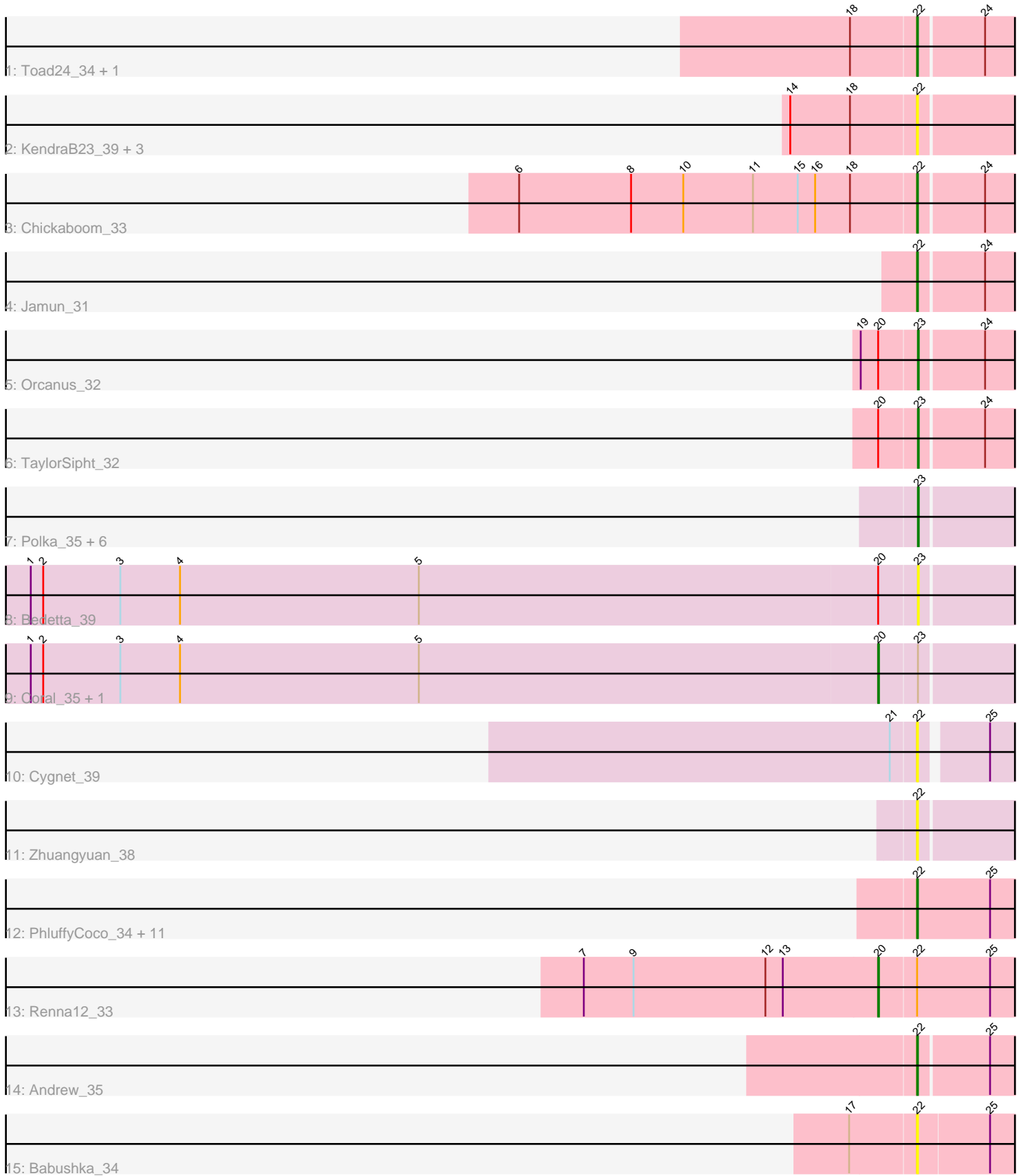


Pham 214456



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 214456 Report

This analysis was run 02/22/25 on database version 588.

Pham number 214456 has 37 members, 20 are drafts.

Phages represented in each track:

- Track 1 : Toad24\_34, Eesa\_31
- Track 2 : KendraB23\_39, Westrich\_37, Gravel\_38, Pelletreau\_38
- Track 3 : Chickaboom\_33
- Track 4 : Jamun\_31
- Track 5 : Orcanus\_32
- Track 6 : TaylorSipht\_32
- Track 7 : Polka\_35, Bibble12\_36, HannahPhantana\_36, Daob\_37, Colusalem\_38, Jerole\_42, OtsoOtso\_39
- Track 8 : Bedetta\_39
- Track 9 : Coral\_35, Cote\_37
- Track 10 : Cygnet\_39
- Track 11 : Zhuangyuan\_38
- Track 12 : PhluffyCoco\_34, AmiCi24\_33, Atlantica\_34, Leona\_33, Juno112\_33, RedFox\_34, HamCheese\_33, KHumphrey\_34, Camara\_34, Glotell\_36, Rattail\_34, DanHam62\_34
- Track 13 : Renna12\_33
- Track 14 : Andrew\_35
- Track 15 : Babushka\_34

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

The start number called the most often in the published annotations is 22, it was called in 9 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AmiCi24\_33, Andrew\_35, Atlantica\_34, Babushka\_34, Camara\_34, Chickaboom\_33, Cygnet\_39, DanHam62\_34, Eesa\_31, Glotell\_36, Gravel\_38, HamCheese\_33, Jamun\_31, Juno112\_33, KHumphrey\_34, KendraB23\_39, Leona\_33, Pelletreau\_38, PhluffyCoco\_34, Rattail\_34, RedFox\_34, Toad24\_34, Westrich\_37, Zhuangyuan\_38,

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

- Renna12\_33,

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

- Bedetta\_39, Bibble12\_36, Colusalem\_38, Coral\_35, Cote\_37, Daob\_37, HannahPhantana\_36, Jerole\_42, Orcanus\_32, OtsoOtso\_39, Polka\_35, TaylorSipht\_32,

### Summary by start number:

Start 20:

- Found in 6 of 37 ( 16.2% ) of genes in pham
- Manual Annotations of this start: 3 of 17
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Coral\_35 (AS2), Cote\_37 (AS2), Renna12\_33 (AS3),

Start 22:

- Found in 25 of 37 ( 67.6% ) of genes in pham
- Manual Annotations of this start: 9 of 17
- Called 96.0% of time when present
- Phage (with cluster) where this start called: AmiCi24\_33 (AS3), Andrew\_35 (AS3), Atlantica\_34 (AS3), Babushka\_34 (AS3), Camara\_34 (AS3), Chickaboom\_33 (AS1), Cygnet\_39 (AS2), DanHam62\_34 (AS3), Eesa\_31 (AS1), Glotell\_36 (AS3), Gravel\_38 (AS1), HamCheese\_33 (AS3), Jamun\_31 (AS1), Juno112\_33 (AS3), KHumphrey\_34 (AS3), KendraB23\_39 (AS1), Leona\_33 (AS3), Pelletreau\_38 (AS1), PhluffyCoco\_34 (AS3), Rattail\_34 (AS3), RedFox\_34 (AS3), Toad24\_34 (AS1), Westrich\_37 (AS1), Zhuangyuan\_38 (AS2),

Start 23:

- Found in 12 of 37 ( 32.4% ) of genes in pham
- Manual Annotations of this start: 5 of 17
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Bedetta\_39 (AS2), Bibble12\_36 (AS2), Colusalem\_38 (AS2), Daob\_37 (AS2), HannahPhantana\_36 (AS2), Jerole\_42 (AS2), Orcanus\_32 (AS1), OtsoOtso\_39 (AS2), Polka\_35 (AS2), TaylorSipht\_32 (AS1),

### Summary by clusters:

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

Info for manual annotations of cluster AS1:

- Start number 22 was manually annotated 3 times for cluster AS1.
- Start number 23 was manually annotated 2 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 20 was manually annotated 2 times for cluster AS2.
- Start number 23 was manually annotated 3 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 20 was manually annotated 1 time for cluster AS3.
- Start number 22 was manually annotated 6 times for cluster AS3.

### Gene Information:

Gene: AmiCi24\_33 Start: 22209, Stop: 22030, Start Num: 22  
Candidate Starts for AmiCi24\_33:  
(Start: 22 @22209 has 9 MA's), (25, 22137),

Gene: Andrew\_35 Start: 22183, Stop: 21995, Start Num: 22  
Candidate Starts for Andrew\_35:  
(Start: 22 @22183 has 9 MA's), (25, 22102),

Gene: Atlantica\_34 Start: 22211, Stop: 22032, Start Num: 22  
Candidate Starts for Atlantica\_34:  
(Start: 22 @22211 has 9 MA's), (25, 22139),

Gene: Babushka\_34 Start: 22143, Stop: 21952, Start Num: 22  
Candidate Starts for Babushka\_34:  
(17, 22221), (Start: 22 @22143 has 9 MA's), (25, 22059),

Gene: Bedetta\_39 Start: 22863, Stop: 22681, Start Num: 23  
Candidate Starts for Bedetta\_39:  
(1, 23928), (2, 23913), (3, 23820), (4, 23748), (5, 23460), (Start: 20 @22908 has 3 MA's), (Start: 23 @22863 has 5 MA's),

Gene: Bible12\_36 Start: 22712, Stop: 22530, Start Num: 23  
Candidate Starts for Bible12\_36:  
(Start: 23 @22712 has 5 MA's),

Gene: Camara\_34 Start: 22213, Stop: 22034, Start Num: 22  
Candidate Starts for Camara\_34:  
(Start: 22 @22213 has 9 MA's), (25, 22141),

Gene: Chickaboom\_33 Start: 22527, Stop: 22345, Start Num: 22  
Candidate Starts for Chickaboom\_33:  
(6, 23004), (8, 22869), (10, 22806), (11, 22722), (15, 22668), (16, 22647), (18, 22605), (Start: 22 @22527 has 9 MA's), (24, 22452),

Gene: Colusalem\_38 Start: 22693, Stop: 22511, Start Num: 23  
Candidate Starts for Colusalem\_38:  
(Start: 23 @22693 has 5 MA's),

Gene: Coral\_35 Start: 22609, Stop: 22382, Start Num: 20  
Candidate Starts for Coral\_35:  
(1, 23629), (2, 23614), (3, 23521), (4, 23449), (5, 23161), (Start: 20 @22609 has 3 MA's), (Start: 23 @22564 has 5 MA's),

Gene: Cote\_37 Start: 23086, Stop: 22859, Start Num: 20  
Candidate Starts for Cote\_37:  
(1, 24106), (2, 24091), (3, 23998), (4, 23926), (5, 23638), (Start: 20 @23086 has 3 MA's), (Start: 23 @23041 has 5 MA's),

Gene: Cygnet\_39 Start: 23502, Stop: 23323, Start Num: 22  
Candidate Starts for Cygnet\_39:  
(21, 23532), (Start: 22 @23502 has 9 MA's), (25, 23430),

Gene: DanHam62\_34 Start: 22210, Stop: 22031, Start Num: 22

Candidate Starts for DanHam62\_34:  
(Start: 22 @22210 has 9 MA's), (25, 22138),

Gene: Daob\_37 Start: 23050, Stop: 22868, Start Num: 23  
Candidate Starts for Daob\_37:  
(Start: 23 @23050 has 5 MA's),

Gene: Eesa\_31 Start: 23331, Stop: 23149, Start Num: 22  
Candidate Starts for Eesa\_31:  
(18, 23409), (Start: 22 @23331 has 9 MA's), (24, 23256),

Gene: Glotell\_36 Start: 22369, Stop: 22190, Start Num: 22  
Candidate Starts for Glotell\_36:  
(Start: 22 @22369 has 9 MA's), (25, 22297),

Gene: Gravel\_38 Start: 23301, Stop: 23119, Start Num: 22  
Candidate Starts for Gravel\_38:  
(14, 23451), (18, 23379), (Start: 22 @23301 has 9 MA's),

Gene: HamCheese\_33 Start: 22197, Stop: 22018, Start Num: 22  
Candidate Starts for HamCheese\_33:  
(Start: 22 @22197 has 9 MA's), (25, 22125),

Gene: HannahPhantana\_36 Start: 22712, Stop: 22530, Start Num: 23  
Candidate Starts for HannahPhantana\_36:  
(Start: 23 @22712 has 5 MA's),

Gene: Jamun\_31 Start: 22438, Stop: 22256, Start Num: 22  
Candidate Starts for Jamun\_31:  
(Start: 22 @22438 has 9 MA's), (24, 22363),

Gene: Jerole\_42 Start: 22835, Stop: 22653, Start Num: 23  
Candidate Starts for Jerole\_42:  
(Start: 23 @22835 has 5 MA's),

Gene: Juno112\_33 Start: 22213, Stop: 22034, Start Num: 22  
Candidate Starts for Juno112\_33:  
(Start: 22 @22213 has 9 MA's), (25, 22141),

Gene: KHumphrey\_34 Start: 22212, Stop: 22033, Start Num: 22  
Candidate Starts for KHumphrey\_34:  
(Start: 22 @22212 has 9 MA's), (25, 22140),

Gene: KendraB23\_39 Start: 23489, Stop: 23307, Start Num: 22  
Candidate Starts for KendraB23\_39:  
(14, 23639), (18, 23567), (Start: 22 @23489 has 9 MA's),

Gene: Leona\_33 Start: 22280, Stop: 22101, Start Num: 22  
Candidate Starts for Leona\_33:  
(Start: 22 @22280 has 9 MA's), (25, 22208),

Gene: Orcanus\_32 Start: 23008, Stop: 22826, Start Num: 23  
Candidate Starts for Orcanus\_32:

(19, 23074), (Start: 20 @23053 has 3 MA's), (Start: 23 @23008 has 5 MA's), (24, 22933),

Gene: OtsoOtso\_39 Start: 22566, Stop: 22384, Start Num: 23

Candidate Starts for OtsoOtso\_39:

(Start: 23 @22566 has 5 MA's),

Gene: Pelletreau\_38 Start: 23301, Stop: 23119, Start Num: 22

Candidate Starts for Pelletreau\_38:

(14, 23451), (18, 23379), (Start: 22 @23301 has 9 MA's),

Gene: PhluffyCoco\_34 Start: 22210, Stop: 22016, Start Num: 22

Candidate Starts for PhluffyCoco\_34:

(Start: 22 @22210 has 9 MA's), (25, 22123),

Gene: Polka\_35 Start: 22566, Stop: 22384, Start Num: 23

Candidate Starts for Polka\_35:

(Start: 23 @22566 has 5 MA's),

Gene: Rattail\_34 Start: 22294, Stop: 22115, Start Num: 22

Candidate Starts for Rattail\_34:

(Start: 22 @22294 has 9 MA's), (25, 22222),

Gene: RedFox\_34 Start: 22209, Stop: 22030, Start Num: 22

Candidate Starts for RedFox\_34:

(Start: 22 @22209 has 9 MA's), (25, 22137),

Gene: Renna12\_33 Start: 22293, Stop: 22057, Start Num: 20

Candidate Starts for Renna12\_33:

(7, 22647), (9, 22587), (12, 22428), (13, 22407), (Start: 20 @22293 has 3 MA's), (Start: 22 @22251 has 9 MA's), (25, 22164),

Gene: TaylorSipht\_32 Start: 22421, Stop: 22239, Start Num: 23

Candidate Starts for TaylorSipht\_32:

(Start: 20 @22466 has 3 MA's), (Start: 23 @22421 has 5 MA's), (24, 22346),

Gene: Toad24\_34 Start: 23550, Stop: 23368, Start Num: 22

Candidate Starts for Toad24\_34:

(18, 23628), (Start: 22 @23550 has 9 MA's), (24, 23475),

Gene: Westrich\_37 Start: 23225, Stop: 23043, Start Num: 22

Candidate Starts for Westrich\_37:

(14, 23375), (18, 23303), (Start: 22 @23225 has 9 MA's),

Gene: Zhuangyuan\_38 Start: 23402, Stop: 23214, Start Num: 22

Candidate Starts for Zhuangyuan\_38:

(Start: 22 @23402 has 9 MA's),