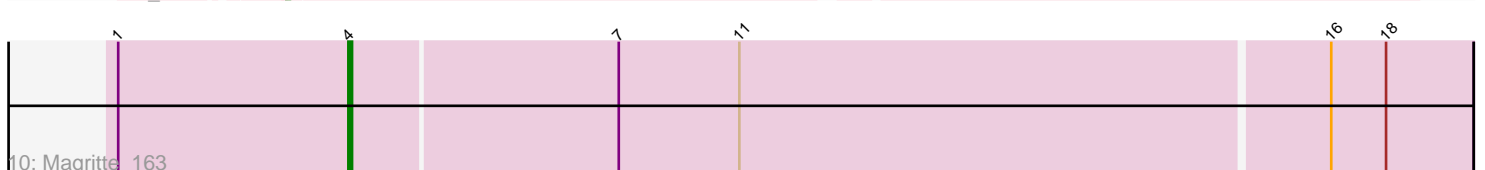
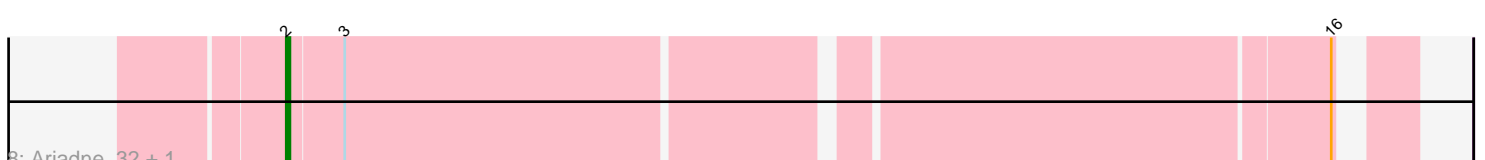
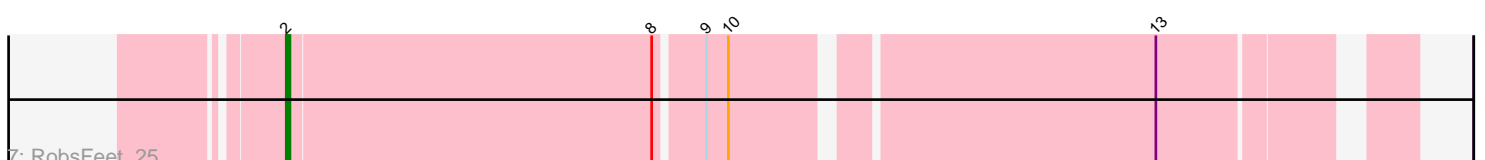
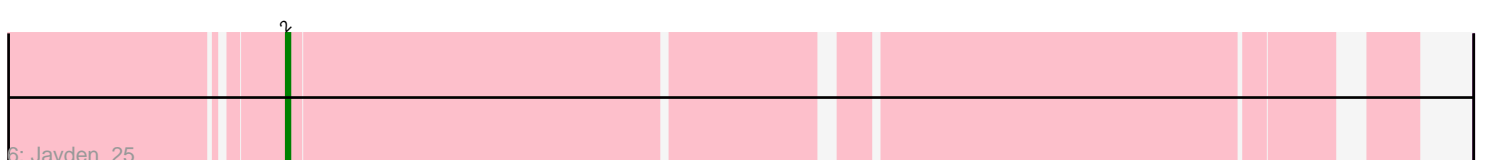
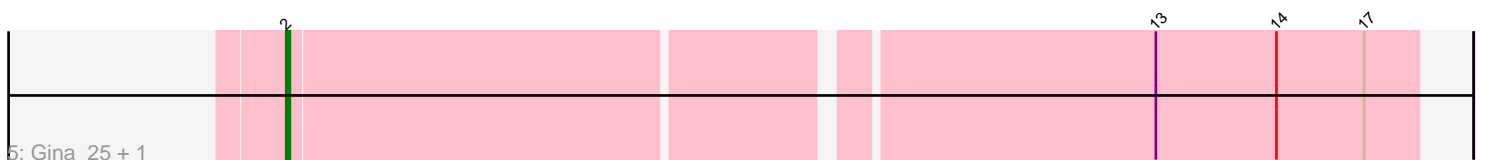
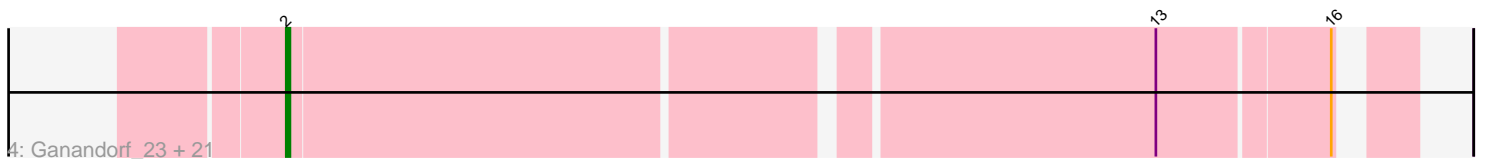
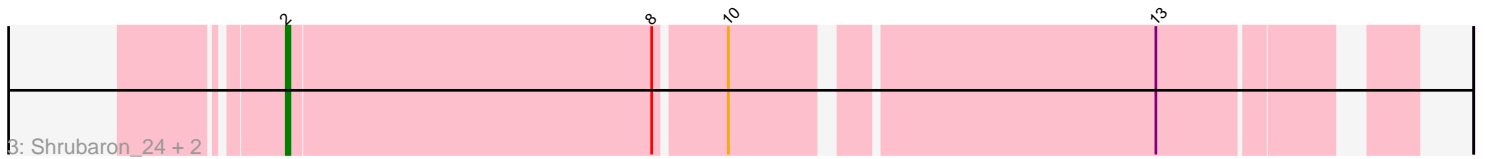
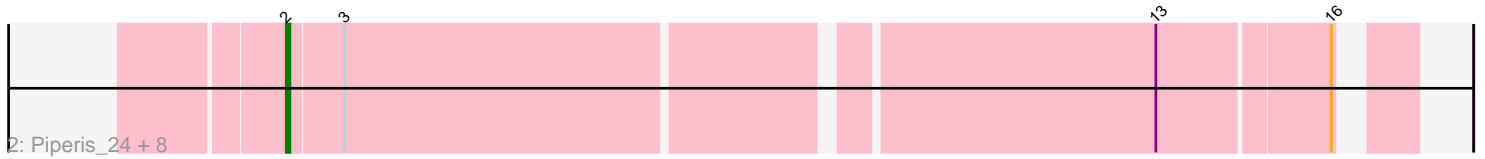


Pham 221524



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 221524 Report

This analysis was run 03/28/25 on database version 593.

Pham number 221524 has 46 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Metamorphoo\_24
- Track 2 : Piperis\_24, Paschalis\_23, Phorgeous\_23, PierreOrion\_24, LittleFortune\_25, Glorp\_25, Yeti\_24, Antares\_24, Phrancesco\_24
- Track 3 : Shrubaron\_24, Fireman\_24, Tyumbra\_22
- Track 4 : Ganandorf\_23, Shotgun\_23, Hermeonysus\_23, CrazyRich\_23, Busephilis\_23, Jefe\_24, Savannah\_23, BrazzalePHS\_23, PhedwardCullen\_22, KaiHaiDragon\_24, Crisis\_25, Onika\_23, Selwyn23\_25, Pulchra\_25, EarickHC\_24, Cranjis\_25, Ramiel05\_23, Honeyfin\_25, Kowalski\_23, Jollipop\_24, PiperSansNom\_24, Scumberland\_25
- Track 5 : Gina\_25, Teamocil\_25
- Track 6 : Jayden\_25
- Track 7 : RobsFeet\_25
- Track 8 : Ariadne\_32, Smarties\_32
- Track 9 : ClearAsMud\_26, SirFrank\_23, NoodlelyBoi\_23, Quhwah\_26
- Track 10 : Magritte\_163

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

The start number called the most often in the published annotations is 2, it was called in 40 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antares\_24, Ariadne\_32, BrazzalePHS\_23, Busephilis\_23, ClearAsMud\_26, Cranjis\_25, CrazyRich\_23, Crisis\_25, EarickHC\_24, Fireman\_24, Ganandorf\_23, Gina\_25, Glorp\_25, Hermeonysus\_23, Honeyfin\_25, Jayden\_25, Jefe\_24, Jollipop\_24, KaiHaiDragon\_24, Kowalski\_23, LittleFortune\_25, Metamorphoo\_24, NoodlelyBoi\_23, Onika\_23, Paschalis\_23, PhedwardCullen\_22, Phorgeous\_23, Phrancesco\_24, PierreOrion\_24, PiperSansNom\_24, Piperis\_24, Pulchra\_25, Quhwah\_26, Ramiel05\_23, RobsFeet\_25, Savannah\_23, Scumberland\_25, Selwyn23\_25, Shotgun\_23, Shrubaron\_24, SirFrank\_23, Smarties\_32, Teamocil\_25, Tyumbra\_22, Yeti\_24,

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

-

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

- Magritte\_163,

### Summary by start number:

Start 2:

- Found in 45 of 46 ( 97.8% ) of genes in pham
- Manual Annotations of this start: 40 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antares\_24 (EC), Ariadne\_32 (EC), BrazzalePHS\_23 (EC), Busephilis\_23 (EC), ClearAsMud\_26 (EC), Cranjis\_25 (EC), CrazyRich\_23 (EC), Crisis\_25 (EC), EarickHC\_24 (EC), Fireman\_24 (EC), Ganandorf\_23 (EC), Gina\_25 (EC), Glorp\_25 (EC), Hermeonysus\_23 (EC), Honeyfin\_25 (EC), Jayden\_25 (EC), Jefe\_24 (EC), Jollipop\_24 (EC), KaiHaiDragon\_24 (EC), Kowalski\_23 (EC), LittleFortune\_25 (EC), Metamorphoo\_24 (EC), NoodlelyBoi\_23 (EC), Onika\_23 (EC), Paschalis\_23 (EC), PhedwardCullen\_22 (EC), Phorgeous\_23 (EC), Phrancesco\_24 (EC), PierreOrion\_24 (EC), PiperSansNom\_24 (EC), Piperis\_24 (EC), Pulchra\_25 (EC), Quhwah\_26 (EC), Ramiel05\_23 (EC), RobsFeet\_25 (EC), Savannah\_23 (EC), Scumberland\_25 (EC), Selwyn23\_25 (EC), Shotgun\_23 (EC), Shrubaron\_24 (EC), SirFrank\_23 (EC), Smarties\_32 (EC), Teamocil\_25 (EC), Tyumbra\_22 (EC), Yeti\_24 (EC),

Start 4:

- Found in 1 of 46 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 1 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Magritte\_163 (singleton),

### Summary by clusters:

There are 2 clusters represented in this pham: singleton, EC,

Info for manual annotations of cluster EC:

- Start number 2 was manually annotated 40 times for cluster EC.

### Gene Information:

Gene: Antares\_24 Start: 11753, Stop: 12037, Start Num: 2

Candidate Starts for Antares\_24:

(Start: 2 @11753 has 40 MA's), (3, 11768), (13, 11978), (16, 12023),

Gene: Ariadne\_32 Start: 13221, Stop: 13505, Start Num: 2

Candidate Starts for Ariadne\_32:

(Start: 2 @13221 has 40 MA's), (3, 13236), (16, 13491),

Gene: BrazzalePHS\_23 Start: 11545, Stop: 11829, Start Num: 2

Candidate Starts for BrazzalePHS\_23:

(Start: 2 @11545 has 40 MA's), (13, 11770), (16, 11815),

Gene: Busephilis\_23 Start: 11484, Stop: 11768, Start Num: 2

Candidate Starts for Busephilis\_23:  
(Start: 2 @11484 has 40 MA's), (13, 11709), (16, 11754),

Gene: ClearAsMud\_26 Start: 12264, Stop: 12563, Start Num: 2  
Candidate Starts for ClearAsMud\_26:  
(Start: 2 @12264 has 40 MA's), (6, 12333), (14, 12525),

Gene: Cranjis\_25 Start: 11708, Stop: 11992, Start Num: 2  
Candidate Starts for Cranjis\_25:  
(Start: 2 @11708 has 40 MA's), (13, 11933), (16, 11978),

Gene: CrazyRich\_23 Start: 11518, Stop: 11802, Start Num: 2  
Candidate Starts for CrazyRich\_23:  
(Start: 2 @11518 has 40 MA's), (13, 11743), (16, 11788),

Gene: Crisis\_25 Start: 11502, Stop: 11786, Start Num: 2  
Candidate Starts for Crisis\_25:  
(Start: 2 @11502 has 40 MA's), (13, 11727), (16, 11772),

Gene: EarickHC\_24 Start: 11429, Stop: 11713, Start Num: 2  
Candidate Starts for EarickHC\_24:  
(Start: 2 @11429 has 40 MA's), (13, 11654), (16, 11699),

Gene: Fireman\_24 Start: 11156, Stop: 11440, Start Num: 2  
Candidate Starts for Fireman\_24:  
(Start: 2 @11156 has 40 MA's), (8, 11255), (10, 11273), (13, 11381),

Gene: Ganandorf\_23 Start: 11565, Stop: 11849, Start Num: 2  
Candidate Starts for Ganandorf\_23:  
(Start: 2 @11565 has 40 MA's), (13, 11790), (16, 11835),

Gene: Gina\_25 Start: 10836, Stop: 11132, Start Num: 2  
Candidate Starts for Gina\_25:  
(Start: 2 @10836 has 40 MA's), (13, 11061), (14, 11094), (17, 11118),

Gene: Glorp\_25 Start: 11567, Stop: 11851, Start Num: 2  
Candidate Starts for Glorp\_25:  
(Start: 2 @11567 has 40 MA's), (3, 11582), (13, 11792), (16, 11837),

Gene: Hermeonysus\_23 Start: 11435, Stop: 11719, Start Num: 2  
Candidate Starts for Hermeonysus\_23:  
(Start: 2 @11435 has 40 MA's), (13, 11660), (16, 11705),

Gene: Honeyfin\_25 Start: 11750, Stop: 12034, Start Num: 2  
Candidate Starts for Honeyfin\_25:  
(Start: 2 @11750 has 40 MA's), (13, 11975), (16, 12020),

Gene: Jayden\_25 Start: 11220, Stop: 11504, Start Num: 2  
Candidate Starts for Jayden\_25:  
(Start: 2 @11220 has 40 MA's),

Gene: Jefe\_24 Start: 11488, Stop: 11772, Start Num: 2  
Candidate Starts for Jefe\_24:

(Start: 2 @11488 has 40 MA's), (13, 11713), (16, 11758),

Gene: Jollipop\_24 Start: 11836, Stop: 12120, Start Num: 2

Candidate Starts for Jollipop\_24:

(Start: 2 @11836 has 40 MA's), (13, 12061), (16, 12106),

Gene: KaiHaiDragon\_24 Start: 11429, Stop: 11713, Start Num: 2

Candidate Starts for KaiHaiDragon\_24:

(Start: 2 @11429 has 40 MA's), (13, 11654), (16, 11699),

Gene: Kowalski\_23 Start: 11545, Stop: 11829, Start Num: 2

Candidate Starts for Kowalski\_23:

(Start: 2 @11545 has 40 MA's), (13, 11770), (16, 11815),

Gene: LittleFortune\_25 Start: 11792, Stop: 12076, Start Num: 2

Candidate Starts for LittleFortune\_25:

(Start: 2 @11792 has 40 MA's), (3, 11807), (13, 12017), (16, 12062),

Gene: Magritte\_163 Start: 97376, Stop: 97678, Start Num: 4

Candidate Starts for Magritte\_163:

(1, 97313), (Start: 4 @97376 has 1 MA's), (7, 97448), (11, 97481), (16, 97640), (18, 97655),

Gene: Metamorphoo\_24 Start: 11145, Stop: 11429, Start Num: 2

Candidate Starts for Metamorphoo\_24:

(Start: 2 @11145 has 40 MA's), (5, 11181), (12, 11322), (13, 11370), (15, 11412), (16, 11415),

Gene: NoodlelyBoi\_23 Start: 11571, Stop: 11870, Start Num: 2

Candidate Starts for NoodlelyBoi\_23:

(Start: 2 @11571 has 40 MA's), (6, 11640), (14, 11832),

Gene: Onika\_23 Start: 11518, Stop: 11802, Start Num: 2

Candidate Starts for Onika\_23:

(Start: 2 @11518 has 40 MA's), (13, 11743), (16, 11788),

Gene: Paschalis\_23 Start: 11534, Stop: 11818, Start Num: 2

Candidate Starts for Paschalis\_23:

(Start: 2 @11534 has 40 MA's), (3, 11549), (13, 11759), (16, 11804),

Gene: PhedwardCullen\_22 Start: 11278, Stop: 11562, Start Num: 2

Candidate Starts for PhedwardCullen\_22:

(Start: 2 @11278 has 40 MA's), (13, 11503), (16, 11548),

Gene: Phorgeous\_23 Start: 11386, Stop: 11670, Start Num: 2

Candidate Starts for Phorgeous\_23:

(Start: 2 @11386 has 40 MA's), (3, 11401), (13, 11611), (16, 11656),

Gene: Phrancesco\_24 Start: 11665, Stop: 11949, Start Num: 2

Candidate Starts for Phrancesco\_24:

(Start: 2 @11665 has 40 MA's), (3, 11680), (13, 11890), (16, 11935),

Gene: PierreOrion\_24 Start: 11689, Stop: 11973, Start Num: 2

Candidate Starts for PierreOrion\_24:

(Start: 2 @11689 has 40 MA's), (3, 11704), (13, 11914), (16, 11959),

Gene: PiperSansNom\_24 Start: 11838, Stop: 12122, Start Num: 2  
Candidate Starts for PiperSansNom\_24:  
(Start: 2 @11838 has 40 MA's), (13, 12063), (16, 12108),

Gene: Piperis\_24 Start: 11511, Stop: 11795, Start Num: 2  
Candidate Starts for Piperis\_24:  
(Start: 2 @11511 has 40 MA's), (3, 11526), (13, 11736), (16, 11781),

Gene: Pulchra\_25 Start: 11910, Stop: 12194, Start Num: 2  
Candidate Starts for Pulchra\_25:  
(Start: 2 @11910 has 40 MA's), (13, 12135), (16, 12180),

Gene: Quhwah\_26 Start: 11886, Stop: 12185, Start Num: 2  
Candidate Starts for Quhwah\_26:  
(Start: 2 @11886 has 40 MA's), (6, 11955), (14, 12147),

Gene: Ramiel05\_23 Start: 11545, Stop: 11829, Start Num: 2  
Candidate Starts for Ramiel05\_23:  
(Start: 2 @11545 has 40 MA's), (13, 11770), (16, 11815),

Gene: RobsFeet\_25 Start: 11423, Stop: 11707, Start Num: 2  
Candidate Starts for RobsFeet\_25:  
(Start: 2 @11423 has 40 MA's), (8, 11522), (9, 11534), (10, 11540), (13, 11648),

Gene: Savannah\_23 Start: 11569, Stop: 11853, Start Num: 2  
Candidate Starts for Savannah\_23:  
(Start: 2 @11569 has 40 MA's), (13, 11794), (16, 11839),

Gene: Scumberland\_25 Start: 11759, Stop: 12043, Start Num: 2  
Candidate Starts for Scumberland\_25:  
(Start: 2 @11759 has 40 MA's), (13, 11984), (16, 12029),

Gene: Selwyn23\_25 Start: 11738, Stop: 12022, Start Num: 2  
Candidate Starts for Selwyn23\_25:  
(Start: 2 @11738 has 40 MA's), (13, 11963), (16, 12008),

Gene: Shotgun\_23 Start: 11367, Stop: 11651, Start Num: 2  
Candidate Starts for Shotgun\_23:  
(Start: 2 @11367 has 40 MA's), (13, 11592), (16, 11637),

Gene: Shrubaron\_24 Start: 11058, Stop: 11342, Start Num: 2  
Candidate Starts for Shrubaron\_24:  
(Start: 2 @11058 has 40 MA's), (8, 11157), (10, 11175), (13, 11283),

Gene: SirFrank\_23 Start: 11421, Stop: 11720, Start Num: 2  
Candidate Starts for SirFrank\_23:  
(Start: 2 @11421 has 40 MA's), (6, 11490), (14, 11682),

Gene: Smarties\_32 Start: 13221, Stop: 13505, Start Num: 2  
Candidate Starts for Smarties\_32:  
(Start: 2 @13221 has 40 MA's), (3, 13236), (16, 13491),

Gene: Teamocil\_25 Start: 10836, Stop: 11132, Start Num: 2  
Candidate Starts for Teamocil\_25:  
(Start: 2 @10836 has 40 MA's), (13, 11061), (14, 11094), (17, 11118),

Gene: Tyrumbra\_22 Start: 10499, Stop: 10783, Start Num: 2  
Candidate Starts for Tyrumbra\_22:  
(Start: 2 @10499 has 40 MA's), (8, 10598), (10, 10616), (13, 10724),

Gene: Yeti\_24 Start: 11541, Stop: 11825, Start Num: 2  
Candidate Starts for Yeti\_24:  
(Start: 2 @11541 has 40 MA's), (3, 11556), (13, 11766), (16, 11811),