

Pham 305052



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 305052 Report

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

Pham number 305052 has 55 members, 25 are drafts.

Phages represented in each track:

- Track 1 : Phaja\_37, IHOP\_37, ShereKhan\_39
- Track 2 : Gonephishing\_53, Shaboozey\_44, BronnyJames\_44, Squint\_50
- Track 3 : Hidrated\_52, Marleymoo\_53
- Track 4 : OhShagHennessy\_30, Wamburgrxpress\_30, Rose5\_30, Enceladus\_30, Calm\_30, Acquire49\_30, JoeDirt\_30, Silverleaf\_30, Appletree2\_30, LeBron\_30, Halena\_30, Zaria\_30, CicholasNage\_30, AvadaKedavra\_30, Wyatt2\_30, UPIE\_30, MAckerman\_30
- Track 5 : Tyson\_30, DirkDirk\_30
- Track 6 : Pochiewood\_30
- Track 7 : Kahlid\_32, OverPar\_33, Hafay\_32, Lewan\_32, Sarshaun\_32, Lynnae\_32, Rumpelstiltskin\_32, Soap141\_32, SoJulia\_33
- Track 8 : Tourach\_32
- Track 9 : DanBing\_31, ZhongYanYuan\_31
- Track 10 : Rossetti\_32
- Track 11 : DHan\_32, Claus\_32
- Track 12 : BourbonZero\_30, KirDoubleO7\_29
- Track 13 : Jobypre\_31, Moostard\_31
- Track 14 : Red305\_31
- Track 15 : FarmResident\_30, Quby\_30
- Track 16 : PYPDinur\_30, BrainDrainer\_31, Sheng711\_30, Douzhi\_30

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

The start number called the most often in the published annotations is 1, it was called in 18 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acquire49\_30, Appletree2\_30, AvadaKedavra\_30, Calm\_30, CicholasNage\_30, Enceladus\_30, Halena\_30, JoeDirt\_30, LeBron\_30, MAckerman\_30, OhShagHennessy\_30, Pochiewood\_30, Rose5\_30, Silverleaf\_30, Tourach\_32, UPIE\_30, Wamburgrxpress\_30, Wyatt2\_30, Zaria\_30,

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

- BourbonZero\_30, BrainDrainer\_31, Claus\_32, DHan\_32, DanBing\_31, DirkDirk\_30, Douzhi\_30, FarmResident\_30, Hafay\_32, IHOP\_37, Jobypre\_31, Kahlid\_32, KirDoubleO7\_29, Lewan\_32, Lynnae\_32, Moostard\_31, OverPar\_33, PYPDinur\_30, Phaja\_37, Quby\_30, Red305\_31, Rossetti\_32, Rumpelstiltskin\_32, Sarshaun\_32, Sheng711\_30, ShereKhan\_39, SoJulia\_33, Soap141\_32, Tyson\_30, ZhongYanYuan\_31,

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

- BronnyJames\_44, Gonephishing\_53, Hidrated\_52, Marleymoo\_53, Shaboozey\_44, Squint\_50,

### Summary by start number:

Start 1:

- Found in 49 of 55 ( 89.1% ) of genes in pham
- Manual Annotations of this start: 18 of 30
- Called 38.8% of time when present
- Phage (with cluster) where this start called: Acquire49\_30 (L1), Appletree2\_30 (L1), AvadaKedavra\_30 (L1), Calm\_30 (L1), CicholasNage\_30 (L1), Enceladus\_30 (L1), Halena\_30 (L1), JoeDirt\_30 (L1), LeBron\_30 (L1), MAckerman\_30 (L1), OhShagHennessy\_30 (L1), Poochiewood\_30 (L1), Rose5\_30 (L1), Silverleaf\_30 (L1), Tourach\_32 (L2), UPIE\_30 (L1), Wamburgrxpress\_30 (L1), Wyatt2\_30 (L1), Zaria\_30 (L1),

Start 2:

- Found in 11 of 55 ( 20.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Red305\_31 (L3),

Start 3:

- Found in 6 of 55 ( 10.9% ) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BronnyJames\_44 (J), Gonephishing\_53 (J), Hidrated\_52 (J), Marleymoo\_53 (J), Shaboozey\_44 (J), Squint\_50 (J),

Start 4:

- Found in 46 of 55 ( 83.6% ) of genes in pham
- Manual Annotations of this start: 8 of 30
- Called 56.5% of time when present
- Phage (with cluster) where this start called: BourbonZero\_30 (L3), BrainDrainer\_31 (L4), Claus\_32 (L2), DHan\_32 (L2), DanBing\_31 (L2), DirkDirk\_30 (L1), Douzhi\_30 (L4), FarmResident\_30 (L4), Hafay\_32 (L2), Jobypre\_31 (L3), Kahlid\_32 (L2), KirDoubleO7\_29 (L3), Lewan\_32 (L2), Lynnae\_32 (L2), Moostard\_31 (L3), OverPar\_33 (L2), PYPDinur\_30 (L4), Quby\_30 (L4), Rossetti\_32 (L2), Rumpelstiltskin\_32 (L2), Sarshaun\_32 (L2), Sheng711\_30 (L4), SoJulia\_33 (L2), Soap141\_32 (L2), Tyson\_30 (L1), ZhongYanYuan\_31 (L2),

Start 5:

- Found in 3 of 55 ( 5.5% ) of genes in pham
- Manual Annotations of this start: 3 of 30
- Called 100.0% of time when present

- Phage (with cluster) where this start called: IHOP\_37 (E), Phaja\_37 (E), ShereKhan\_39 (E),

### **Summary by clusters:**

There are 6 clusters represented in this pham: E, J, L4, L2, L3, L1,

Info for manual annotations of cluster E:

- Start number 5 was manually annotated 3 times for cluster E.

Info for manual annotations of cluster J:

- Start number 3 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster L1:

- Start number 1 was manually annotated 17 times for cluster L1.
- Start number 4 was manually annotated 2 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 1 was manually annotated 1 time for cluster L2.
- Start number 4 was manually annotated 4 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 4 was manually annotated 2 times for cluster L3.

### **Gene Information:**

Gene: Acquire49\_30 Start: 27690, Stop: 27959, Start Num: 1

Candidate Starts for Acquire49\_30:

(Start: 1 @27690 has 18 MA's), (Start: 4 @27735 has 8 MA's), (11, 27843),

Gene: Appletree2\_30 Start: 27633, Stop: 27902, Start Num: 1

Candidate Starts for Appletree2\_30:

(Start: 1 @27633 has 18 MA's), (Start: 4 @27678 has 8 MA's), (11, 27786),

Gene: AvadaKedavra\_30 Start: 27700, Stop: 27969, Start Num: 1

Candidate Starts for AvadaKedavra\_30:

(Start: 1 @27700 has 18 MA's), (Start: 4 @27745 has 8 MA's), (11, 27853),

Gene: BourbonZero\_30 Start: 28780, Stop: 29001, Start Num: 4

Candidate Starts for BourbonZero\_30:

(Start: 1 @28735 has 18 MA's), (2, 28747), (Start: 4 @28780 has 8 MA's), (6, 28828),

Gene: BrainDrainer\_31 Start: 27763, Stop: 27981, Start Num: 4

Candidate Starts for BrainDrainer\_31:

(Start: 1 @27718 has 18 MA's), (Start: 4 @27763 has 8 MA's), (12, 27877),

Gene: BronnyJames\_44 Start: 38020, Stop: 38232, Start Num: 3

Candidate Starts for BronnyJames\_44:

(2, 37993), (Start: 3 @38020 has 1 MA's), (6, 38074), (7, 38077), (11, 38134), (14, 38170),

Gene: Calm\_30 Start: 27704, Stop: 27973, Start Num: 1  
Candidate Starts for Calm\_30:  
(Start: 1 @27704 has 18 MA's), (Start: 4 @27749 has 8 MA's), (11, 27857),

Gene: CicholasNage\_30 Start: 27692, Stop: 27961, Start Num: 1  
Candidate Starts for CicholasNage\_30:  
(Start: 1 @27692 has 18 MA's), (Start: 4 @27737 has 8 MA's), (11, 27845),

Gene: Claus\_32 Start: 28444, Stop: 28665, Start Num: 4  
Candidate Starts for Claus\_32:  
(Start: 1 @28399 has 18 MA's), (Start: 4 @28444 has 8 MA's), (7, 28495), (9, 28513), (15, 28633), (16, 28654),

Gene: DHan\_32 Start: 28380, Stop: 28601, Start Num: 4  
Candidate Starts for DHan\_32:  
(Start: 1 @28335 has 18 MA's), (Start: 4 @28380 has 8 MA's), (7, 28431), (9, 28449), (15, 28569), (16, 28590),

Gene: DanBing\_31 Start: 28284, Stop: 28505, Start Num: 4  
Candidate Starts for DanBing\_31:  
(Start: 1 @28239 has 18 MA's), (Start: 4 @28284 has 8 MA's), (7, 28335), (15, 28473), (16, 28494),

Gene: DirkDirk\_30 Start: 27718, Stop: 27942, Start Num: 4  
Candidate Starts for DirkDirk\_30:  
(Start: 1 @27673 has 18 MA's), (Start: 4 @27718 has 8 MA's), (11, 27826),

Gene: Douzhi\_30 Start: 27624, Stop: 27842, Start Num: 4  
Candidate Starts for Douzhi\_30:  
(Start: 1 @27579 has 18 MA's), (Start: 4 @27624 has 8 MA's), (12, 27738),

Gene: Enceladus\_30 Start: 27674, Stop: 27943, Start Num: 1  
Candidate Starts for Enceladus\_30:  
(Start: 1 @27674 has 18 MA's), (Start: 4 @27719 has 8 MA's), (11, 27827),

Gene: FarmResident\_30 Start: 27563, Stop: 27781, Start Num: 4  
Candidate Starts for FarmResident\_30:  
(Start: 1 @27518 has 18 MA's), (Start: 4 @27563 has 8 MA's), (6, 27611), (12, 27677),

Gene: Gonephishing\_53 Start: 42117, Stop: 42329, Start Num: 3  
Candidate Starts for Gonephishing\_53:  
(2, 42090), (Start: 3 @42117 has 1 MA's), (6, 42171), (7, 42174), (11, 42231), (14, 42267),

Gene: Hafay\_32 Start: 28500, Stop: 28721, Start Num: 4  
Candidate Starts for Hafay\_32:  
(Start: 1 @28455 has 18 MA's), (Start: 4 @28500 has 8 MA's), (7, 28551), (13, 28617), (15, 28689), (16, 28710),

Gene: Halena\_30 Start: 27701, Stop: 27970, Start Num: 1  
Candidate Starts for Halena\_30:  
(Start: 1 @27701 has 18 MA's), (Start: 4 @27746 has 8 MA's), (11, 27854),

Gene: Hidrated\_52 Start: 43955, Stop: 44164, Start Num: 3  
Candidate Starts for Hidrated\_52:

(2, 43928), (Start: 3 @43955 has 1 MA's), (6, 44009), (7, 44012), (11, 44069), (14, 44105), (15, 44153),

Gene: IHOP\_37 Start: 33369, Stop: 33557, Start Num: 5

Candidate Starts for IHOP\_37:

(Start: 1 @33312 has 18 MA's), (Start: 5 @33369 has 3 MA's), (6, 33402), (8, 33408), (10, 33462), (12, 33474),

Gene: Jobypre\_31 Start: 28829, Stop: 29050, Start Num: 4

Candidate Starts for Jobypre\_31:

(Start: 1 @28784 has 18 MA's), (2, 28796), (Start: 4 @28829 has 8 MA's),

Gene: JoeDirt\_30 Start: 27672, Stop: 27941, Start Num: 1

Candidate Starts for JoeDirt\_30:

(Start: 1 @27672 has 18 MA's), (Start: 4 @27717 has 8 MA's), (11, 27825),

Gene: Kahlid\_32 Start: 28472, Stop: 28693, Start Num: 4

Candidate Starts for Kahlid\_32:

(Start: 1 @28427 has 18 MA's), (Start: 4 @28472 has 8 MA's), (7, 28523), (13, 28589), (15, 28661), (16, 28682),

Gene: KirDoubleO7\_29 Start: 28812, Stop: 29033, Start Num: 4

Candidate Starts for KirDoubleO7\_29:

(Start: 1 @28767 has 18 MA's), (2, 28779), (Start: 4 @28812 has 8 MA's), (6, 28860),

Gene: LeBron\_30 Start: 27716, Stop: 27985, Start Num: 1

Candidate Starts for LeBron\_30:

(Start: 1 @27716 has 18 MA's), (Start: 4 @27761 has 8 MA's), (11, 27869),

Gene: Lewan\_32 Start: 28467, Stop: 28688, Start Num: 4

Candidate Starts for Lewan\_32:

(Start: 1 @28422 has 18 MA's), (Start: 4 @28467 has 8 MA's), (7, 28518), (13, 28584), (15, 28656), (16, 28677),

Gene: Lynnae\_32 Start: 28455, Stop: 28676, Start Num: 4

Candidate Starts for Lynnae\_32:

(Start: 1 @28410 has 18 MA's), (Start: 4 @28455 has 8 MA's), (7, 28506), (13, 28572), (15, 28644), (16, 28665),

Gene: MAckerman\_30 Start: 27690, Stop: 27959, Start Num: 1

Candidate Starts for MAckerman\_30:

(Start: 1 @27690 has 18 MA's), (Start: 4 @27735 has 8 MA's), (11, 27843),

Gene: Marleymoo\_53 Start: 43853, Stop: 44062, Start Num: 3

Candidate Starts for Marleymoo\_53:

(2, 43826), (Start: 3 @43853 has 1 MA's), (6, 43907), (7, 43910), (11, 43967), (14, 44003), (15, 44051),

Gene: Moostard\_31 Start: 28832, Stop: 29053, Start Num: 4

Candidate Starts for Moostard\_31:

(Start: 1 @28787 has 18 MA's), (2, 28799), (Start: 4 @28832 has 8 MA's),

Gene: OhShagHennessy\_30 Start: 27655, Stop: 27924, Start Num: 1

Candidate Starts for OhShagHennessy\_30:

(Start: 1 @27655 has 18 MA's), (Start: 4 @27700 has 8 MA's), (11, 27808),

Gene: OverPar\_33 Start: 28499, Stop: 28720, Start Num: 4  
Candidate Starts for OverPar\_33:  
(Start: 1 @28454 has 18 MA's), (Start: 4 @28499 has 8 MA's), (7, 28550), (13, 28616), (15, 28688),  
(16, 28709),

Gene: PYPDinur\_30 Start: 27624, Stop: 27842, Start Num: 4  
Candidate Starts for PYPDinur\_30:  
(Start: 1 @27579 has 18 MA's), (Start: 4 @27624 has 8 MA's), (12, 27738),

Gene: Phaja\_37 Start: 33368, Stop: 33556, Start Num: 5  
Candidate Starts for Phaja\_37:  
(Start: 1 @33311 has 18 MA's), (Start: 5 @33368 has 3 MA's), (6, 33401), (8, 33407), (10, 33461), (12,  
33473),

Gene: Poochiewood\_30 Start: 27690, Stop: 27959, Start Num: 1  
Candidate Starts for Poochiewood\_30:  
(Start: 1 @27690 has 18 MA's), (Start: 4 @27735 has 8 MA's),

Gene: Quby\_30 Start: 27518, Stop: 27736, Start Num: 4  
Candidate Starts for Quby\_30:  
(Start: 1 @27473 has 18 MA's), (Start: 4 @27518 has 8 MA's), (6, 27566), (12, 27632),

Gene: Red305\_31 Start: 28796, Stop: 29050, Start Num: 2  
Candidate Starts for Red305\_31:  
(Start: 1 @28784 has 18 MA's), (2, 28796), (Start: 4 @28829 has 8 MA's),

Gene: Rose5\_30 Start: 27690, Stop: 27959, Start Num: 1  
Candidate Starts for Rose5\_30:  
(Start: 1 @27690 has 18 MA's), (Start: 4 @27735 has 8 MA's), (11, 27843),

Gene: Rossetti\_32 Start: 28739, Stop: 28960, Start Num: 4  
Candidate Starts for Rossetti\_32:  
(Start: 1 @28694 has 18 MA's), (Start: 4 @28739 has 8 MA's), (13, 28856), (16, 28949),

Gene: Rumpelstiltskin\_32 Start: 28735, Stop: 28956, Start Num: 4  
Candidate Starts for Rumpelstiltskin\_32:  
(Start: 1 @28690 has 18 MA's), (Start: 4 @28735 has 8 MA's), (7, 28786), (13, 28852), (15, 28924),  
(16, 28945),

Gene: Sarshaun\_32 Start: 28500, Stop: 28721, Start Num: 4  
Candidate Starts for Sarshaun\_32:  
(Start: 1 @28455 has 18 MA's), (Start: 4 @28500 has 8 MA's), (7, 28551), (13, 28617), (15, 28689),  
(16, 28710),

Gene: Shaboozey\_44 Start: 38020, Stop: 38232, Start Num: 3  
Candidate Starts for Shaboozey\_44:  
(2, 37993), (Start: 3 @38020 has 1 MA's), (6, 38074), (7, 38077), (11, 38134), (14, 38170),

Gene: Sheng711\_30 Start: 27624, Stop: 27842, Start Num: 4  
Candidate Starts for Sheng711\_30:  
(Start: 1 @27579 has 18 MA's), (Start: 4 @27624 has 8 MA's), (12, 27738),

Gene: ShereKhan\_39 Start: 34175, Stop: 34363, Start Num: 5

Candidate Starts for ShereKhan\_39:

(Start: 1 @34118 has 18 MA's), (Start: 5 @34175 has 3 MA's), (6, 34208), (8, 34214), (10, 34268), (12, 34280),

Gene: Silverleaf\_30 Start: 27690, Stop: 27959, Start Num: 1

Candidate Starts for Silverleaf\_30:

(Start: 1 @27690 has 18 MA's), (Start: 4 @27735 has 8 MA's), (11, 27843),

Gene: SoJulia\_33 Start: 28728, Stop: 28949, Start Num: 4

Candidate Starts for SoJulia\_33:

(Start: 1 @28683 has 18 MA's), (Start: 4 @28728 has 8 MA's), (7, 28779), (13, 28845), (15, 28917), (16, 28938),

Gene: Soap141\_32 Start: 28500, Stop: 28721, Start Num: 4

Candidate Starts for Soap141\_32:

(Start: 1 @28455 has 18 MA's), (Start: 4 @28500 has 8 MA's), (7, 28551), (13, 28617), (15, 28689), (16, 28710),

Gene: Squint\_50 Start: 40769, Stop: 40981, Start Num: 3

Candidate Starts for Squint\_50:

(2, 40742), (Start: 3 @40769 has 1 MA's), (6, 40823), (7, 40826), (11, 40883), (14, 40919),

Gene: Tourach\_32 Start: 28413, Stop: 28679, Start Num: 1

Candidate Starts for Tourach\_32:

(Start: 1 @28413 has 18 MA's), (Start: 4 @28458 has 8 MA's), (7, 28509), (15, 28647), (16, 28668),

Gene: Tyson\_30 Start: 27735, Stop: 27959, Start Num: 4

Candidate Starts for Tyson\_30:

(Start: 1 @27690 has 18 MA's), (Start: 4 @27735 has 8 MA's), (11, 27843),

Gene: UPIE\_30 Start: 27688, Stop: 27957, Start Num: 1

Candidate Starts for UPIE\_30:

(Start: 1 @27688 has 18 MA's), (Start: 4 @27733 has 8 MA's), (11, 27841),

Gene: Wamburgexpress\_30 Start: 27703, Stop: 27972, Start Num: 1

Candidate Starts for Wamburgexpress\_30:

(Start: 1 @27703 has 18 MA's), (Start: 4 @27748 has 8 MA's), (11, 27856),

Gene: Wyatt2\_30 Start: 27690, Stop: 27959, Start Num: 1

Candidate Starts for Wyatt2\_30:

(Start: 1 @27690 has 18 MA's), (Start: 4 @27735 has 8 MA's), (11, 27843),

Gene: Zaria\_30 Start: 27704, Stop: 27973, Start Num: 1

Candidate Starts for Zaria\_30:

(Start: 1 @27704 has 18 MA's), (Start: 4 @27749 has 8 MA's), (11, 27857),

Gene: ZhongYanYuan\_31 Start: 28288, Stop: 28509, Start Num: 4

Candidate Starts for ZhongYanYuan\_31:

(Start: 1 @28243 has 18 MA's), (Start: 4 @28288 has 8 MA's), (7, 28339), (15, 28477), (16, 28498),