

Pham 200266



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 200266 Report

This analysis was run 01/18/25 on database version 583.

Pham number 200266 has 52 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Cheesy\_51, Xenomorph\_48, Bowling\_50, Elsa\_51, Correa\_49, Nason\_51, Arcadia\_51, Tribby\_52
- Track 2 : GoCrazy\_50, Benllo\_52, JEGGS\_50, BenitoAntonio\_51, Heisenberger\_50, Kardesai\_52, KeaneyLin\_50
- Track 3 : Dynamite\_51, NapoleonB\_51
- Track 4 : Hankly\_50, Circum\_53, Mudcat\_48, Mooshroom\_53
- Track 5 : Inked\_50
- Track 6 : Tokki\_51
- Track 7 : Chlochlo\_46, Bouchard\_47, Shepard\_50
- Track 8 : LilHuddy\_48, Phaby\_49
- Track 9 : Giantsbane\_48
- Track 10 : Zippen\_48
- Track 11 : Ingrid\_48, Loretta\_48
- Track 12 : Caterpillar\_43, MediumFry\_44
- Track 13 : Makai\_46
- Track 14 : Truckee\_44
- Track 15 : Egad\_47, ProfFrink\_47, Stayer\_47, Boog\_48, Sloopyjoe\_47, BronxBay\_47, Linda\_47, StarLord\_47, Michelle\_47, Shiba\_46, MrAaronian\_47, Raunak\_50, DoctorPepper\_46, Djungelskog\_47, Salk\_47
- Track 16 : Powellldog\_53

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

The start number called the most often in the published annotations is 4, it was called in 15 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arcadia\_51, BenitoAntonio\_51, Benllo\_52, Bowling\_50, Cheesy\_51, Correa\_49, Dynamite\_51, Elsa\_51, GoCrazy\_50, Heisenberger\_50, JEGGS\_50, Kardesai\_52, KeaneyLin\_50, NapoleonB\_51, Nason\_51, Tribby\_52, Xenomorph\_48,

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

- Circum\_53, Hankly\_50, Mooshroom\_53, Mudcat\_48,

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

- Boog\_48, Bouchard\_47, BronxBay\_47, Caterpillar\_43, Chlochlo\_46, Djungelskog\_47, DoctorPepper\_46, Egad\_47, Giantsbane\_48, Ingrid\_48, Inked\_50, LilHuddy\_48, Linda\_47, Loretta\_48, Makai\_46, MediumFry\_44, Michelle\_47, MrAaronian\_47, Phaby\_49, PowellDog\_53, ProfFrink\_47, Raunak\_50, Salk\_47, Shepard\_50, Shiba\_46, Sloopyjoe\_47, StarLord\_47, Stayer\_47, Tokki\_51, Truckee\_44, Zippen\_48,

### Summary by start number:

Start 1:

- Found in 16 of 52 ( 30.8% ) of genes in pham
- Manual Annotations of this start: 13 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Boog\_48 (AW), BronxBay\_47 (AW), Djungelskog\_47 (AW), DoctorPepper\_46 (AW), Egad\_47 (AW), Linda\_47 (AW), Michelle\_47 (AW), MrAaronian\_47 (AW), PowellDog\_53 (AW), ProfFrink\_47 (AW), Raunak\_50 (AW), Salk\_47 (AW), Shiba\_46 (AW), Sloopyjoe\_47 (AW), StarLord\_47 (AW), Stayer\_47 (AW),

Start 2:

- Found in 11 of 52 ( 21.2% ) of genes in pham
- Manual Annotations of this start: 4 of 44
- Called 36.4% of time when present
- Phage (with cluster) where this start called: Circum\_53 (AM), Hankly\_50 (AM), Mooshroom\_53 (AM), Mudcat\_48 (AM),

Start 3:

- Found in 15 of 52 ( 28.8% ) of genes in pham
- Manual Annotations of this start: 12 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bouchard\_47 (AU2), Caterpillar\_43 (AU4), Chlochlo\_46 (AU2), Giantsbane\_48 (AU2), Ingrid\_48 (AU3), Inked\_50 (AU), LilHuddy\_48 (AU2), Loretta\_48 (AU3), Makai\_46 (AU5), MediumFry\_44 (AU4), Phaby\_49 (AU2), Shepard\_50 (AU2), Tokki\_51 (AU2), Truckee\_44 (AU5), Zippen\_48 (AU3),

Start 4:

- Found in 21 of 52 ( 40.4% ) of genes in pham
- Manual Annotations of this start: 15 of 44
- Called 81.0% of time when present
- Phage (with cluster) where this start called: Arcadia\_51 (AM), BenitoAntonio\_51 (AM), Benllo\_52 (AM), Bowling\_50 (AM), Cheesy\_51 (AM), Correa\_49 (AM), Dynamite\_51 (AM), Elsa\_51 (AM), GoCrazy\_50 (AM), Heisenberger\_50 (AM), JEGGS\_50 (AM), Kardesai\_52 (AM), KeaneyLin\_50 (AM), NapoleonB\_51 (AM), Nason\_51 (AM), Tribby\_52 (AM), Xenomorph\_48 (AM),

### Summary by clusters:

There are 7 clusters represented in this pham: AM, AU3, AU2, AU5, AU4, AW, AU,

Info for manual annotations of cluster AM:

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

- Start number 4 was manually annotated 15 times for cluster AM.

Info for manual annotations of cluster AU:

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

Info for manual annotations of cluster AU2:

- Start number 3 was manually annotated 5 times for cluster AU2.

Info for manual annotations of cluster AU3:

- Start number 3 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 3 was manually annotated 2 times for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 3 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AW:

- Start number 1 was manually annotated 13 times for cluster AW.

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

Gene: Arcadia\_51 Start: 33107, Stop: 33238, Start Num: 4

Candidate Starts for Arcadia\_51:

(Start: 4 @33107 has 15 MA's),

Gene: BenitoAntonio\_51 Start: 32641, Stop: 32775, Start Num: 4

Candidate Starts for BenitoAntonio\_51:

(Start: 2 @32626 has 4 MA's), (Start: 4 @32641 has 15 MA's),

Gene: Benllo\_52 Start: 33319, Stop: 33453, Start Num: 4

Candidate Starts for Benllo\_52:

(Start: 2 @33304 has 4 MA's), (Start: 4 @33319 has 15 MA's),

Gene: Boog\_48 Start: 32111, Stop: 32281, Start Num: 1

Candidate Starts for Boog\_48:

(Start: 1 @32111 has 13 MA's),

Gene: Bouchard\_47 Start: 34638, Stop: 34778, Start Num: 3

Candidate Starts for Bouchard\_47:

(Start: 3 @34638 has 12 MA's),

Gene: Bowling\_50 Start: 32852, Stop: 32983, Start Num: 4

Candidate Starts for Bowling\_50:

(Start: 4 @32852 has 15 MA's),

Gene: BronxBay\_47 Start: 32409, Stop: 32579, Start Num: 1

Candidate Starts for BronxBay\_47:

(Start: 1 @32409 has 13 MA's),

Gene: Caterpillar\_43 Start: 33489, Stop: 33626, Start Num: 3

Candidate Starts for Caterpillar\_43:  
(Start: 3 @33489 has 12 MA's), (8, 33558),

Gene: Cheesy\_51 Start: 32828, Stop: 32959, Start Num: 4  
Candidate Starts for Cheesy\_51:  
(Start: 4 @32828 has 15 MA's),

Gene: Chlochlo\_46 Start: 34382, Stop: 34522, Start Num: 3  
Candidate Starts for Chlochlo\_46:  
(Start: 3 @34382 has 12 MA's),

Gene: Circum\_53 Start: 33495, Stop: 33644, Start Num: 2  
Candidate Starts for Circum\_53:  
(Start: 2 @33495 has 4 MA's), (Start: 4 @33510 has 15 MA's),

Gene: Correa\_49 Start: 31974, Stop: 32105, Start Num: 4  
Candidate Starts for Correa\_49:  
(Start: 4 @31974 has 15 MA's),

Gene: Djungelskog\_47 Start: 32408, Stop: 32578, Start Num: 1  
Candidate Starts for Djungelskog\_47:  
(Start: 1 @32408 has 13 MA's),

Gene: DoctorPepper\_46 Start: 32113, Stop: 32283, Start Num: 1  
Candidate Starts for DoctorPepper\_46:  
(Start: 1 @32113 has 13 MA's),

Gene: Dynamite\_51 Start: 33040, Stop: 33168, Start Num: 4  
Candidate Starts for Dynamite\_51:  
(Start: 4 @33040 has 15 MA's),

Gene: Egad\_47 Start: 32410, Stop: 32580, Start Num: 1  
Candidate Starts for Egad\_47:  
(Start: 1 @32410 has 13 MA's),

Gene: Elsa\_51 Start: 33107, Stop: 33238, Start Num: 4  
Candidate Starts for Elsa\_51:  
(Start: 4 @33107 has 15 MA's),

Gene: Giantsbane\_48 Start: 33565, Stop: 33705, Start Num: 3  
Candidate Starts for Giantsbane\_48:  
(Start: 3 @33565 has 12 MA's),

Gene: GoCrazy\_50 Start: 32975, Stop: 33109, Start Num: 4  
Candidate Starts for GoCrazy\_50:  
(Start: 2 @32960 has 4 MA's), (Start: 4 @32975 has 15 MA's),

Gene: Hankly\_50 Start: 32234, Stop: 32383, Start Num: 2  
Candidate Starts for Hankly\_50:  
(Start: 2 @32234 has 4 MA's), (Start: 4 @32249 has 15 MA's),

Gene: Heisenberger\_50 Start: 32530, Stop: 32664, Start Num: 4  
Candidate Starts for Heisenberger\_50:

(Start: 2 @32515 has 4 MA's), (Start: 4 @32530 has 15 MA's),

Gene: Ingrid\_48 Start: 34313, Stop: 34441, Start Num: 3

Candidate Starts for Ingrid\_48:

(Start: 3 @34313 has 12 MA's), (5, 34334), (9, 34400), (10, 34415), (11, 34421),

Gene: Inked\_50 Start: 35444, Stop: 35572, Start Num: 3

Candidate Starts for Inked\_50:

(Start: 3 @35444 has 12 MA's), (10, 35546),

Gene: JEGGS\_50 Start: 32585, Stop: 32719, Start Num: 4

Candidate Starts for JEGGS\_50:

(Start: 2 @32570 has 4 MA's), (Start: 4 @32585 has 15 MA's),

Gene: Kardesai\_52 Start: 33219, Stop: 33353, Start Num: 4

Candidate Starts for Kardesai\_52:

(Start: 2 @33204 has 4 MA's), (Start: 4 @33219 has 15 MA's),

Gene: KeaneyLin\_50 Start: 32975, Stop: 33109, Start Num: 4

Candidate Starts for KeaneyLin\_50:

(Start: 2 @32960 has 4 MA's), (Start: 4 @32975 has 15 MA's),

Gene: LilHuddy\_48 Start: 34521, Stop: 34658, Start Num: 3

Candidate Starts for LilHuddy\_48:

(Start: 3 @34521 has 12 MA's), (9, 34608),

Gene: Linda\_47 Start: 32406, Stop: 32576, Start Num: 1

Candidate Starts for Linda\_47:

(Start: 1 @32406 has 13 MA's),

Gene: Loretta\_48 Start: 34313, Stop: 34441, Start Num: 3

Candidate Starts for Loretta\_48:

(Start: 3 @34313 has 12 MA's), (5, 34334), (9, 34400), (10, 34415), (11, 34421),

Gene: Makai\_46 Start: 34498, Stop: 34635, Start Num: 3

Candidate Starts for Makai\_46:

(Start: 3 @34498 has 12 MA's), (8, 34567), (9, 34585),

Gene: MediumFry\_44 Start: 33794, Stop: 33931, Start Num: 3

Candidate Starts for MediumFry\_44:

(Start: 3 @33794 has 12 MA's), (8, 33863),

Gene: Michelle\_47 Start: 32408, Stop: 32578, Start Num: 1

Candidate Starts for Michelle\_47:

(Start: 1 @32408 has 13 MA's),

Gene: Mooshroom\_53 Start: 33204, Stop: 33353, Start Num: 2

Candidate Starts for Mooshroom\_53:

(Start: 2 @33204 has 4 MA's), (Start: 4 @33219 has 15 MA's),

Gene: MrAaronian\_47 Start: 32408, Stop: 32578, Start Num: 1

Candidate Starts for MrAaronian\_47:

(Start: 1 @32408 has 13 MA's),

Gene: Mudcat\_48 Start: 33928, Stop: 34077, Start Num: 2  
Candidate Starts for Mudcat\_48:  
(Start: 2 @33928 has 4 MA's), (Start: 4 @33943 has 15 MA's),

Gene: NapoleonB\_51 Start: 33040, Stop: 33168, Start Num: 4  
Candidate Starts for NapoleonB\_51:  
(Start: 4 @33040 has 15 MA's),

Gene: Nason\_51 Start: 33107, Stop: 33238, Start Num: 4  
Candidate Starts for Nason\_51:  
(Start: 4 @33107 has 15 MA's),

Gene: Phaby\_49 Start: 35065, Stop: 35202, Start Num: 3  
Candidate Starts for Phaby\_49:  
(Start: 3 @35065 has 12 MA's), (9, 35152),

Gene: Powelldog\_53 Start: 33364, Stop: 33534, Start Num: 1  
Candidate Starts for Powelldog\_53:  
(Start: 1 @33364 has 13 MA's), (7, 33427),

Gene: ProfFrink\_47 Start: 32409, Stop: 32579, Start Num: 1  
Candidate Starts for ProfFrink\_47:  
(Start: 1 @32409 has 13 MA's),

Gene: Raunak\_50 Start: 32106, Stop: 32276, Start Num: 1  
Candidate Starts for Raunak\_50:  
(Start: 1 @32106 has 13 MA's),

Gene: Salk\_47 Start: 32406, Stop: 32576, Start Num: 1  
Candidate Starts for Salk\_47:  
(Start: 1 @32406 has 13 MA's),

Gene: Shepard\_50 Start: 34596, Stop: 34736, Start Num: 3  
Candidate Starts for Shepard\_50:  
(Start: 3 @34596 has 12 MA's),

Gene: Shiba\_46 Start: 32106, Stop: 32276, Start Num: 1  
Candidate Starts for Shiba\_46:  
(Start: 1 @32106 has 13 MA's),

Gene: Sloopyjoe\_47 Start: 32410, Stop: 32580, Start Num: 1  
Candidate Starts for Sloopyjoe\_47:  
(Start: 1 @32410 has 13 MA's),

Gene: StarLord\_47 Start: 32409, Stop: 32579, Start Num: 1  
Candidate Starts for StarLord\_47:  
(Start: 1 @32409 has 13 MA's),

Gene: Stayer\_47 Start: 32406, Stop: 32576, Start Num: 1  
Candidate Starts for Stayer\_47:  
(Start: 1 @32406 has 13 MA's),

Gene: Tokki\_51 Start: 34693, Stop: 34830, Start Num: 3  
Candidate Starts for Tokki\_51:  
(Start: 3 @34693 has 12 MA's), (6, 34717), (9, 34780), (10, 34795),

Gene: Tribby\_52 Start: 33045, Stop: 33176, Start Num: 4  
Candidate Starts for Tribby\_52:  
(Start: 4 @33045 has 15 MA's),

Gene: Truckee\_44 Start: 34288, Stop: 34425, Start Num: 3  
Candidate Starts for Truckee\_44:  
(Start: 3 @34288 has 12 MA's), (8, 34357), (9, 34375),

Gene: Xenomorph\_48 Start: 32778, Stop: 32909, Start Num: 4  
Candidate Starts for Xenomorph\_48:  
(Start: 4 @32778 has 15 MA's),

Gene: Zippen\_48 Start: 35143, Stop: 35271, Start Num: 3  
Candidate Starts for Zippen\_48:  
(Start: 3 @35143 has 12 MA's), (9, 35230), (10, 35245),