_39 (AS3), Azaz\_40 (AS3), Babushka\_36 (AS3), Basilisk\_37 (AS1), Bedetta\_44 (AS2), Bibble12\_43 (AS2), Brynnie\_36 (AS1), Camara\_39 (AS3), Chickaboom\_38 (AS1), Colusalem\_40 (AS2), Coral\_39 (AS2), Cote\_41 (AS2), Damocles\_43 (AS2), DanHam62\_39 (AS3), Daob\_41 (AS2), Fingolfin\_39 (AS3), Galaxy\_36 (AS1), Glotell\_40 (AS3), GramZayde\_41 (AS2), HamCheese\_39 (AS3), HannahPhantana\_40 (AS2), Jamun\_36 (AS1), Jerole\_40 (AS2), Juno112\_38 (AS3), KHumphrey\_39 (AS3), Kepler\_41 (AS2), Kuleana\_40 (AS2), Laphuphu24k\_38 (AS3), Leona\_38 (AS3), LittleTokyo\_39 (AS2), Lunar\_41 (AS2), Melons\_41 (AS2), Oppalora\_38 (AS3), OtsoOtso\_40 (AS2), PhirstandPhine\_48 (AS2), PhluffyCoco\_39 (AS3), Pineda\_42 (AS2), Polka\_39 (AS2), Rattail\_39 (AS3), RedFox\_39 (AS3), Renna12\_38 (AS3), StuartMinion\_31 (AS3),

WileyE\_38 (AS1), Zhuangyuan\_41 (AS2),

### **Summary by clusters:**

There are 3 clusters represented in this pham: AS3, AS2, AS1,

Info for manual annotations of cluster AS1:

- Start number 9 was manually annotated 10 times for cluster AS1.
- Start number 11 was manually annotated 7 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 10 was manually annotated 2 times for cluster AS2.
- Start number 11 was manually annotated 15 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 11 was manually annotated 16 times for cluster AS3.

### **Gene Information:**

Gene: Abidatro\_37 Start: 25098, Stop: 25304, Start Num: 11

Candidate Starts for Abidatro\_37:

(Start: 11 @25098 has 38 MA's), (12, 25110), (18, 25179),

Gene: AdoptaAdorbs\_38 Start: 24774, Stop: 25004, Start Num: 11

Candidate Starts for AdoptaAdorbs\_38:

(Start: 11 @24774 has 38 MA's), (15, 24804), (17, 24828), (18, 24855),

Gene: AlexMinion\_41 Start: 24931, Stop: 25170, Start Num: 11

Candidate Starts for AlexMinion\_41:

(Start: 11 @24931 has 38 MA's), (15, 24961), (17, 24985), (18, 25012),

Gene: Amanises\_39 Start: 26103, Stop: 26360, Start Num: 9

Candidate Starts for Amanises\_39:

(6, 26088), (Start: 9 @26103 has 10 MA's), (18, 26193),

Gene: Amelia\_39 Start: 24861, Stop: 25067, Start Num: 11

Candidate Starts for Amelia\_39:

(3, 24756), (Start: 11 @24861 has 38 MA's), (15, 24891), (17, 24915), (18, 24942),

Gene: AmiCi24\_38 Start: 24772, Stop: 25002, Start Num: 11

Candidate Starts for AmiCi24\_38:

(Start: 11 @24772 has 38 MA's), (15, 24802), (17, 24826), (18, 24853),

Gene: Amphitrite\_39 Start: 24773, Stop: 25003, Start Num: 11

Candidate Starts for Amphitrite\_39:

(Start: 11 @24773 has 38 MA's), (15, 24803), (17, 24827), (18, 24854), (19, 24896),

Gene: Andrew\_40 Start: 24666, Stop: 24896, Start Num: 11

Candidate Starts for Andrew\_40:

(Start: 11 @24666 has 38 MA's), (15, 24696), (17, 24720), (18, 24747),

Gene: Antrice\_42 Start: 26009, Stop: 26257, Start Num: 10  
Candidate Starts for Antrice\_42:  
(Start: 10 @26009 has 2 MA's), (15, 26045), (17, 26069), (18, 26096), (19, 26138),

Gene: Atlantica\_39 Start: 24774, Stop: 25004, Start Num: 11  
Candidate Starts for Atlantica\_39:  
(Start: 11 @24774 has 38 MA's), (15, 24804), (17, 24828), (18, 24855),

Gene: Azaz\_40 Start: 24846, Stop: 25076, Start Num: 11  
Candidate Starts for Azaz\_40:  
(Start: 11 @24846 has 38 MA's), (15, 24876), (17, 24900), (18, 24927),

Gene: Babushka\_36 Start: 24696, Stop: 24935, Start Num: 11  
Candidate Starts for Babushka\_36:  
(Start: 11 @24696 has 38 MA's), (15, 24726), (17, 24750), (18, 24777),

Gene: Basilisk\_37 Start: 25576, Stop: 25815, Start Num: 11  
Candidate Starts for Basilisk\_37:  
(7, 25561), (Start: 9 @25567 has 10 MA's), (Start: 11 @25576 has 38 MA's), (12, 25588), (18, 25657),

Gene: Bedetta\_44 Start: 25008, Stop: 25214, Start Num: 11  
Candidate Starts for Bedetta\_44:  
(3, 24903), (Start: 11 @25008 has 38 MA's), (15, 25038), (17, 25062), (18, 25089),

Gene: Bible12\_43 Start: 24856, Stop: 25062, Start Num: 11  
Candidate Starts for Bible12\_43:  
(3, 24751), (Start: 11 @24856 has 38 MA's), (15, 24886), (17, 24910), (18, 24937),

Gene: Brynnie\_36 Start: 25454, Stop: 25693, Start Num: 11  
Candidate Starts for Brynnie\_36:  
(7, 25439), (Start: 9 @25445 has 10 MA's), (Start: 11 @25454 has 38 MA's), (12, 25466), (18, 25535),

Gene: Camara\_39 Start: 24776, Stop: 25006, Start Num: 11  
Candidate Starts for Camara\_39:  
(Start: 11 @24776 has 38 MA's), (15, 24806), (17, 24830), (18, 24857),

Gene: Chickaboom\_38 Start: 25076, Stop: 25315, Start Num: 11  
Candidate Starts for Chickaboom\_38:  
(1, 24824), (2, 24881), (5, 25022), (8, 25061), (Start: 11 @25076 has 38 MA's), (18, 25157),

Gene: Chicken\_36 Start: 25407, Stop: 25655, Start Num: 9  
Candidate Starts for Chicken\_36:  
(Start: 9 @25407 has 10 MA's), (12, 25428), (14, 25443), (18, 25497),

Gene: Colusalem\_40 Start: 24838, Stop: 25044, Start Num: 11  
Candidate Starts for Colusalem\_40:  
(3, 24733), (Start: 11 @24838 has 38 MA's), (15, 24868), (17, 24892), (18, 24919),

Gene: Coral\_39 Start: 24709, Stop: 24915, Start Num: 11  
Candidate Starts for Coral\_39:  
(3, 24604), (Start: 11 @24709 has 38 MA's), (15, 24739), (17, 24763), (18, 24790),

Gene: Cote\_41 Start: 25186, Stop: 25392, Start Num: 11

Candidate Starts for Cote\_41:

(3, 25081), (Start: 11 @25186 has 38 MA's), (15, 25216), (17, 25240), (18, 25267),

Gene: Cygnet\_39 Start: 25607, Stop: 25855, Start Num: 10

Candidate Starts for Cygnet\_39:

(Start: 10 @25607 has 2 MA's), (15, 25643), (17, 25667), (20, 25769),

Gene: Damocles\_43 Start: 24997, Stop: 25203, Start Num: 11

Candidate Starts for Damocles\_43:

(3, 24892), (Start: 11 @24997 has 38 MA's), (15, 25027), (17, 25051), (18, 25078),

Gene: DanHam62\_39 Start: 24773, Stop: 25003, Start Num: 11

Candidate Starts for DanHam62\_39:

(Start: 11 @24773 has 38 MA's), (15, 24803), (17, 24827), (18, 24854),

Gene: Daob\_41 Start: 25194, Stop: 25400, Start Num: 11

Candidate Starts for Daob\_41:

(Start: 11 @25194 has 38 MA's), (15, 25224), (17, 25248), (18, 25275),

Gene: Eesa\_36 Start: 25937, Stop: 26194, Start Num: 9

Candidate Starts for Eesa\_36:

(6, 25922), (Start: 9 @25937 has 10 MA's), (18, 26027),

Gene: Fingolfin\_39 Start: 24776, Stop: 25006, Start Num: 11

Candidate Starts for Fingolfin\_39:

(Start: 11 @24776 has 38 MA's), (15, 24806), (17, 24830), (18, 24857),

Gene: Galaxy\_36 Start: 24864, Stop: 25070, Start Num: 11

Candidate Starts for Galaxy\_36:

(Start: 11 @24864 has 38 MA's), (12, 24876), (18, 24945), (21, 25029),

Gene: Glotell\_40 Start: 24932, Stop: 25162, Start Num: 11

Candidate Starts for Glotell\_40:

(Start: 11 @24932 has 38 MA's), (15, 24962), (17, 24986), (18, 25013), (19, 25055),

Gene: GramZayde\_41 Start: 25022, Stop: 25228, Start Num: 11

Candidate Starts for GramZayde\_41:

(3, 24917), (Start: 11 @25022 has 38 MA's), (15, 25052), (17, 25076), (18, 25103),

Gene: Gravel\_46 Start: 25916, Stop: 26167, Start Num: 9

Candidate Starts for Gravel\_46:

(6, 25901), (Start: 9 @25916 has 10 MA's), (18, 26006),

Gene: HamCheese\_39 Start: 24760, Stop: 24990, Start Num: 11

Candidate Starts for HamCheese\_39:

(Start: 11 @24760 has 38 MA's), (15, 24790), (17, 24814), (18, 24841), (19, 24883),

Gene: HannahPhantana\_40 Start: 24856, Stop: 25062, Start Num: 11

Candidate Starts for HannahPhantana\_40:

(3, 24751), (Start: 11 @24856 has 38 MA's), (15, 24886), (17, 24910), (18, 24937),

Gene: Jamun\_36 Start: 25116, Stop: 25355, Start Num: 11

Candidate Starts for Jamun\_36:

(4, 25056), (Start: 9 @25107 has 10 MA's), (Start: 11 @25116 has 38 MA's), (12, 25128), (16, 25161), (18, 25197),

Gene: Jerole\_40 Start: 24980, Stop: 25186, Start Num: 11

Candidate Starts for Jerole\_40:

(3, 24875), (Start: 11 @24980 has 38 MA's), (15, 25010), (17, 25034), (18, 25061),

Gene: Juno112\_38 Start: 24776, Stop: 25006, Start Num: 11

Candidate Starts for Juno112\_38:

(Start: 11 @24776 has 38 MA's), (15, 24806), (17, 24830), (18, 24857),

Gene: KHumphrey\_39 Start: 24775, Stop: 25005, Start Num: 11

Candidate Starts for KHumphrey\_39:

(Start: 11 @24775 has 38 MA's), (15, 24805), (17, 24829), (18, 24856),

Gene: KendraB23\_47 Start: 26103, Stop: 26360, Start Num: 9

Candidate Starts for KendraB23\_47:

(6, 26088), (Start: 9 @26103 has 10 MA's), (18, 26193),

Gene: Kepler\_41 Start: 25604, Stop: 25810, Start Num: 11

Candidate Starts for Kepler\_41:

(3, 25499), (Start: 11 @25604 has 38 MA's), (15, 25634), (17, 25658), (18, 25685),

Gene: Kuleana\_40 Start: 25028, Stop: 25261, Start Num: 11

Candidate Starts for Kuleana\_40:

(Start: 11 @25028 has 38 MA's), (15, 25058), (18, 25109),

Gene: Laphuphu24k\_38 Start: 24760, Stop: 24990, Start Num: 11

Candidate Starts for Laphuphu24k\_38:

(Start: 11 @24760 has 38 MA's), (15, 24790), (17, 24814), (18, 24841), (19, 24883),

Gene: Leona\_38 Start: 24847, Stop: 25077, Start Num: 11

Candidate Starts for Leona\_38:

(Start: 11 @24847 has 38 MA's), (15, 24877), (17, 24901), (18, 24928),

Gene: LittleTokyo\_39 Start: 24706, Stop: 24936, Start Num: 11

Candidate Starts for LittleTokyo\_39:

(Start: 11 @24706 has 38 MA's), (15, 24736), (17, 24760), (18, 24787), (22, 24874), (24, 24922),

Gene: Lunar\_41 Start: 25520, Stop: 25726, Start Num: 11

Candidate Starts for Lunar\_41:

(3, 25415), (Start: 11 @25520 has 38 MA's), (15, 25550), (17, 25574), (18, 25601),

Gene: Melons\_41 Start: 25334, Stop: 25540, Start Num: 11

Candidate Starts for Melons\_41:

(3, 25229), (Start: 11 @25334 has 38 MA's), (15, 25364), (17, 25388), (18, 25415),

Gene: Niblet\_36 Start: 25494, Stop: 25742, Start Num: 9

Candidate Starts for Niblet\_36:

(Start: 9 @25494 has 10 MA's), (12, 25515), (14, 25530), (18, 25584), (23, 25710),

Gene: Oppalora\_38 Start: 24774, Stop: 25004, Start Num: 11

Candidate Starts for Oppalora\_38:

(Start: 11 @24774 has 38 MA's), (15, 24804), (17, 24828), (18, 24855),

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

Candidate Starts for Orcanus\_37:

(6, 25451), (Start: 9 @25466 has 10 MA's), (18, 25556),

Gene: OtsoOtso\_40 Start: 24710, Stop: 24916, Start Num: 11

Candidate Starts for OtsoOtso\_40:

(Start: 11 @24710 has 38 MA's), (15, 24740), (17, 24764), (18, 24791),

Gene: Pelletreau\_46 Start: 25916, Stop: 26167, Start Num: 9

Candidate Starts for Pelletreau\_46:

(6, 25901), (Start: 9 @25916 has 10 MA's), (18, 26006),

Gene: PhirstandPhine\_48 Start: 25480, Stop: 25686, Start Num: 11

Candidate Starts for PhirstandPhine\_48:

(3, 25375), (Start: 11 @25480 has 38 MA's), (15, 25510), (17, 25534), (18, 25561),

Gene: PhluffyCoco\_39 Start: 24772, Stop: 25002, Start Num: 11

Candidate Starts for PhluffyCoco\_39:

(Start: 11 @24772 has 38 MA's), (15, 24802), (17, 24826), (18, 24853), (19, 24895),

Gene: Pineda\_42 Start: 25006, Stop: 25212, Start Num: 11

Candidate Starts for Pineda\_42:

(3, 24901), (Start: 11 @25006 has 38 MA's), (15, 25036), (17, 25060), (18, 25087),

Gene: Polka\_39 Start: 24710, Stop: 24916, Start Num: 11

Candidate Starts for Polka\_39:

(Start: 11 @24710 has 38 MA's), (15, 24740), (17, 24764), (18, 24791),

Gene: Rattail\_39 Start: 24858, Stop: 25088, Start Num: 11

Candidate Starts for Rattail\_39:

(Start: 11 @24858 has 38 MA's), (15, 24888), (17, 24912), (18, 24939), (19, 24981),

Gene: RedFox\_39 Start: 24771, Stop: 25001, Start Num: 11

Candidate Starts for RedFox\_39:

(Start: 11 @24771 has 38 MA's), (15, 24801), (17, 24825), (18, 24852),

Gene: Renna12\_38 Start: 24811, Stop: 25059, Start Num: 11

Candidate Starts for Renna12\_38:

(Start: 11 @24811 has 38 MA's), (15, 24841), (17, 24865), (18, 24892),

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

Candidate Starts for Ruchi\_36:

(7, 25507), (Start: 9 @25513 has 10 MA's), (Start: 11 @25522 has 38 MA's), (12, 25534), (18, 25603),

Gene: Shen\_36 Start: 24017, Stop: 24274, Start Num: 9

Candidate Starts for Shen\_36:

(6, 24002), (Start: 9 @24017 has 10 MA's), (18, 24107),

Gene: StuartMinion\_31 Start: 21830, Stop: 22069, Start Num: 11

Candidate Starts for StuartMinion\_31:

(Start: 11 @21830 has 38 MA's), (15, 21860), (17, 21884), (18, 21911),

Gene: TaylorSipht\_37 Start: 24886, Stop: 25134, Start Num: 9  
Candidate Starts for TaylorSipht\_37:  
(Start: 9 @24886 has 10 MA's), (13, 24910), (14, 24922),

Gene: Toad24\_39 Start: 26156, Stop: 26413, Start Num: 9  
Candidate Starts for Toad24\_39:  
(6, 26141), (Start: 9 @26156 has 10 MA's), (18, 26246),

Gene: Vulpecula\_36 Start: 25190, Stop: 25438, Start Num: 9  
Candidate Starts for Vulpecula\_36:  
(7, 25184), (Start: 9 @25190 has 10 MA's), (Start: 11 @25199 has 38 MA's), (12, 25211), (18, 25280),

Gene: Westrich\_45 Start: 25840, Stop: 26091, Start Num: 9  
Candidate Starts for Westrich\_45:  
(6, 25825), (Start: 9 @25840 has 10 MA's), (18, 25930),

Gene: WileyE\_38 Start: 25076, Stop: 25315, Start Num: 11  
Candidate Starts for WileyE\_38:  
(1, 24824), (2, 24881), (5, 25022), (8, 25061), (Start: 11 @25076 has 38 MA's), (18, 25157),

Gene: Zhuangyuan\_41 Start: 25541, Stop: 25783, Start Num: 11  
Candidate Starts for Zhuangyuan\_41:  
(Start: 11 @25541 has 38 MA's), (18, 25622),

Gene: Zixiang\_36 Start: 25521, Stop: 25778, Start Num: 9  
Candidate Starts for Zixiang\_36:  
(6, 25506), (Start: 9 @25521 has 10 MA's), (18, 25611),