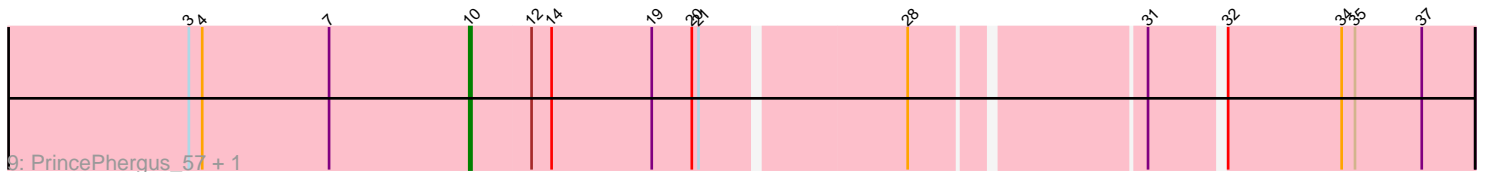
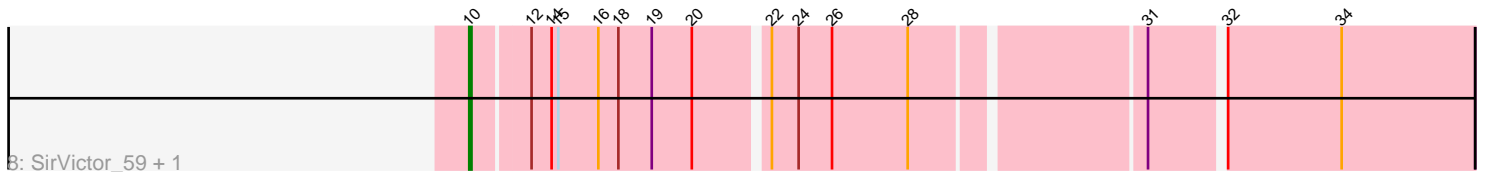
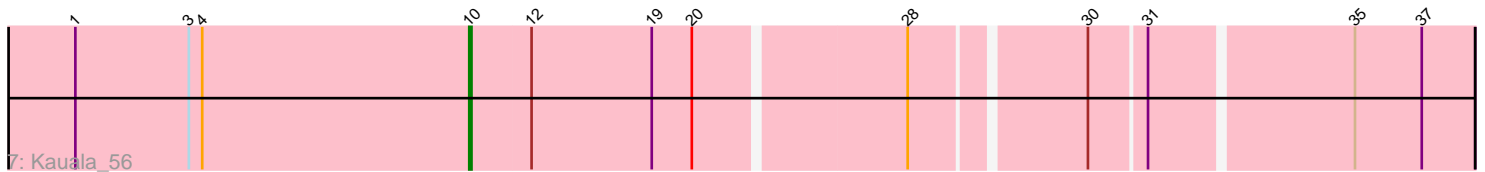
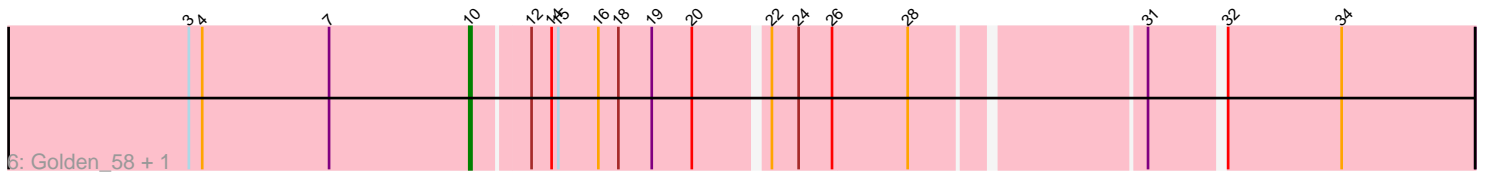
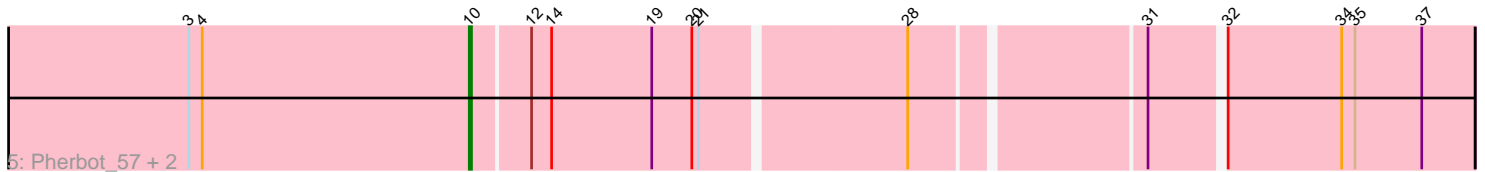
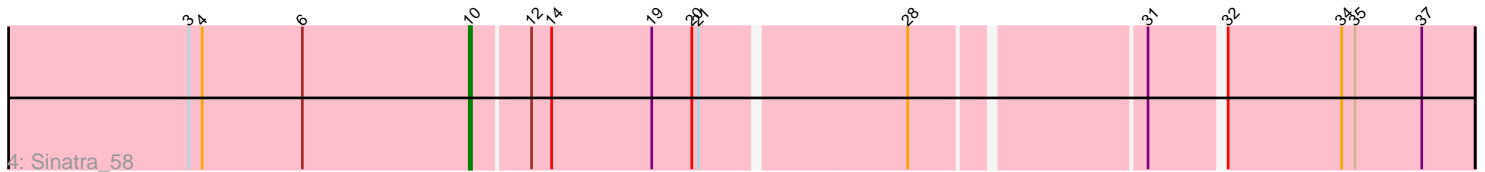
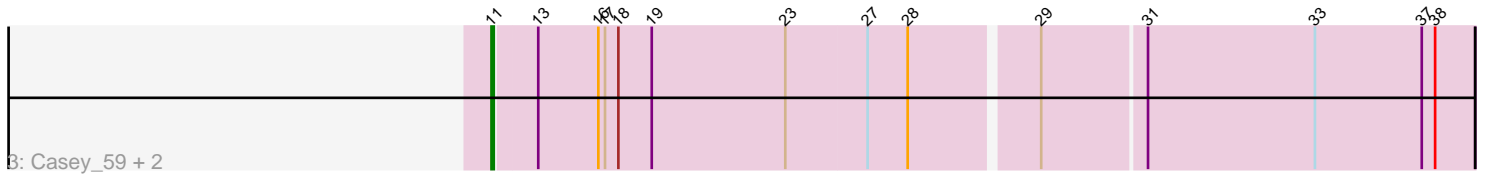
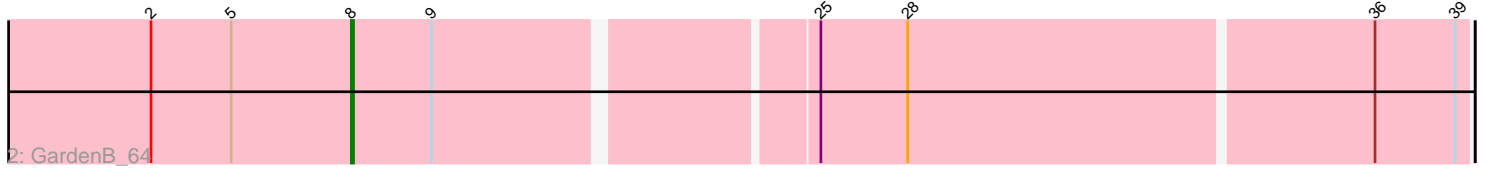
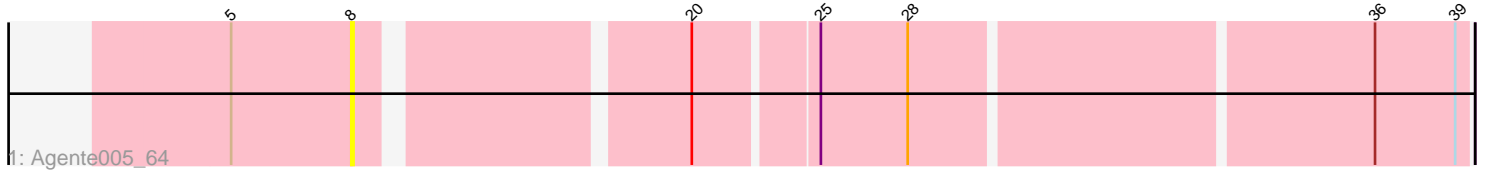


# Pham 159465



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 159465 Report

This analysis was run 04/28/24 on database version 559.

Pham number 159465 has 16 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Agente005\_64
- Track 2 : GardenB\_64
- Track 3 : Casey\_59, Pikmin\_59, Pajaza\_59
- Track 4 : Sinatra\_58
- Track 5 : Pherbot\_57, BouleyBill\_58, Bustleton\_57
- Track 6 : Golden\_58, Lucky3\_58
- Track 7 : Kauala\_56
- Track 8 : SirVictor\_59, Guetzie\_59
- Track 9 : PrincePhergus\_57, Koji\_56

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

The start number called the most often in the published annotations is 10, it was called in 10 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BouleyBill\_58, Bustleton\_57, Golden\_58, Guetzie\_59, Kauala\_56, Koji\_56, Lucky3\_58, Pherbot\_57, PrincePhergus\_57, Sinatra\_58, SirVictor\_59,

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

- 

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

- Agente005\_64, Casey\_59, GardenB\_64, Pajaza\_59, Pikmin\_59,

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

Start 8:

- Found in 2 of 16 ( 12.5% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agente005\_64 (EA1), GardenB\_64 (EA1),

Start 10:

- Found in 11 of 16 ( 68.8% ) of genes in pham
- Manual Annotations of this start: 10 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BouleyBill\_58 (EA4), Bustleton\_57 (EA4), Golden\_58 (EA4), Guetzie\_59 (EA4), Kauala\_56 (EA4), Koji\_56 (EA4), Lucky3\_58 (EA4), Pherbot\_57 (EA4), PrincePhergus\_57 (EA4), Sinatra\_58 (EA4), SirVictor\_59 (EA4),

Start 11:

- Found in 3 of 16 ( 18.8% ) of genes in pham
- Manual Annotations of this start: 3 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Casey\_59 (EA3), Pajaza\_59 (EA3), Pikmin\_59 (EA3),

**Summary by clusters:**

There are 3 clusters represented in this pham: EA1, EA3, EA4,

Info for manual annotations of cluster EA1:

- Start number 8 was manually annotated 1 time for cluster EA1.

Info for manual annotations of cluster EA3:

- Start number 11 was manually annotated 3 times for cluster EA3.

Info for manual annotations of cluster EA4:

- Start number 10 was manually annotated 10 times for cluster EA4.

**Gene Information:**

Gene: Agente005\_64 Start: 41218, Stop: 41679, Start Num: 8

Candidate Starts for Agente005\_64:

(5, 41164), (Start: 8 @41218 has 1 MA's), (20, 41350), (25, 41401), (28, 41440), (36, 41638), (39, 41674),

Gene: BouleyBill\_58 Start: 38730, Stop: 39152, Start Num: 10

Candidate Starts for BouleyBill\_58:

(3, 38604), (4, 38610), (Start: 10 @38730 has 10 MA's), (12, 38754), (14, 38763), (19, 38808), (20, 38826), (21, 38829), (28, 38916), (31, 39012), (32, 39042), (34, 39093), (35, 39099), (37, 39129),

Gene: Bustleton\_57 Start: 38699, Stop: 39121, Start Num: 10

Candidate Starts for Bustleton\_57:

(3, 38573), (4, 38579), (Start: 10 @38699 has 10 MA's), (12, 38723), (14, 38732), (19, 38777), (20, 38795), (21, 38798), (28, 38885), (31, 38981), (32, 39011), (34, 39062), (35, 39068), (37, 39098),

Gene: Casey\_59 Start: 38795, Stop: 39223, Start Num: 11

Candidate Starts for Casey\_59:

(Start: 11 @38795 has 3 MA's), (13, 38813), (16, 38840), (17, 38843), (18, 38849), (19, 38864), (23, 38924), (27, 38960), (28, 38978), (29, 39032), (31, 39077), (33, 39152), (37, 39200), (38, 39206),

Gene: GardenB\_64 Start: 41481, Stop: 41960, Start Num: 8

Candidate Starts for GardenB\_64:

(2, 41391), (5, 41427), (Start: 8 @41481 has 1 MA's), (9, 41517), (25, 41676), (28, 41715), (36, 41919), (39, 41955),

Gene: Golden\_58 Start: 39155, Stop: 39577, Start Num: 10

Candidate Starts for Golden\_58:

(3, 39029), (4, 39035), (7, 39092), (Start: 10 @39155 has 10 MA's), (12, 39179), (14, 39188), (15, 39191), (16, 39209), (18, 39218), (19, 39233), (20, 39251), (22, 39281), (24, 39293), (26, 39308), (28, 39341), (31, 39437), (32, 39467), (34, 39518),

Gene: Guetzie\_59 Start: 39273, Stop: 39695, Start Num: 10

Candidate Starts for Guetzie\_59:

(Start: 10 @39273 has 10 MA's), (12, 39297), (14, 39306), (15, 39309), (16, 39327), (18, 39336), (19, 39351), (20, 39369), (22, 39399), (24, 39411), (26, 39426), (28, 39459), (31, 39555), (32, 39585), (34, 39636),

Gene: Kauala\_56 Start: 38890, Stop: 39315, Start Num: 10

Candidate Starts for Kauala\_56:

(1, 38713), (3, 38764), (4, 38770), (Start: 10 @38890 has 10 MA's), (12, 38917), (19, 38971), (20, 38989), (28, 39079), (30, 39151), (31, 39175), (35, 39262), (37, 39292),

Gene: Koji\_56 Start: 38918, Stop: 39340, Start Num: 10

Candidate Starts for Koji\_56:

(3, 38792), (4, 38798), (7, 38855), (Start: 10 @38918 has 10 MA's), (12, 38942), (14, 38951), (19, 38996), (20, 39014), (21, 39017), (28, 39104), (31, 39200), (32, 39230), (34, 39281), (35, 39287), (37, 39317),

Gene: Lucky3\_58 Start: 39155, Stop: 39577, Start Num: 10

Candidate Starts for Lucky3\_58:

(3, 39029), (4, 39035), (7, 39092), (Start: 10 @39155 has 10 MA's), (12, 39179), (14, 39188), (15, 39191), (16, 39209), (18, 39218), (19, 39233), (20, 39251), (22, 39281), (24, 39293), (26, 39308), (28, 39341), (31, 39437), (32, 39467), (34, 39518),

Gene: Pajaza\_59 Start: 38795, Stop: 39223, Start Num: 11

Candidate Starts for Pajaza\_59:

(Start: 11 @38795 has 3 MA's), (13, 38813), (16, 38840), (17, 38843), (18, 38849), (19, 38864), (23, 38924), (27, 38960), (28, 38978), (29, 39032), (31, 39077), (33, 39152), (37, 39200), (38, 39206),

Gene: Pherbot\_57 Start: 38686, Stop: 39108, Start Num: 10

Candidate Starts for Pherbot\_57:

(3, 38560), (4, 38566), (Start: 10 @38686 has 10 MA's), (12, 38710), (14, 38719), (19, 38764), (20, 38782), (21, 38785), (28, 38872), (31, 38968), (32, 38998), (34, 39049), (35, 39055), (37, 39085),

Gene: Pikmin\_59 Start: 38795, Stop: 39223, Start Num: 11

Candidate Starts for Pikmin\_59:

(Start: 11 @38795 has 3 MA's), (13, 38813), (16, 38840), (17, 38843), (18, 38849), (19, 38864), (23, 38924), (27, 38960), (28, 38978), (29, 39032), (31, 39077), (33, 39152), (37, 39200), (38, 39206),

Gene: PrincePhergus\_57 Start: 38703, Stop: 39128, Start Num: 10

Candidate Starts for PrincePhergus\_57:

(3, 38577), (4, 38583), (7, 38640), (Start: 10 @38703 has 10 MA's), (12, 38730), (14, 38739), (19, 38784), (20, 38802), (21, 38805), (28, 38892), (31, 38988), (32, 39018), (34, 39069), (35, 39075), (37,

39105),

Gene: Sinatra\_58 Start: 38698, Stop: 39120, Start Num: 10

Candidate Starts for Sinatra\_58:

(3, 38572), (4, 38578), (6, 38623), (Start: 10 @38698 has 10 MA's), (12, 38722), (14, 38731), (19, 38776), (20, 38794), (21, 38797), (28, 38884), (31, 38980), (32, 39010), (34, 39061), (35, 39067), (37, 39097),

Gene: SirVictor\_59 Start: 39273, Stop: 39695, Start Num: 10

Candidate Starts for SirVictor\_59:

(Start: 10 @39273 has 10 MA's), (12, 39297), (14, 39306), (15, 39309), (16, 39327), (18, 39336), (19, 39351), (20, 39369), (22, 39399), (24, 39411), (26, 39426), (28, 39459), (31, 39555), (32, 39585), (34, 39636),