

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 203283 Report

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

Pham number 203283 has 23 members, 1 are drafts.

Phages represented in each track:

- Track 1: Mudpuppy 49
- Track 2 : Yang\_54
- Track 3 : Warda\_53
- Track 4 : DrSierra 51
- Track 5 : Nitro 54
- Track 6 : ObiToo\_58
- Track 7: Ascela 54, Iter 54
- Track 8 : Maureen\_54, Liebe\_54
- Track 9 : Buldak 56
- Track 10: Percival 36, Gretchen 36
- Track 11 : Floof 36
- Track 12 : SuMoo 33
- Track 13 : GardenState\_35, IAmGroot\_35
- Track 14 : Mabodamaca 33
- Track 15 : UtzChips 32, Barnstormer 32
- Track 16 : Cen1621 33
- Track 17 : Caron\_35
- Track 18 : Smelly 24

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

The start number called the most often in the published annotations is 7, it was called in 21 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Ascela\_54, Barnstormer\_32, Buldak\_56, Cen1621\_33, DrSierra\_51, Floof\_36, GardenState\_35, Gretchen\_36, IAmGroot\_35, Iter\_54, Liebe\_54, Mabodamaca\_33, Maureen\_54, Mudpuppy\_49, Nitro\_54, ObiToo\_58, Percival\_36, Smelly\_24, SuMoo\_33, UtzChips\_32, Warda\_53, Yang\_54,

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

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

Caron\_35,

### **Summary by start number:**

#### Start 7:

- Found in 22 of 23 (95.7%) of genes in pham
- Manual Annotations of this start: 21 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ascela\_54 (AZ1), Barnstormer\_32 (EH), Buldak\_56 (EB), Cen1621\_33 (EH), DrSierra\_51 (AZ1), Floof\_36 (EH), GardenState\_35 (EH), Gretchen\_36 (EH), IAmGroot\_35 (EH), Iter\_54 (AZ1), Liebe\_54 (AZ2), Mabodamaca\_33 (EH), Maureen\_54 (AZ2), Mudpuppy\_49 (AZ1), Nitro\_54 (AZ1), ObiToo\_58 (AZ1), Percival\_36 (EH), Smelly\_24 (GK), SuMoo\_33 (EH), UtzChips\_32 (EH), Warda\_53 (AZ1), Yang\_54 (AZ1),

#### Start 8:

- Found in 1 of 23 (4.3%) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Caron\_35 (EH),

### Summary by clusters:

There are 5 clusters represented in this pham: AZ1, AZ2, GK, EH, EB,

Info for manual annotations of cluster AZ1:

•Start number 7 was manually annotated 8 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

•Start number 7 was manually annotated 2 times for cluster AZ2.

Info for manual annotations of cluster EB:

Start number 7 was manually annotated 1 time for cluster EB.

Info for manual annotations of cluster EH:

- •Start number 7 was manually annotated 10 times for cluster EH.
- •Start number 8 was manually annotated 1 time for cluster EH.

#### Gene Information:

Gene: Ascela\_54 Start: 38184, Stop: 38390, Start Num: 7

Candidate Starts for Ascela\_54:

(Start: 7 @ 38184 has 21 MA's), (11, 38286), (13, 38310),

Gene: Barnstormer 32 Start: 23785, Stop: 24018, Start Num: 7

Candidate Starts for Barnstormer 32:

(3, 23161), (4, 23401), (Start: 7 @23785 has 21 MA's), (12, 23908),

Gene: Buldak\_56 Start: 36115, Stop: 36327, Start Num: 7

Candidate Starts for Buldak\_56:

(Start: 7 @ 36115 has 21 MA's), (10, 36154), (13, 36250),

Gene: Caron\_35 Start: 24264, Stop: 24491, Start Num: 8

Candidate Starts for Caron\_35:

(Start: 8 @24264 has 1 MA's), (12, 24378),

Gene: Cen1621\_33 Start: 23276, Stop: 23482, Start Num: 7

Candidate Starts for Cen1621\_33:

(Start: 7 @23276 has 21 MA's), (12, 23396),

Gene: DrSierra\_51 Start: 36255, Stop: 36458, Start Num: 7

Candidate Starts for DrSierra\_51:

(Start: 7 @ 36255 has 21 MA's), (13, 36381),

Gene: Floof\_36 Start: 25209, Stop: 25427, Start Num: 7

Candidate Starts for Floof\_36:

(1, 24261), (2, 24555), (Start: 7 @25209 has 21 MA's), (15, 25407),

Gene: GardenState\_35 Start: 24724, Stop: 24942, Start Num: 7

Candidate Starts for GardenState\_35:

(Start: 7 @24724 has 21 MA's), (15, 24925),

Gene: Gretchen\_36 Start: 26317, Stop: 26535, Start Num: 7

Candidate Starts for Gretchen\_36:

(Start: 7 @26317 has 21 MA's), (15, 26515),

Gene: IAmGroot\_35 Start: 25389, Stop: 25607, Start Num: 7

Candidate Starts for IAmGroot 35:

(Start: 7 @25389 has 21 MA's), (15, 25590),

Gene: Iter\_54 Start: 38176, Stop: 38382, Start Num: 7

Candidate Starts for Iter 54:

(Start: 7 @38176 has 21 MA's), (11, 38278), (13, 38302),

Gene: Liebe\_54 Start: 39610, Stop: 39810, Start Num: 7

Candidate Starts for Liebe\_54:

(Start: 7 @ 39610 has 21 MA's), (13, 39730),

Gene: Mabodamaca\_33 Start: 24562, Stop: 24792, Start Num: 7

Candidate Starts for Mabodamaca\_33:

(Start: 7 @24562 has 21 MA's),

Gene: Maureen\_54 Start: 39609, Stop: 39809, Start Num: 7

Candidate Starts for Maureen 54:

(Start: 7 @ 39609 has 21 MA's), (13, 39729),

Gene: Mudpuppy\_49 Start: 37133, Stop: 37333, Start Num: 7

Candidate Starts for Mudpuppy\_49:

(Start: 7 @37133 has 21 MA's), (9, 37160), (13, 37256),

Gene: Nitro\_54 Start: 39215, Stop: 39412, Start Num: 7

Candidate Starts for Nitro 54:

(Start: 7 @39215 has 21 MA's), (13, 39335),

Gene: ObiToo\_58 Start: 38862, Stop: 39068, Start Num: 7

Candidate Starts for ObiToo\_58:

(Start: 7 @38862 has 21 MA's), (13, 38988),

Gene: Percival\_36 Start: 26151, Stop: 26369, Start Num: 7

Candidate Starts for Percival\_36:

(Start: 7 @26151 has 21 MA's), (15, 26349),

Gene: Smelly\_24 Start: 17195, Stop: 17398, Start Num: 7

Candidate Starts for Smelly\_24:

(Start: 7 @ 17195 has 21 MA's), (14, 17372),

Gene: SuMoo\_33 Start: 23508, Stop: 23738, Start Num: 7

Candidate Starts for SuMoo\_33: (Start: 7 @23508 has 21 MA's),

Gene: UtzChips\_32 Start: 23770, Stop: 24003, Start Num: 7

Candidate Starts for UtzChips\_32:

(3, 23146), (4, 23386), (Start: 7 @23770 has 21 MA's), (12, 23893),

Gene: Warda\_53 Start: 37573, Stop: 37773, Start Num: 7

Candidate Starts for Warda\_53:

(Start: 7 @ 37573 has 21 MA's), (9, 37600), (13, 37696),

Gene: Yang\_54 Start: 38204, Stop: 38410, Start Num: 7

Candidate Starts for Yang\_54:

(5, 37991), (6, 38126), (Start: 7 @38204 has 21 MA's), (13, 38330),