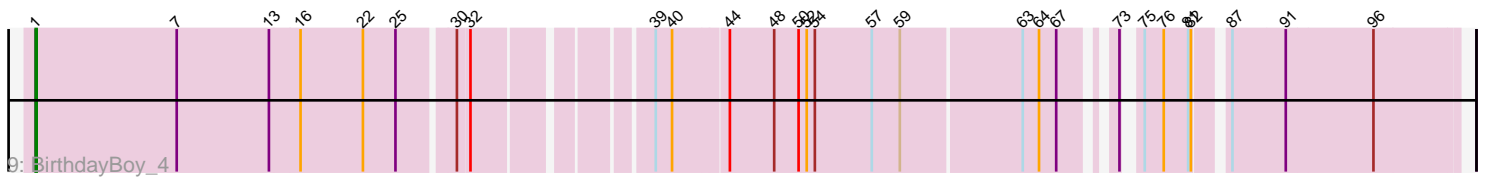
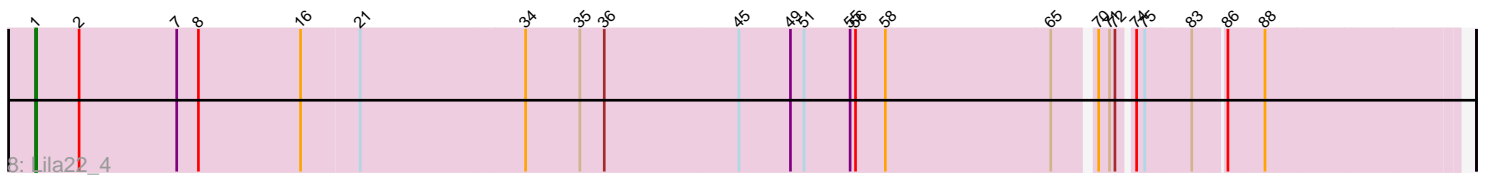
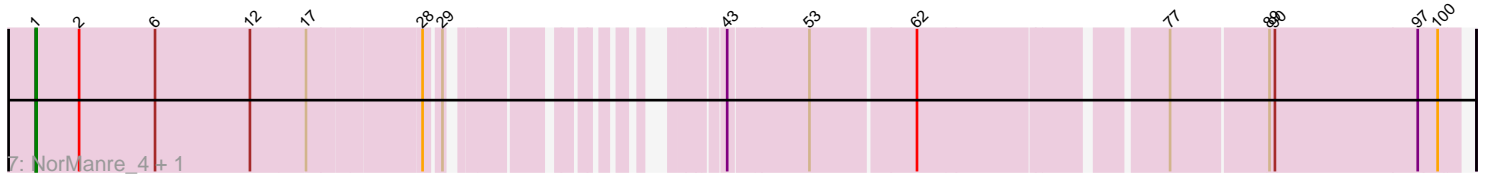
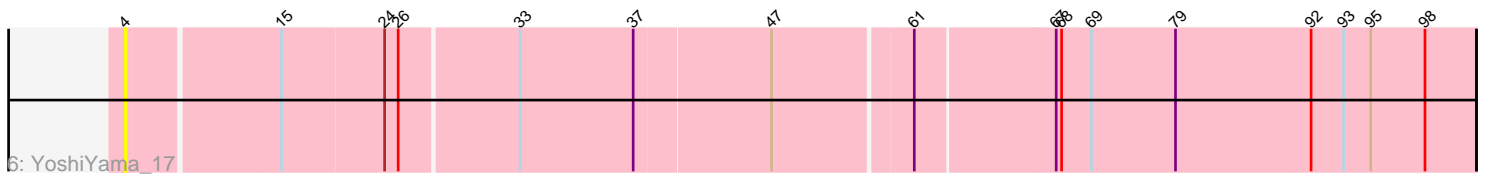
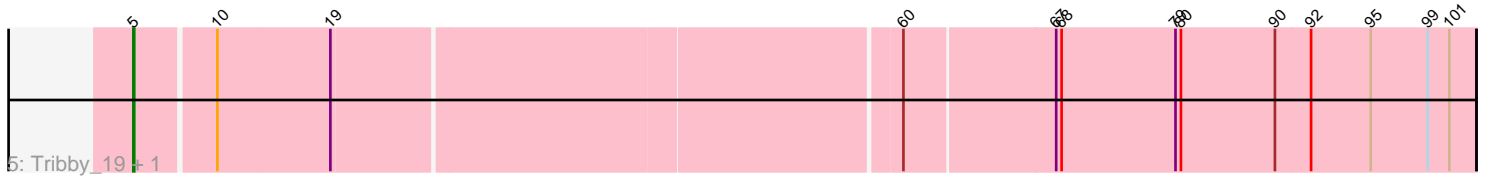
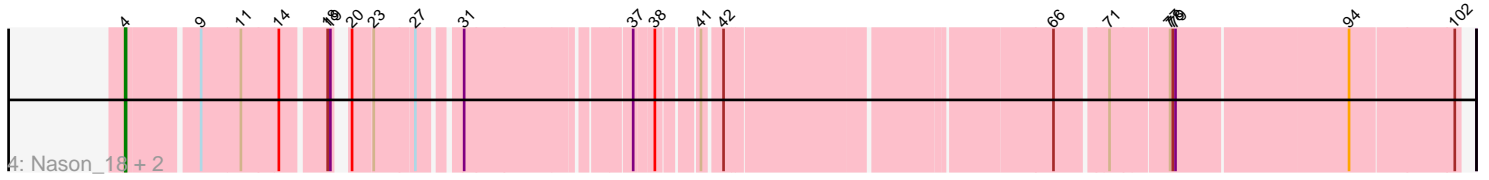
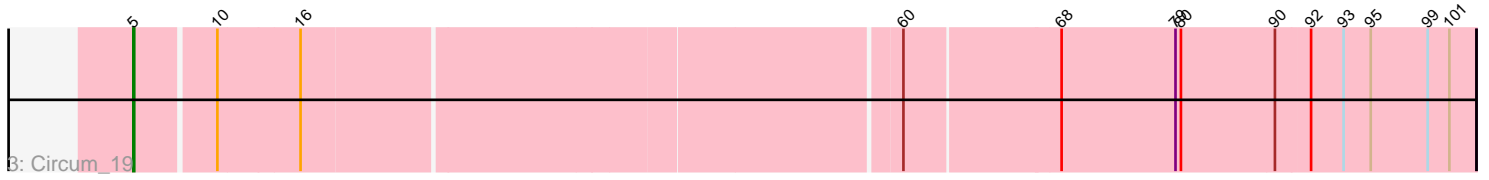
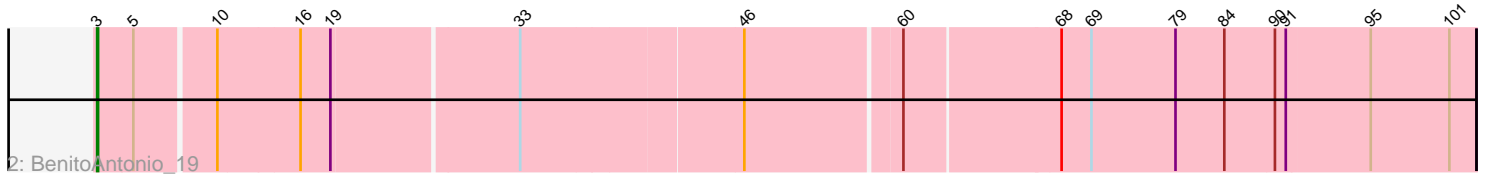
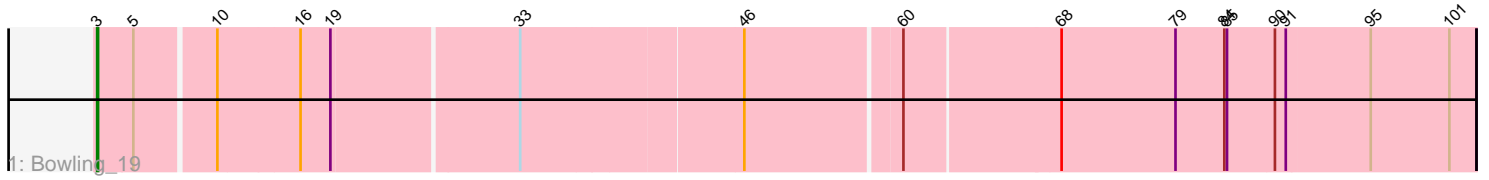


# Pham 295243



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 295243 Report

This analysis was run 04/18/26 on database version 643.

Pham number 295243 has 13 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Bowling\_19
- Track 2 : BenitoAntonio\_19
- Track 3 : Circum\_19
- Track 4 : Nason\_18, Arcadia\_18, Elsa\_18
- Track 5 : Tribby\_19, Cheesy\_19
- Track 6 : YoshiYama\_17
- Track 7 : NorManre\_4, Patos\_4
- Track 8 : Lila22\_4
- Track 9 : BirthdayBoy\_4

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

The start number called the most often in the published annotations is 1, it was called in 4 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BirthdayBoy\_4, Lila22\_4, NorManre\_4, Patos\_4,

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

- 

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

- Arcadia\_18, BenitoAntonio\_19, Bowling\_19, Cheesy\_19, Circum\_19, Elsa\_18, Nason\_18, Tribby\_19, YoshiYama\_17,

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

Start 1:

- Found in 4 of 13 ( 30.8% ) of genes in pham
- Manual Annotations of this start: 4 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BirthdayBoy\_4 (DV), Lila22\_4 (DV), NorManre\_4 (DV), Patos\_4 (DV),

Start 3:

- Found in 2 of 13 ( 15.4% ) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BenitoAntonio\_19 (AM), Bowling\_19 (AM),

Start 4:

- Found in 4 of 13 ( 30.8% ) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arcadia\_18 (AM), Elsa\_18 (AM), Nason\_18 (AM), YoshiYama\_17 (AM),

Start 5:

- Found in 5 of 13 ( 38.5% ) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Cheesy\_19 (AM), Circum\_19 (AM), Tribby\_19 (AM),

**Summary by clusters:**

There are 2 clusters represented in this pham: DV, AM,

Info for manual annotations of cluster AM:

- Start number 3 was manually annotated 2 times for cluster AM.
- Start number 4 was manually annotated 3 times for cluster AM.
- Start number 5 was manually annotated 3 times for cluster AM.

Info for manual annotations of cluster DV:

- Start number 1 was manually annotated 4 times for cluster DV.

**Gene Information:**

Gene: Arcadia\_18 Start: 13315, Stop: 14601, Start Num: 4

Candidate Starts for Arcadia\_18:

(Start: 4 @13315 has 3 MA's), (9, 13387), (11, 13429), (14, 13468), (18, 13513), (19, 13516), (20, 13522), (23, 13543), (27, 13585), (31, 13621), (37, 13783), (38, 13801), (41, 13837), (42, 13855), (66, 14185), (71, 14236), (77, 14296), (78, 14299), (79, 14302), (94, 14485), (102, 14596),

Gene: BenitoAntonio\_19 Start: 14727, Stop: 16184, Start Num: 3

Candidate Starts for BenitoAntonio\_19:

(Start: 3 @14727 has 2 MA's), (Start: 5 @14766 has 3 MA's), (10, 14850), (16, 14937), (19, 14970), (33, 15168), (46, 15402), (60, 15567), (68, 15732), (69, 15765), (79, 15858), (84, 15912), (90, 15966), (91, 15978), (95, 16068), (101, 16155),

Gene: BirthdayBoy\_4 Start: 3417, Stop: 4841, Start Num: 1

Candidate Starts for BirthdayBoy\_4:

(Start: 1 @3417 has 4 MA's), (7, 3573), (13, 3675), (16, 3708), (22, 3777), (25, 3813), (30, 3870), (32, 3882), (39, 4047), (40, 4065), (44, 4122), (48, 4170), (50, 4197), (52, 4206), (54, 4215), (57, 4278), (59,

4308), (63, 4437), (64, 4455), (67, 4473), (73, 4515), (75, 4524), (76, 4545), (81, 4572), (82, 4575), (87, 4602), (91, 4659), (96, 4752),

Gene: Bowling\_19 Start: 14825, Stop: 16282, Start Num: 3

Candidate Starts for Bowling\_19:

(Start: 3 @14825 has 2 MA's), (Start: 5 @14864 has 3 MA's), (10, 14948), (16, 15035), (19, 15068), (33, 15266), (46, 15500), (60, 15665), (68, 15830), (79, 15956), (84, 16010), (85, 16013), (90, 16064), (91, 16076), (95, 16166), (101, 16253),

Gene: Cheesy\_19 Start: 14864, Stop: 16282, Start Num: 5

Candidate Starts for Cheesy\_19:

(Start: 5 @14864 has 3 MA's), (10, 14948), (19, 15068), (60, 15665), (67, 15824), (68, 15830), (79, 15956), (80, 15962), (90, 16064), (92, 16100), (95, 16166), (99, 16229), (101, 16253),

Gene: Circum\_19 Start: 14871, Stop: 16289, Start Num: 5

Candidate Starts for Circum\_19:

(Start: 5 @14871 has 3 MA's), (10, 14955), (16, 15042), (60, 15672), (68, 15837), (79, 15963), (80, 15969), (90, 16071), (92, 16107), (93, 16143), (95, 16173), (99, 16236), (101, 16260),

Gene: Elsa\_18 Start: 13315, Stop: 14601, Start Num: 4

Candidate Starts for Elsa\_18:

(Start: 4 @13315 has 3 MA's), (9, 13387), (11, 13429), (14, 13468), (18, 13513), (19, 13516), (20, 13522), (23, 13543), (27, 13585), (31, 13621), (37, 13783), (38, 13801), (41, 13837), (42, 13855), (66, 14185), (71, 14236), (77, 14296), (78, 14299), (79, 14302), (94, 14485), (102, 14596),

Gene: Lila22\_4 Start: 3409, Stop: 4914, Start Num: 1

Candidate Starts for Lila22\_4:

(Start: 1 @3409 has 4 MA's), (2, 3457), (7, 3565), (8, 3589), (16, 3700), (21, 3763), (34, 3940), (35, 4000), (36, 4027), (45, 4174), (49, 4231), (51, 4246), (55, 4297), (56, 4303), (58, 4336), (65, 4516), (70, 4555), (71, 4567), (72, 4573), (74, 4585), (75, 4594), (83, 4645), (86, 4675), (88, 4714),

Gene: Nason\_18 Start: 13315, Stop: 14601, Start Num: 4

Candidate Starts for Nason\_18:

(Start: 4 @13315 has 3 MA's), (9, 13387), (11, 13429), (14, 13468), (18, 13513), (19, 13516), (20, 13522), (23, 13543), (27, 13585), (31, 13621), (37, 13783), (38, 13801), (41, 13837), (42, 13855), (66, 14185), (71, 14236), (77, 14296), (78, 14299), (79, 14302), (94, 14485), (102, 14596),

Gene: NorManre\_4 Start: 3410, Stop: 4777, Start Num: 1

Candidate Starts for NorManre\_4:

(Start: 1 @3410 has 4 MA's), (2, 3458), (6, 3542), (12, 3647), (17, 3704), (28, 3821), (29, 3836), (43, 4031), (53, 4115), (62, 4226), (77, 4472), (89, 4574), (90, 4580), (97, 4736), (100, 4757),

Gene: Patos\_4 Start: 3410, Stop: 4777, Start Num: 1

Candidate Starts for Patos\_4:

(Start: 1 @3410 has 4 MA's), (2, 3458), (6, 3542), (12, 3647), (17, 3704), (28, 3821), (29, 3836), (43, 4031), (53, 4115), (62, 4226), (77, 4472), (89, 4574), (90, 4580), (97, 4736), (100, 4757),

Gene: Tribby\_19 Start: 14864, Stop: 16282, Start Num: 5

Candidate Starts for Tribby\_19:

(Start: 5 @14864 has 3 MA's), (10, 14948), (19, 15068), (60, 15665), (67, 15824), (68, 15830), (79, 15956), (80, 15962), (90, 16064), (92, 16100), (95, 16166), (99, 16229), (101, 16253),

Gene: YoshiYama\_17 Start: 12925, Stop: 14349, Start Num: 4

Candidate Starts for YoshiYama\_17:

(Start: 4 @12925 has 3 MA's), (15, 13081), (24, 13192), (26, 13207), (33, 13333), (37, 13453), (47, 13597), (61, 13744), (67, 13891), (68, 13897), (69, 13930), (79, 14023), (92, 14167), (93, 14203), (95, 14233), (98, 14293),