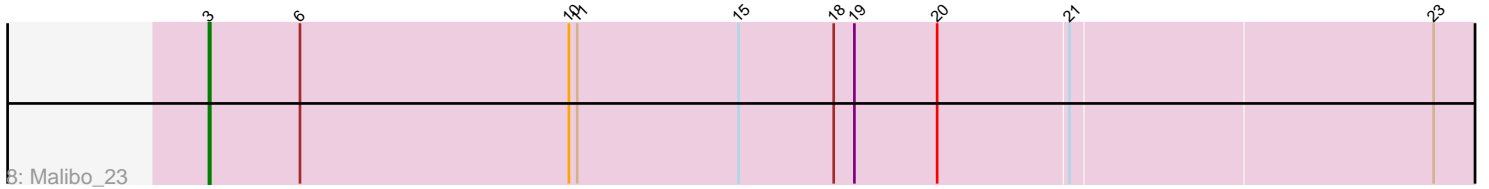
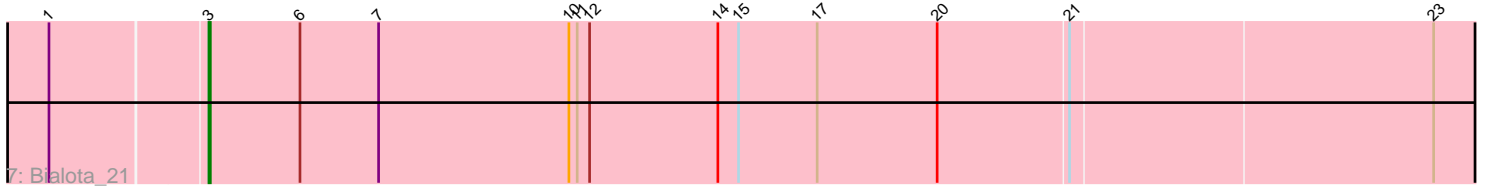
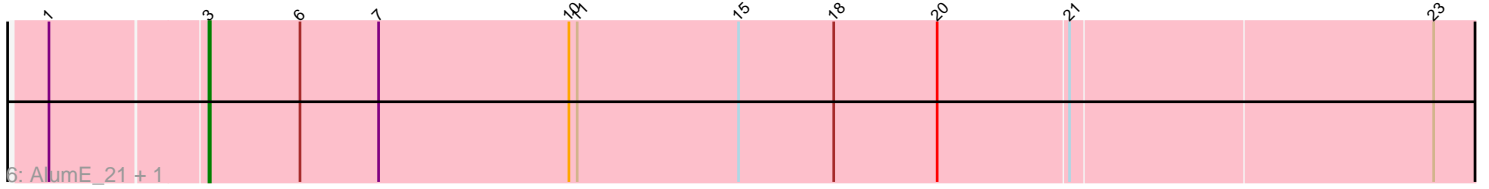
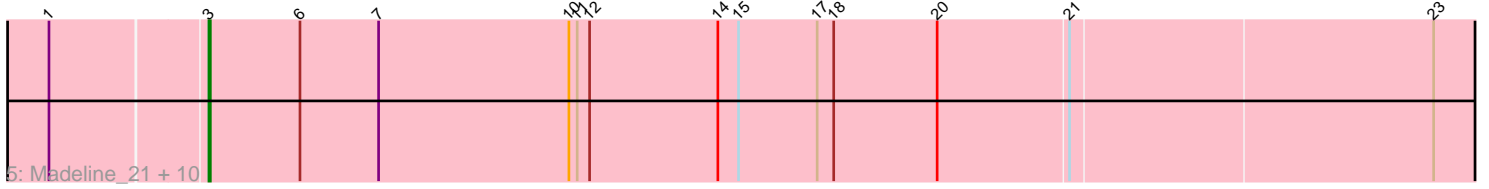
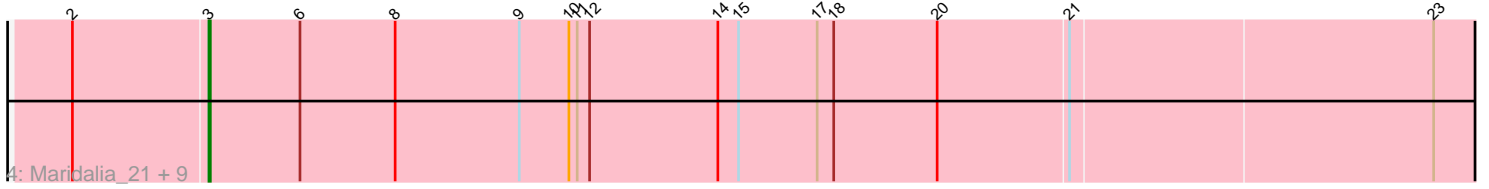
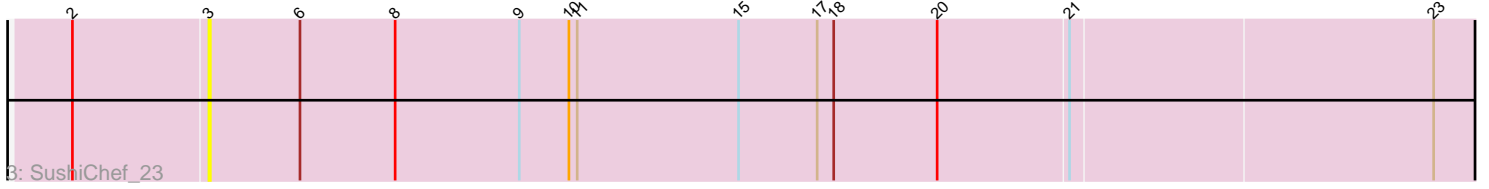
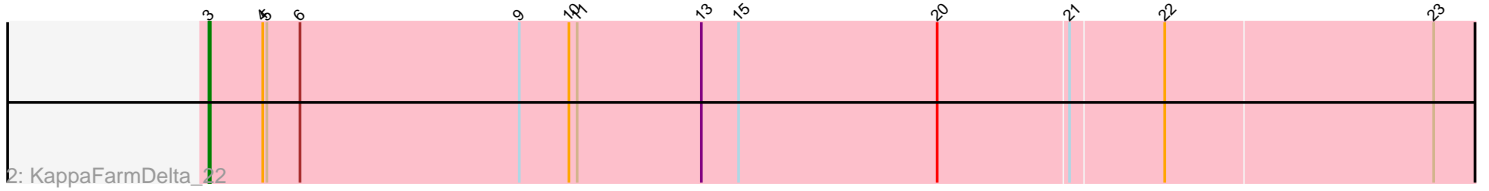
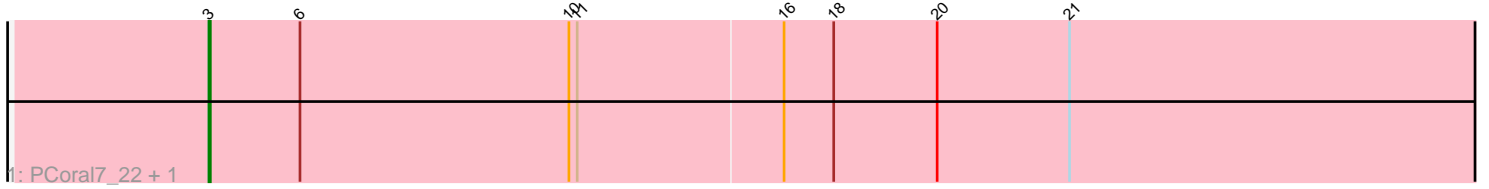


Pham 305223



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 305223 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305223 has 29 members, 3 are drafts.

Phages represented in each track:

- Track 1 : PCoral7\_22, Toast\_22
- Track 2 : KappaFarmDelta\_22
- Track 3 : SushiChef\_23
- Track 4 : Maridalia\_21, Suscepit\_22, Eudoria\_22, Neobush\_22, Tayonia\_22, Antonio\_22, Trumpet\_22, Manasvini\_22, Kita\_22, Zameen\_22
- Track 5 : Madeline\_21, Bosnia\_21, Nymphadora\_21, TimTam\_21, Zirinka\_21, Hugley\_21, Madavieve\_21, Herod\_21, Ohgeesy\_21, Eviarto\_21, BatStarr\_21
- Track 6 : AlumE\_21, BoyNamedSue\_21
- Track 7 : Bialota\_21
- Track 8 : Malibo\_23

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

The start number called the most often in the published annotations is 3, it was called in 26 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AlumE\_21, Antonio\_22, BatStarr\_21, Bialota\_21, Bosnia\_21, BoyNamedSue\_21, Eudoria\_22, Eviarto\_21, Herod\_21, Hugley\_21, KappaFarmDelta\_22, Kita\_22, Madavieve\_21, Madeline\_21, Malibo\_23, Manasvini\_22, Maridalia\_21, Neobush\_22, Nymphadora\_21, Ohgeesy\_21, PCoral7\_22, Suscepit\_22, SushiChef\_23, Tayonia\_22, TimTam\_21, Toast\_22, Trumpet\_22, Zameen\_22, Zirinka\_21,

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

- 

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

- 

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

Start 3:

- Found in 29 of 29 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 26 of 26

- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlumE\_21 (CZ1), Antonio\_22 (CZ1), BatStarr\_21 (CZ1), Bialota\_21 (CZ1), Bosnia\_21 (CZ1), BoyNamedSue\_21 (CZ1), Eudoria\_22 (CZ1), Eviarto\_21 (CZ1), Herod\_21 (CZ1), Hugley\_21 (CZ1), KappaFarmDelta\_22 (CV), Kita\_22 (CZ1), Madavieve\_21 (CZ1), Madeline\_21 (CZ1), Malibo\_23 (DW), Manasvini\_22 (CZ1), Maridalia\_21 (CZ1), Neobush\_22 (CZ1), Nymphadora\_21 (CZ1), Ohgeesy\_21 (CZ), PCoral7\_22 (CV), Suscepit\_22 (CZ1), SushiChef\_23 (CZ), Tayonia\_22 (CZ1), TimTam\_21 (CZ1), Toast\_22 (CV), Trumpet\_22 (CZ1), Zameen\_22 (CZ1), Zirinka\_21 (CZ1),

### **Summary by clusters:**

There are 4 clusters represented in this pham: CZ, CZ1, CV, DW,

Info for manual annotations of cluster CV:

- Start number 3 was manually annotated 3 times for cluster CV.

Info for manual annotations of cluster CZ:

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

Info for manual annotations of cluster CZ1:

- Start number 3 was manually annotated 21 times for cluster CZ1.

Info for manual annotations of cluster DW:

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

### **Gene Information:**

Gene: AlumE\_21 Start: 20173, Stop: 21084, Start Num: 3

Candidate Starts for AlumE\_21:

(1, 20065), (Start: 3 @20173 has 26 MA's), (6, 20239), (7, 20296), (10, 20434), (11, 20440), (15, 20557), (18, 20626), (20, 20701), (21, 20794), (23, 21052),

Gene: Antonio\_22 Start: 20294, Stop: 21205, Start Num: 3

Candidate Starts for Antonio\_22:

(2, 20198), (Start: 3 @20294 has 26 MA's), (6, 20360), (8, 20429), (9, 20519), (10, 20555), (11, 20561), (12, 20570), (14, 20663), (15, 20678), (17, 20735), (18, 20747), (20, 20822), (21, 20915), (23, 21173),

Gene: BatStarr\_21 Start: 20161, Stop: 21072, Start Num: 3

Candidate Starts for BatStarr\_21:

(1, 20053), (Start: 3 @20161 has 26 MA's), (6, 20227), (7, 20284), (10, 20422), (11, 20428), (12, 20437), (14, 20530), (15, 20545), (17, 20602), (18, 20614), (20, 20689), (21, 20782), (23, 21040),

Gene: Bialota\_21 Start: 20173, Stop: 21084, Start Num: 3

Candidate Starts for Bialota\_21:

(1, 20065), (Start: 3 @20173 has 26 MA's), (6, 20239), (7, 20296), (10, 20434), (11, 20440), (12, 20449), (14, 20542), (15, 20557), (17, 20614), (20, 20701), (21, 20794), (23, 21052),

Gene: Bosnia\_21 Start: 20161, Stop: 21072, Start Num: 3

Candidate Starts for Bosnia\_21:

(1, 20053), (Start: 3 @20161 has 26 MA's), (6, 20227), (7, 20284), (10, 20422), (11, 20428), (12, 20437), (14, 20530), (15, 20545), (17, 20602), (18, 20614), (20, 20689), (21, 20782), (23, 21040),

Gene: BoyNamedSue\_21 Start: 20173, Stop: 21084, Start Num: 3

Candidate Starts for BoyNamedSue\_21:

(1, 20065), (Start: 3 @20173 has 26 MA's), (6, 20239), (7, 20296), (10, 20434), (11, 20440), (15, 20557), (18, 20626), (20, 20701), (21, 20794), (23, 21052),

Gene: Eudoria\_22 Start: 20294, Stop: 21205, Start Num: 3

Candidate Starts for Eudoria\_22:

(2, 20198), (Start: 3 @20294 has 26 MA's), (6, 20360), (8, 20429), (9, 20519), (10, 20555), (11, 20561), (12, 20570), (14, 20663), (15, 20678), (17, 20735), (18, 20747), (20, 20822), (21, 20915), (23, 21173),

Gene: Eviarto\_21 Start: 20161, Stop: 21072, Start Num: 3

Candidate Starts for Eviarto\_21:

(1, 20053), (Start: 3 @20161 has 26 MA's), (6, 20227), (7, 20284), (10, 20422), (11, 20428), (12, 20437), (14, 20530), (15, 20545), (17, 20602), (18, 20614), (20, 20689), (21, 20782), (23, 21040),

Gene: Herod\_21 Start: 20161, Stop: 21072, Start Num: 3

Candidate Starts for Herod\_21:

(1, 20053), (Start: 3 @20161 has 26 MA's), (6, 20227), (7, 20284), (10, 20422), (11, 20428), (12, 20437), (14, 20530), (15, 20545), (17, 20602), (18, 20614), (20, 20689), (21, 20782), (23, 21040),

Gene: Hugley\_21 Start: 20161, Stop: 21072, Start Num: 3

Candidate Starts for Hugley\_21:

(1, 20053), (Start: 3 @20161 has 26 MA's), (6, 20227), (7, 20284), (10, 20422), (11, 20428), (12, 20437), (14, 20530), (15, 20545), (17, 20602), (18, 20614), (20, 20689), (21, 20782), (23, 21040),

Gene: KappaFarmDelta\_22 Start: 19388, Stop: 20299, Start Num: 3

Candidate Starts for KappaFarmDelta\_22:

(Start: 3 @19388 has 26 MA's), (4, 19427), (5, 19430), (6, 19454), (9, 19613), (10, 19649), (11, 19655), (13, 19745), (15, 19772), (20, 19916), (21, 20009), (22, 20075), (23, 20267),

Gene: Kita\_22 Start: 20294, Stop: 21205, Start Num: 3

Candidate Starts for Kita\_22:

(2, 20198), (Start: 3 @20294 has 26 MA's), (6, 20360), (8, 20429), (9, 20519), (10, 20555), (11, 20561), (12, 20570), (14, 20663), (15, 20678), (17, 20735), (18, 20747), (20, 20822), (21, 20915), (23, 21173),

Gene: Madavieve\_21 Start: 20441, Stop: 21352, Start Num: 3

Candidate Starts for Madavieve\_21:

(1, 20333), (Start: 3 @20441 has 26 MA's), (6, 20507), (7, 20564), (10, 20702), (11, 20708), (12, 20717), (14, 20810), (15, 20825), (17, 20882), (18, 20894), (20, 20969), (21, 21062), (23, 21320),

Gene: Madeline\_21 Start: 20459, Stop: 21370, Start Num: 3

Candidate Starts for Madeline\_21:

(1, 20351), (Start: 3 @20459 has 26 MA's), (6, 20525), (7, 20582), (10, 20720), (11, 20726), (12, 20735), (14, 20828), (15, 20843), (17, 20900), (18, 20912), (20, 20987), (21, 21080), (23, 21338),

Gene: Malibo\_23 Start: 19343, Stop: 20254, Start Num: 3

Candidate Starts for Malibo\_23:

(Start: 3 @19343 has 26 MA's), (6, 19409), (10, 19604), (11, 19610), (15, 19727), (18, 19796), (19, 19811), (20, 19871), (21, 19964), (23, 20222),

Gene: Manasvini\_22 Start: 20294, Stop: 21205, Start Num: 3

Candidate Starts for Manasvini\_22:

(2, 20198), (Start: 3 @20294 has 26 MA's), (6, 20360), (8, 20429), (9, 20519), (10, 20555), (11, 20561), (12, 20570), (14, 20663), (15, 20678), (17, 20735), (18, 20747), (20, 20822), (21, 20915), (23, 21173),

Gene: Maridalia\_21 Start: 20294, Stop: 21205, Start Num: 3

Candidate Starts for Maridalia\_21:

(2, 20198), (Start: 3 @20294 has 26 MA's), (6, 20360), (8, 20429), (9, 20519), (10, 20555), (11, 20561), (12, 20570), (14, 20663), (15, 20678), (17, 20735), (18, 20747), (20, 20822), (21, 20915), (23, 21173),

Gene: Neobush\_22 Start: 20294, Stop: 21205, Start Num: 3

Candidate Starts for Neobush\_22:

(2, 20198), (Start: 3 @20294 has 26 MA's), (6, 20360), (8, 20429), (9, 20519), (10, 20555), (11, 20561), (12, 20570), (14, 20663), (15, 20678), (17, 20735), (18, 20747), (20, 20822), (21, 20915), (23, 21173),

Gene: Nymphadora\_21 Start: 20161, Stop: 21072, Start Num: 3

Candidate Starts for Nymphadora\_21:

(1, 20053), (Start: 3 @20161 has 26 MA's), (6, 20227), (7, 20284), (10, 20422), (11, 20428), (12, 20437), (14, 20530), (15, 20545), (17, 20602), (18, 20614), (20, 20689), (21, 20782), (23, 21040),

Gene: Ohgeesy\_21 Start: 19784, Stop: 20695, Start Num: 3

Candidate Starts for Ohgeesy\_21:

(1, 19676), (Start: 3 @19784 has 26 MA's), (6, 19850), (7, 19907), (10, 20045), (11, 20051), (12, 20060), (14, 20153), (15, 20168), (17, 20225), (18, 20237), (20, 20312), (21, 20405), (23, 20663),

Gene: PCoral7\_22 Start: 19309, Stop: 20226, Start Num: 3

Candidate Starts for PCoral7\_22:

(Start: 3 @19309 has 26 MA's), (6, 19375), (10, 19570), (11, 19576), (16, 19723), (18, 19759), (20, 19834), (21, 19930),

Gene: Suscepit\_22 Start: 20294, Stop: 21205, Start Num: 3

Candidate Starts for Suscepit\_22:

(2, 20198), (Start: 3 @20294 has 26 MA's), (6, 20360), (8, 20429), (9, 20519), (10, 20555), (11, 20561), (12, 20570), (14, 20663), (15, 20678), (17, 20735), (18, 20747), (20, 20822), (21, 20915), (23, 21173),

Gene: SushiChef\_23 Start: 20360, Stop: 21271, Start Num: 3

Candidate Starts for SushiChef\_23:

(2, 20264), (Start: 3 @20360 has 26 MA's), (6, 20426), (8, 20495), (9, 20585), (10, 20621), (11, 20627), (15, 20744), (17, 20801), (18, 20813), (20, 20888), (21, 20981), (23, 21239),

Gene: Tayonia\_22 Start: 20294, Stop: 21205, Start Num: 3

Candidate Starts for Tayonia\_22:

(2, 20198), (Start: 3 @20294 has 26 MA's), (6, 20360), (8, 20429), (9, 20519), (10, 20555), (11, 20561), (12, 20570), (14, 20663), (15, 20678), (17, 20735), (18, 20747), (20, 20822), (21, 20915), (23, 21173),

Gene: TimTam\_21 Start: 20161, Stop: 21072, Start Num: 3

Candidate Starts for TimTam\_21:

(1, 20053), (Start: 3 @20161 has 26 MA's), (6, 20227), (7, 20284), (10, 20422), (11, 20428), (12, 20437), (14, 20530), (15, 20545), (17, 20602), (18, 20614), (20, 20689), (21, 20782), (23, 21040),

Gene: Toast\_22 Start: 19309, Stop: 20226, Start Num: 3

Candidate Starts for Toast\_22:

(Start: 3 @19309 has 26 MA's), (6, 19375), (10, 19570), (11, 19576), (16, 19723), (18, 19759), (20, 19834), (21, 19930),

Gene: Trumpet\_22 Start: 20294, Stop: 21205, Start Num: 3

Candidate Starts for Trumpet\_22:

(2, 20198), (Start: 3 @20294 has 26 MA's), (6, 20360), (8, 20429), (9, 20519), (10, 20555), (11, 20561), (12, 20570), (14, 20663), (15, 20678), (17, 20735), (18, 20747), (20, 20822), (21, 20915), (23, 21173),

Gene: Zameen\_22 Start: 20294, Stop: 21205, Start Num: 3

Candidate Starts for Zameen\_22:

(2, 20198), (Start: 3 @20294 has 26 MA's), (6, 20360), (8, 20429), (9, 20519), (10, 20555), (11, 20561), (12, 20570), (14, 20663), (15, 20678), (17, 20735), (18, 20747), (20, 20822), (21, 20915), (23, 21173),

Gene: Zirinka\_21 Start: 20173, Stop: 21084, Start Num: 3

Candidate Starts for Zirinka\_21:

(1, 20065), (Start: 3 @20173 has 26 MA's), (6, 20239), (7, 20296), (10, 20434), (11, 20440), (12, 20449), (14, 20542), (15, 20557), (17, 20614), (18, 20626), (20, 20701), (21, 20794), (23, 21052),