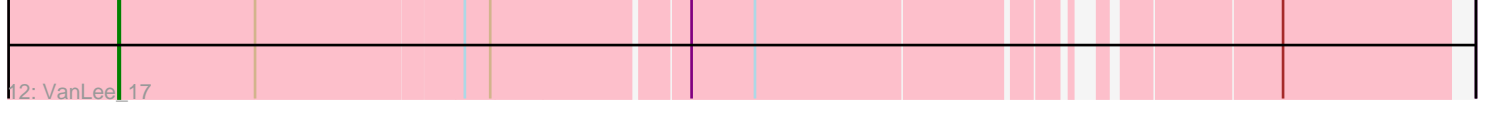
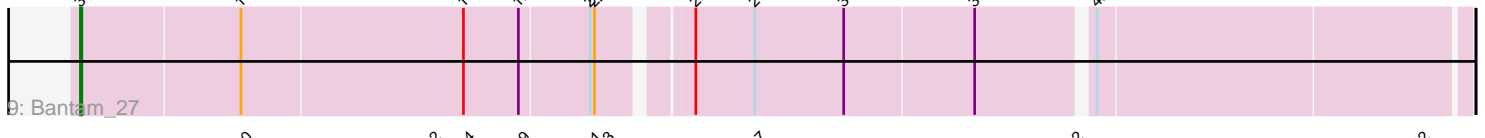
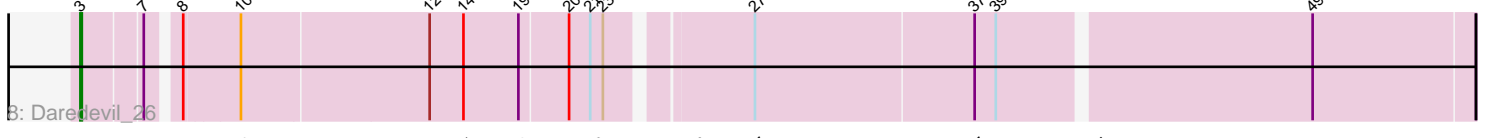
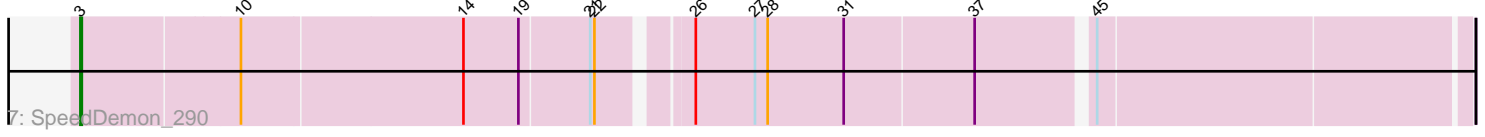
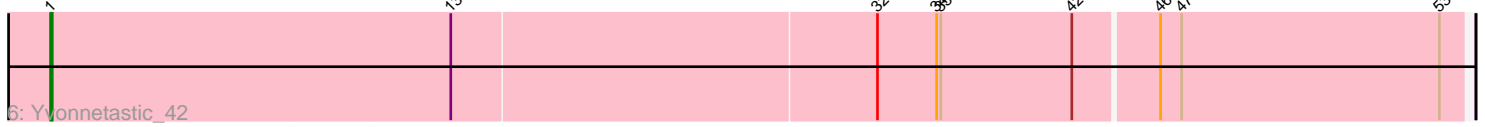
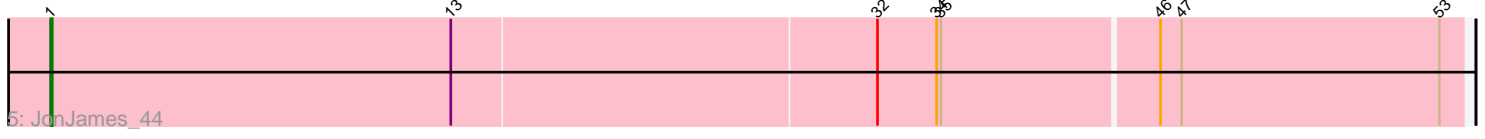
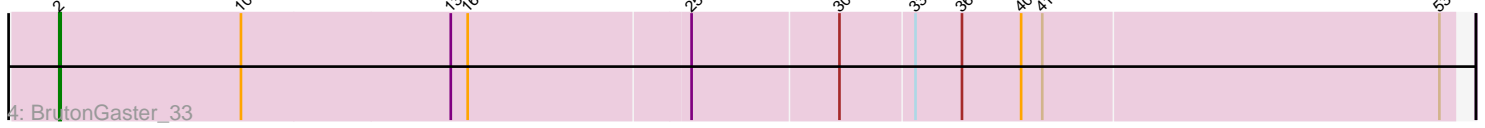
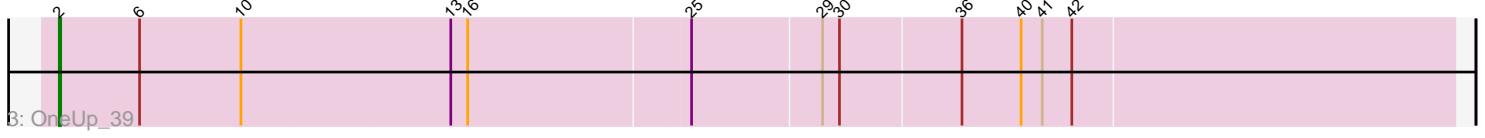
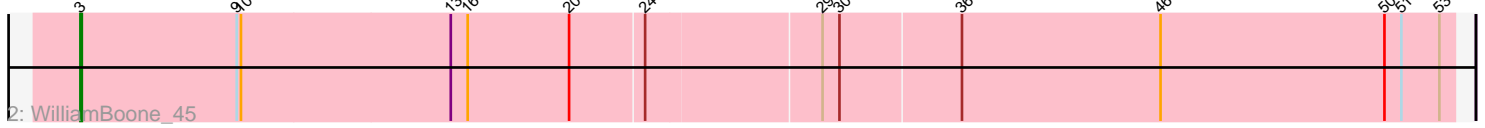
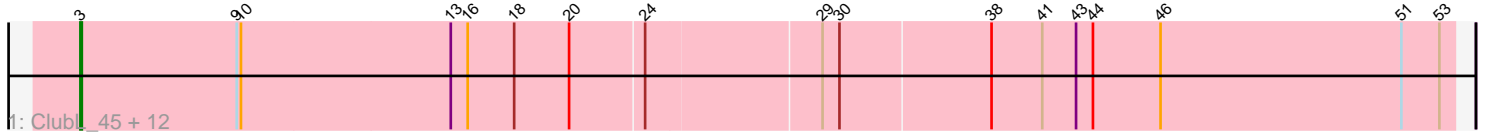


Pham 223396



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 223396 Report

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

Pham number 223396 has 24 members, 0 are drafts.

Phages represented in each track:

- Track 1 : ClubL\_45, Bachita\_47, Aphelion\_45, Norvs\_46, Toniann\_45, Smoothie\_46, Culver\_45, Abscondus\_44, Lozinak\_45, Cucurbita\_47, PhinkBoden\_45, Miskis\_43, Engineer\_45
- Track 2 : WilliamBoone\_45
- Track 3 : OneUp\_39
- Track 4 : BrutonGaster\_33
- Track 5 : JonJames\_44
- Track 6 : Yvonnestic\_42
- Track 7 : SpeedDemon\_290
- Track 8 : Daredevil\_26
- Track 9 : Bantam\_27
- Track 10 : Mollymur\_28
- Track 11 : DatBoi\_28
- Track 12 : VanLee\_17

### ***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 18 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus\_44, Aphelion\_45, Bachita\_47, Bantam\_27, ClubL\_45, Cucurbita\_47, Culver\_45, Daredevil\_26, DatBoi\_28, Engineer\_45, Lozinak\_45, Miskis\_43, Norvs\_46, PhinkBoden\_45, Smoothie\_46, SpeedDemon\_290, Toniann\_45, WilliamBoone\_45,

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

- 

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

- BrutonGaster\_33, JonJames\_44, Mollymur\_28, OneUp\_39, VanLee\_17, Yvonnestic\_42,

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

Start 1:

- Found in 2 of 24 ( 8.3% ) of genes in pham
- Manual Annotations of this start: 2 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JonJames\_44 (DD), Yvonnetastic\_42 (DD),

Start 2:

- Found in 2 of 24 ( 8.3% ) of genes in pham
- Manual Annotations of this start: 2 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrutonGaster\_33 (CQ2), OneUp\_39 (CQ2),

Start 3:

- Found in 18 of 24 ( 75.0% ) of genes in pham
- Manual Annotations of this start: 18 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus\_44 (CQ1), Aphelion\_45 (CQ1), Bachita\_47 (CQ1), Bantam\_27 (DL), ClubL\_45 (CQ1), Cucurbita\_47 (CQ1), Culver\_45 (CQ1), Daredevil\_26 (DL), DatBoi\_28 (DL), Engineer\_45 (CQ1), Lozinak\_45 (CQ1), Miskis\_43 (CQ1), Norvs\_46 (CQ1), PhinkBoden\_45 (CQ1), Smoothie\_46 (CQ1), SpeedDemon\_290 (DL), Toniann\_45 (CQ1), WilliamBoone\_45 (CQ1),

Start 4:

- Found in 1 of 24 ( 4.2% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mollymur\_28 (DL),

Start 5:

- Found in 1 of 24 ( 4.2% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: VanLee\_17 (singleton),

**Summary by clusters:**

There are 5 clusters represented in this pham: CQ2, DD, CQ1, DL, singleton,

Info for manual annotations of cluster CQ1:

- Start number 3 was manually annotated 14 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 2 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster DD:

- Start number 1 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DL:

- Start number 3 was manually annotated 4 times for cluster DL.

- Start number 4 was manually annotated 1 time for cluster DL.

### **Gene Information:**

Gene: Abscondus\_44 Start: 18658, Stop: 19619, Start Num: 3

Candidate Starts for Abscondus\_44:

(Start: 3 @18658 has 18 MA's), (9, 18769), (10, 18772), (13, 18919), (16, 18931), (18, 18964), (20, 19003), (24, 19054), (29, 19174), (30, 19186), (38, 19291), (41, 19327), (43, 19351), (44, 19363), (46, 19411), (51, 19582), (53, 19609),

Gene: Aphelion\_45 Start: 18927, Stop: 19888, Start Num: 3

Candidate Starts for Aphelion\_45:

(Start: 3 @18927 has 18 MA's), (9, 19038), (10, 19041), (13, 19188), (16, 19200), (18, 19233), (20, 19272), (24, 19323), (29, 19443), (30, 19455), (38, 19560), (41, 19596), (43, 19620), (44, 19632), (46, 19680), (51, 19851), (53, 19878),

Gene: Bachita\_47 Start: 19360, Stop: 20321, Start Num: 3

Candidate Starts for Bachita\_47:

(Start: 3 @19360 has 18 MA's), (9, 19471), (10, 19474), (13, 19621), (16, 19633), (18, 19666), (20, 19705), (24, 19756), (29, 19876), (30, 19888), (38, 19993), (41, 20029), (43, 20053), (44, 20065), (46, 20113), (51, 20284), (53, 20311),

Gene: Bantam\_27 Start: 16393, Stop: 17321, Start Num: 3

Candidate Starts for Bantam\_27:

(Start: 3 @16393 has 18 MA's), (10, 16501), (14, 16654), (19, 16693), (21, 16741), (22, 16744), (26, 16798), (27, 16840), (31, 16903), (37, 16993), (45, 17068),

Gene: BrutonGaster\_33 Start: 15537, Stop: 16510, Start Num: 2

Candidate Starts for BrutonGaster\_33:

(Start: 2 @15537 has 2 MA's), (10, 15666), (13, 15813), (16, 15825), (25, 15978), (30, 16080), (33, 16131), (36, 16164), (40, 16206), (41, 16221), (53, 16500),

Gene: ClubL\_45 Start: 18849, Stop: 19810, Start Num: 3

Candidate Starts for ClubL\_45:

(Start: 3 @18849 has 18 MA's), (9, 18960), (10, 18963), (13, 19110), (16, 19122), (18, 19155), (20, 19194), (24, 19245), (29, 19365), (30, 19377), (38, 19482), (41, 19518), (43, 19542), (44, 19554), (46, 19602), (51, 19773), (53, 19800),

Gene: Cucurbita\_47 Start: 20219, Stop: 21180, Start Num: 3

Candidate Starts for Cucurbita\_47:

(Start: 3 @20219 has 18 MA's), (9, 20330), (10, 20333), (13, 20480), (16, 20492), (18, 20525), (20, 20564), (24, 20615), (29, 20735), (30, 20747), (38, 20852), (41, 20888), (43, 20912), (44, 20924), (46, 20972), (51, 21143), (53, 21170),

Gene: Culver\_45 Start: 18658, Stop: 19619, Start Num: 3

Candidate Starts for Culver\_45:

(Start: 3 @18658 has 18 MA's), (9, 18769), (10, 18772), (13, 18919), (16, 18931), (18, 18964), (20, 19003), (24, 19054), (29, 19174), (30, 19186), (38, 19291), (41, 19327), (43, 19351), (44, 19363), (46, 19411), (51, 19582), (53, 19609),

Gene: Daredevil\_26 Start: 14796, Stop: 15721, Start Num: 3

Candidate Starts for Daredevil\_26:

(Start: 3 @14796 has 18 MA's), (7, 14835), (8, 14853), (10, 14889), (12, 15018), (14, 15042), (19, 15081), (20, 15114), (21, 15129), (23, 15138), (27, 15228), (37, 15381), (39, 15396), (49, 15609),

Gene: DatBoi\_28 Start: 17182, Stop: 18110, Start Num: 3

Candidate Starts for DatBoi\_28:

(Start: 3 @17182 has 18 MA's), (10, 17290), (14, 17443), (19, 17482), (21, 17530), (22, 17533), (26, 17587), (27, 17629), (31, 17692),

Gene: Engineer\_45 Start: 18875, Stop: 19836, Start Num: 3

Candidate Starts for Engineer\_45:

(Start: 3 @18875 has 18 MA's), (9, 18986), (10, 18989), (13, 19136), (16, 19148), (18, 19181), (20, 19220), (24, 19271), (29, 19391), (30, 19403), (38, 19508), (41, 19544), (43, 19568), (44, 19580), (46, 19628), (51, 19799), (53, 19826),

Gene: JonJames\_44 Start: 22784, Stop: 23772, Start Num: 1

Candidate Starts for JonJames\_44:

(Start: 1 @22784 has 2 MA's), (13, 23066), (32, 23363), (34, 23405), (35, 23408), (46, 23558), (47, 23573), (53, 23756),

Gene: Lozinak\_45 Start: 18930, Stop: 19891, Start Num: 3

Candidate Starts for Lozinak\_45:

(Start: 3 @18930 has 18 MA's), (9, 19041), (10, 19044), (13, 19191), (16, 19203), (18, 19236), (20, 19275), (24, 19326), (29, 19446), (30, 19458), (38, 19563), (41, 19599), (43, 19623), (44, 19635), (46, 19683), (51, 19854), (53, 19881),

Gene: Miskis\_43 Start: 18693, Stop: 19654, Start Num: 3

Candidate Starts for Miskis\_43:

(Start: 3 @18693 has 18 MA's), (9, 18804), (10, 18807), (13, 18954), (16, 18966), (18, 18999), (20, 19038), (24, 19089), (29, 19209), (30, 19221), (38, 19326), (41, 19362), (43, 19386), (44, 19398), (46, 19446), (51, 19617), (53, 19644),

Gene: Mollymur\_28 Start: 17282, Stop: 18201, Start Num: 4

Candidate Starts for Mollymur\_28:

(Start: 4 @17282 has 1 MA's), (10, 17369), (12, 17498), (14, 17522), (19, 17561), (21, 17609), (23, 17618), (27, 17708), (42, 17930), (52, 18161),

Gene: Norvs\_46 Start: 18932, Stop: 19893, Start Num: 3

Candidate Starts for Norvs\_46:

(Start: 3 @18932 has 18 MA's), (9, 19043), (10, 19046), (13, 19193), (16, 19205), (18, 19238), (20, 19277), (24, 19328), (29, 19448), (30, 19460), (38, 19565), (41, 19601), (43, 19625), (44, 19637), (46, 19685), (51, 19856), (53, 19883),

Gene: OneUp\_39 Start: 16642, Stop: 17615, Start Num: 2

Candidate Starts for OneUp\_39:

(Start: 2 @16642 has 2 MA's), (6, 16699), (10, 16771), (13, 16918), (16, 16930), (25, 17083), (29, 17173), (30, 17185), (36, 17269), (40, 17311), (41, 17326), (42, 17347),

Gene: PhinkBoden\_45 Start: 19313, Stop: 20274, Start Num: 3

Candidate Starts for PhinkBoden\_45:

(Start: 3 @19313 has 18 MA's), (9, 19424), (10, 19427), (13, 19574), (16, 19586), (18, 19619), (20, 19658), (24, 19709), (29, 19829), (30, 19841), (38, 19946), (41, 19982), (43, 20006), (44, 20018), (46, 20066), (51, 20237), (53, 20264),

Gene: Smoothie\_46 Start: 18930, Stop: 19891, Start Num: 3

Candidate Starts for Smoothie\_46:

(Start: 3 @18930 has 18 MA's), (9, 19041), (10, 19044), (13, 19191), (16, 19203), (18, 19236), (20, 19275), (24, 19326), (29, 19446), (30, 19458), (38, 19563), (41, 19599), (43, 19623), (44, 19635), (46, 19683), (51, 19854), (53, 19881),

Gene: SpeedDemon\_290 Start: 18239, Stop: 19167, Start Num: 3

Candidate Starts for SpeedDemon\_290:

(Start: 3 @18239 has 18 MA's), (10, 18347), (14, 18500), (19, 18539), (21, 18587), (22, 18590), (26, 18644), (27, 18686), (28, 18695), (31, 18749), (37, 18839), (45, 18914),

Gene: Toniann\_45 Start: 18875, Stop: 19836, Start Num: 3

Candidate Starts for Toniann\_45:

(Start: 3 @18875 has 18 MA's), (9, 18986), (10, 18989), (13, 19136), (16, 19148), (18, 19181), (20, 19220), (24, 19271), (29, 19391), (30, 19403), (38, 19508), (41, 19544), (43, 19568), (44, 19580), (46, 19628), (51, 19799), (53, 19826),

Gene: VanLee\_17 Start: 10020, Stop: 10897, Start Num: 5

Candidate Starts for VanLee\_17:

(Start: 5 @10020 has 1 MA's), (11, 10116), (15, 10260), (17, 10278), (25, 10410), (27, 10455), (48, 10779),

Gene: WilliamBoone\_45 Start: 18239, Stop: 19200, Start Num: 3

Candidate Starts for WilliamBoone\_45:

(Start: 3 @18239 has 18 MA's), (9, 18350), (10, 18353), (13, 18500), (16, 18512), (20, 18584), (24, 18635), (29, 18755), (30, 18767), (36, 18851), (46, 18992), (50, 19151), (51, 19163), (53, 19190),

Gene: Yvonnetastic\_42 Start: 20319, Stop: 21307, Start Num: 1

Candidate Starts for Yvonnetastic\_42:

(Start: 1 @20319 has 2 MA's), (13, 20601), (32, 20898), (34, 20940), (35, 20943), (42, 21036), (46, 21093), (47, 21108), (53, 21291),