



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 289406 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289406 has 63 members, 18 are drafts.

Phages represented in each track:

- Track 1 : Salgado\_30
- Track 2 : Edmundo\_29
- Track 3 : LiSara\_29
- Track 4 : ScienceWizSam\_26, Westerlin\_25, Kinny\_23, Niktson\_24, AreFloNak\_24, ElephantMan\_24, Brunswick\_24, TrixiePhattel\_21, BarbieDoll\_24, Nivinsha\_24, Muglass\_23, Shepard\_25, Breylor17\_25, Stardrop\_22, Biscute\_22, Argan\_20, Tatanka\_24, Acai\_24, Issa\_24, Renaldo\_26, Darby\_24, Barbonzobean\_24, Teacup\_24, Phaila\_20, LilHuddy\_25, Altjira\_20, Zeina\_21, Synepsis\_23, Phaby\_25, LucySwiss\_24, Tenney120\_21, Navi1117\_21, Mardi\_22
- Track 5 : Gordon\_24, CastorTray\_26, Inked\_26, Bouchard\_25, PoeMe\_22, Chlochlo\_25, Tokki\_25, Nightmare\_25, LastNadiia\_5
- Track 6 : Dinallo\_25, Tipton\_25, Tenno\_25, MiniBagel\_24, CapnMurica\_24
- Track 7 : DevitoJr\_24
- Track 8 : Trustiboi\_25
- Track 9 : Anandi\_27
- Track 10 : Uzumaki\_21
- Track 11 : KevinMinion\_21, GantcherGoblin\_20
- Track 12 : Lewando\_24
- Track 13 : Leathea\_21
- Track 14 : Sunny\_, Merry\_
- Track 15 : BlueFeather\_18
- Track 16 : Maruru\_28
- Track 17 : Prairie\_33

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

The start number called the most often in the published annotations is 14, it was called in 44 of the 45 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acai\_24, Altjira\_20, Anandi\_27, AreFloNak\_24, Argan\_20, BarbieDoll\_24, Barbonzobean\_24, Biscute\_22, BlueFeather\_18, Bouchard\_25, Breylor17\_25, Brunswick\_24, CapnMurica\_24, CastorTray\_26, Chlochlo\_25, Darby\_24, DevitoJr\_24, Dinallo\_25, ElephantMan\_24, GantcherGoblin\_20, Gordon\_24,

Inked\_26, Issa\_24, KevinMinion\_21, Kinny\_23, LastNadiia\_5, Leathea\_21, Lewando\_24, LiSara\_29, LilHuddy\_25, LucySwiss\_24, Mardi\_22, Maruru\_28, Merry\_, MiniBagel\_24, Muglass\_23, Navi1117\_21, Nightmare\_25, Niktson\_24, Nivinsha\_24, Phaby\_25, Phaila\_20, PoeMe\_22, Prairie\_33, Renaldo\_26, Salgado\_30, ScienceWizSam\_26, Shepard\_25, Stardrop\_22, Sunny\_, Synepsis\_23, Tatanka\_24, Teacup\_24, Tenney120\_21, Tenno\_25, Tipton\_25, Tokki\_25, TrixiePhattel\_21, Trustiboi\_25, Uzumaki\_21, Westerlin\_25, Zeina\_21,

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

- 

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

- Edmundo\_29,

### Summary by start number:

Start 13:

- Found in 1 of 63 ( 1.6% ) of genes in pham
- Manual Annotations of this start: 1 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Edmundo\_29 (AL),

Start 14:

- Found in 62 of 63 ( 98.4% ) of genes in pham
- Manual Annotations of this start: 44 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acai\_24 (AU1), Altjira\_20 (AU6), Anandi\_27 (AU4), AreFloNak\_24 (AU1), Argan\_20 (AU6), BarbieDoll\_24 (AU6), Barbonzobean\_24 (AU6), Biscute\_22 (AU6), BlueFeather\_18 (FE), Bouchard\_25 (AU2), Breylor17\_25 (AU1), Brunswick\_24 (AU1), CapnMurica\_24 (AU1), CastorTray\_26 (AU1), Chlochlo\_25 (AU2), Darby\_24 (AU1), DevitoJr\_24 (AU1), Dinallo\_25 (AU1), ElephantMan\_24 (AU1), GantcherGoblin\_20 (AU6), Gordon\_24 (AU1), Inked\_26 (AU7), Issa\_24 (AU1), KevinMinion\_21 (AU6), Kinny\_23 (AU6), LastNadiia\_5 (FR), Leathea\_21 (AU6), Lewando\_24 (AU6), LiSara\_29 (AL), LilHuddy\_25 (AU2), LucySwiss\_24 (AU1), Mardi\_22 (AU6), Maruru\_28 (FG), Merry\_ (EC), MiniBagel\_24 (AU1), Muglass\_23 (AU6), Navi1117\_21 (AU6), Nightmare\_25 (AU1), Niktson\_24 (AU1), Nivinsha\_24 (AU1), Phaby\_25 (AU2), Phaila\_20 (AU6), PoeMe\_22 (AU6), Prairie\_33 (FH), Renaldo\_26 (AU6), Salgado\_30 (AL), ScienceWizSam\_26 (AU1), Shepard\_25 (AU2), Stardrop\_22 (AU6), Sunny\_ (EC), Synepsis\_23 (AU1), Tatanka\_24 (AU1), Teacup\_24 (AU1), Tenney120\_21 (AU6), Tenno\_25 (AU1), Tipton\_25 (AU2), Tokki\_25 (AU2), TrixiePhattel\_21 (AU6), Trustiboi\_25 (AU1), Uzumaki\_21 (AU6), Westerlin\_25 (AU1), Zeina\_21 (AU6),

### Summary by clusters:

There are 11 clusters represented in this pham: FR, FG, AL, EC, AU1, AU2, FE, AU7, AU6, FH, AU4,

Info for manual annotations of cluster AL:

- Start number 13 was manually annotated 1 time for cluster AL.
- Start number 14 was manually annotated 2 times for cluster AL.

Info for manual annotations of cluster AU1:

- Start number 14 was manually annotated 19 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 14 was manually annotated 6 times for cluster AU2.

Info for manual annotations of cluster AU6:

- Start number 14 was manually annotated 11 times for cluster AU6.

Info for manual annotations of cluster AU7:

- Start number 14 was manually annotated 1 time for cluster AU7.

Info for manual annotations of cluster EC:

- Start number 14 was manually annotated 2 times for cluster EC.

Info for manual annotations of cluster FE:

- Start number 14 was manually annotated 1 time for cluster FE.

Info for manual annotations of cluster FG:

- Start number 14 was manually annotated 1 time for cluster FG.

Info for manual annotations of cluster FH:

- Start number 14 was manually annotated 1 time for cluster FH.

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

Gene: Acai\_24 Start: 19576, Stop: 19713, Start Num: 14

Candidate Starts for Acai\_24:

(Start: 14 @19576 has 44 MA's),

Gene: Altjira\_20 Start: 17077, Stop: 17208, Start Num: 14

Candidate Starts for Altjira\_20:

(Start: 14 @17077 has 44 MA's),

Gene: Anandi\_27 Start: 20129, Stop: 20260, Start Num: 14

Candidate Starts for Anandi\_27:

(Start: 14 @20129 has 44 MA's),

Gene: AreFloNak\_24 Start: 19537, Stop: 19671, Start Num: 14

Candidate Starts for AreFloNak\_24:

(Start: 14 @19537 has 44 MA's),

Gene: Argan\_20 Start: 16350, Stop: 16481, Start Num: 14

Candidate Starts for Argan\_20:

(Start: 14 @16350 has 44 MA's),

Gene: BarbieDoll\_24 Start: 18330, Stop: 18461, Start Num: 14

Candidate Starts for BarbieDoll\_24:

(Start: 14 @18330 has 44 MA's),

Gene: Barbonzobean\_24 Start: 17927, Stop: 18058, Start Num: 14  
Candidate Starts for Barbonzobean\_24:  
(Start: 14 @17927 has 44 MA's),

Gene: Biscute\_22 Start: 17978, Stop: 18109, Start Num: 14  
Candidate Starts for Biscute\_22:  
(Start: 14 @17978 has 44 MA's),

Gene: BlueFeather\_18 Start: 13518, Stop: 13676, Start Num: 14  
Candidate Starts for BlueFeather\_18:  
(10, 13455), (Start: 14 @13518 has 44 MA's), (15, 13545), (17, 13551),

Gene: Bouchard\_25 Start: 19716, Stop: 19850, Start Num: 14  
Candidate Starts for Bouchard\_25:  
(Start: 14 @19716 has 44 MA's),

Gene: Breylor17\_25 Start: 20143, Stop: 20277, Start Num: 14  
Candidate Starts for Breylor17\_25:  
(Start: 14 @20143 has 44 MA's),

Gene: Brunswick\_24 Start: 19606, Stop: 19743, Start Num: 14  
Candidate Starts for Brunswick\_24:  
(Start: 14 @19606 has 44 MA's),

Gene: CapnMurica\_24 Start: 20695, Stop: 20832, Start Num: 14  
Candidate Starts for CapnMurica\_24:  
(Start: 14 @20695 has 44 MA's),

Gene: CastorTray\_26 Start: 20001, Stop: 20135, Start Num: 14  
Candidate Starts for CastorTray\_26:  
(Start: 14 @20001 has 44 MA's),

Gene: Chlochlo\_25 Start: 19746, Stop: 19880, Start Num: 14  
Candidate Starts for Chlochlo\_25:  
(Start: 14 @19746 has 44 MA's),

Gene: Darby\_24 Start: 19447, Stop: 19581, Start Num: 14  
Candidate Starts for Darby\_24:  
(Start: 14 @19447 has 44 MA's),

Gene: DevitoJr\_24 Start: 19615, Stop: 19749, Start Num: 14  
Candidate Starts for DevitoJr\_24:  
(1, 19471), (2, 19507), (3, 19510), (Start: 14 @19615 has 44 MA's),

Gene: Dinallo\_25 Start: 20683, Stop: 20820, Start Num: 14  
Candidate Starts for Dinallo\_25:  
(Start: 14 @20683 has 44 MA's),

Gene: Edmundo\_29 Start: 22991, Stop: 23122, Start Num: 13  
Candidate Starts for Edmundo\_29:  
(9, 22931), (Start: 13 @22991 has 1 MA's), (15, 23021),

Gene: ElephantMan\_24 Start: 20146, Stop: 20283, Start Num: 14

Candidate Starts for ElephantMan\_24:  
(Start: 14 @20146 has 44 MA's),

Gene: GantcherGoblin\_20 Start: 16389, Stop: 16520, Start Num: 14  
Candidate Starts for GantcherGoblin\_20:  
(Start: 14 @16389 has 44 MA's), (18, 16455),

Gene: Gordon\_24 Start: 20720, Stop: 20854, Start Num: 14  
Candidate Starts for Gordon\_24:  
(Start: 14 @20720 has 44 MA's),

Gene: Inked\_26 Start: 20362, Stop: 20490, Start Num: 14  
Candidate Starts for Inked\_26:  
(Start: 14 @20362 has 44 MA's),

Gene: Issa\_24 Start: 19424, Stop: 19558, Start Num: 14  
Candidate Starts for Issa\_24:  
(Start: 14 @19424 has 44 MA's),

Gene: KevinMinion\_21 Start: 17483, Stop: 17614, Start Num: 14  
Candidate Starts for KevinMinion\_21:  
(Start: 14 @17483 has 44 MA's), (18, 17549),

Gene: Kinny\_23 Start: 18243, Stop: 18374, Start Num: 14  
Candidate Starts for Kinny\_23:  
(Start: 14 @18243 has 44 MA's),

Gene: LastNadiia\_5 Start: 3200, Stop: 3319, Start Num: 14  
Candidate Starts for LastNadiia\_5:  
(Start: 14 @3200 has 44 MA's),

Gene: Leathea\_21 Start: 16379, Stop: 16507, Start Num: 14  
Candidate Starts for Leathea\_21:  
(8, 16310), (Start: 14 @16379 has 44 MA's),

Gene: Lewando\_24 Start: 18312, Stop: 18443, Start Num: 14  
Candidate Starts for Lewando\_24:  
(4, 18219), (8, 18243), (12, 18273), (Start: 14 @18312 has 44 MA's),

Gene: LiSara\_29 Start: 22686, Stop: 22811, Start Num: 14  
Candidate Starts for LiSara\_29:  
(5, 22602), (9, 22620), (Start: 14 @22686 has 44 MA's),

Gene: LilHuddy\_25 Start: 19795, Stop: 19929, Start Num: 14  
Candidate Starts for LilHuddy\_25:  
(Start: 14 @19795 has 44 MA's),

Gene: LucySwiss\_24 Start: 19449, Stop: 19583, Start Num: 14  
Candidate Starts for LucySwiss\_24:  
(Start: 14 @19449 has 44 MA's),

Gene: Mardi\_22 Start: 16917, Stop: 17048, Start Num: 14  
Candidate Starts for Mardi\_22:

(Start: 14 @16917 has 44 MA's),

Gene: Maruru\_28 Start: 27558, Stop: 27689, Start Num: 14

Candidate Starts for Maruru\_28:

(Start: 14 @27558 has 44 MA's),

Gene: Merry\_ Start: 20000, Stop: 20134, Start Num: 14

Candidate Starts for Merry\_:

(6, 19919), (Start: 14 @20000 has 44 MA's), (16, 20042), (17, 20048), (18, 20081),

Gene: MiniBagel\_24 Start: 20674, Stop: 20811, Start Num: 14

Candidate Starts for MiniBagel\_24:

(Start: 14 @20674 has 44 MA's),

Gene: Muglass\_23 Start: 17882, Stop: 18013, Start Num: 14

Candidate Starts for Muglass\_23:

(Start: 14 @17882 has 44 MA's),

Gene: Navi1117\_21 Start: 16640, Stop: 16771, Start Num: 14

Candidate Starts for Navi1117\_21:

(Start: 14 @16640 has 44 MA's),

Gene: Nightmare\_25 Start: 19984, Stop: 20118, Start Num: 14

Candidate Starts for Nightmare\_25:

(Start: 14 @19984 has 44 MA's),

Gene: Niktson\_24 Start: 20146, Stop: 20283, Start Num: 14

Candidate Starts for Niktson\_24:

(Start: 14 @20146 has 44 MA's),

Gene: Nivinsha\_24 Start: 19537, Stop: 19671, Start Num: 14

Candidate Starts for Nivinsha\_24:

(Start: 14 @19537 has 44 MA's),

Gene: Phaby\_25 Start: 19718, Stop: 19852, Start Num: 14

Candidate Starts for Phaby\_25:

(Start: 14 @19718 has 44 MA's),

Gene: Phaila\_20 Start: 15967, Stop: 16098, Start Num: 14

Candidate Starts for Phaila\_20:

(Start: 14 @15967 has 44 MA's),

Gene: PoeMe\_22 Start: 17242, Stop: 17373, Start Num: 14

Candidate Starts for PoeMe\_22:

(Start: 14 @17242 has 44 MA's),

Gene: Prairie\_33 Start: 27099, Stop: 27230, Start Num: 14

Candidate Starts for Prairie\_33:

(Start: 14 @27099 has 44 MA's),

Gene: Renaldo\_26 Start: 18321, Stop: 18452, Start Num: 14

Candidate Starts for Renaldo\_26:

(Start: 14 @18321 has 44 MA's),

Gene: Salgado\_30 Start: 22688, Stop: 22822, Start Num: 14  
Candidate Starts for Salgado\_30:  
(10, 22625), (Start: 14 @22688 has 44 MA's),

Gene: ScienceWizSam\_26 Start: 19938, Stop: 20072, Start Num: 14  
Candidate Starts for ScienceWizSam\_26:  
(Start: 14 @19938 has 44 MA's),

Gene: Shepard\_25 Start: 19792, Stop: 19926, Start Num: 14  
Candidate Starts for Shepard\_25:  
(Start: 14 @19792 has 44 MA's),

Gene: Stardrop\_22 Start: 16938, Stop: 17069, Start Num: 14  
Candidate Starts for Stardrop\_22:  
(Start: 14 @16938 has 44 MA's),

Gene: Sunny\_ Start: 20000, Stop: 20134, Start Num: 14  
Candidate Starts for Sunny\_:  
(6, 19919), (Start: 14 @20000 has 44 MA's), (16, 20042), (17, 20048), (18, 20081),

Gene: Synopsis\_23 Start: 19598, Stop: 19735, Start Num: 14  
Candidate Starts for Synopsis\_23:  
(Start: 14 @19598 has 44 MA's),

Gene: Tatanka\_24 Start: 20085, Stop: 20219, Start Num: 14  
Candidate Starts for Tatanka\_24:  
(Start: 14 @20085 has 44 MA's),

Gene: Teacup\_24 Start: 19451, Stop: 19588, Start Num: 14  
Candidate Starts for Teacup\_24:  
(Start: 14 @19451 has 44 MA's),

Gene: Tenney120\_21 Start: 16675, Stop: 16806, Start Num: 14  
Candidate Starts for Tenney120\_21:  
(Start: 14 @16675 has 44 MA's),

Gene: Tenno\_25 Start: 20683, Stop: 20820, Start Num: 14  
Candidate Starts for Tenno\_25:  
(Start: 14 @20683 has 44 MA's),

Gene: Tipton\_25 Start: 19782, Stop: 19916, Start Num: 14  
Candidate Starts for Tipton\_25:  
(Start: 14 @19782 has 44 MA's),

Gene: Tokki\_25 Start: 19743, Stop: 19877, Start Num: 14  
Candidate Starts for Tokki\_25:  
(Start: 14 @19743 has 44 MA's),

Gene: TrixiePhattel\_21 Start: 16592, Stop: 16723, Start Num: 14  
Candidate Starts for TrixiePhattel\_21:  
(Start: 14 @16592 has 44 MA's),

Gene: Trustiboi\_25 Start: 20151, Stop: 20285, Start Num: 14  
Candidate Starts for Trustiboi\_25:  
(7, 20073), (11, 20106), (Start: 14 @20151 has 44 MA's),

Gene: Uzumaki\_21 Start: 17208, Stop: 17339, Start Num: 14  
Candidate Starts for Uzumaki\_21:  
(Start: 14 @17208 has 44 MA's),

Gene: Westerlin\_25 Start: 21263, Stop: 21397, Start Num: 14  
Candidate Starts for Westerlin\_25:  
(Start: 14 @21263 has 44 MA's),

Gene: Zeina\_21 Start: 16589, Stop: 16720, Start Num: 14  
Candidate Starts for Zeina\_21:  
(Start: 14 @16589 has 44 MA's),