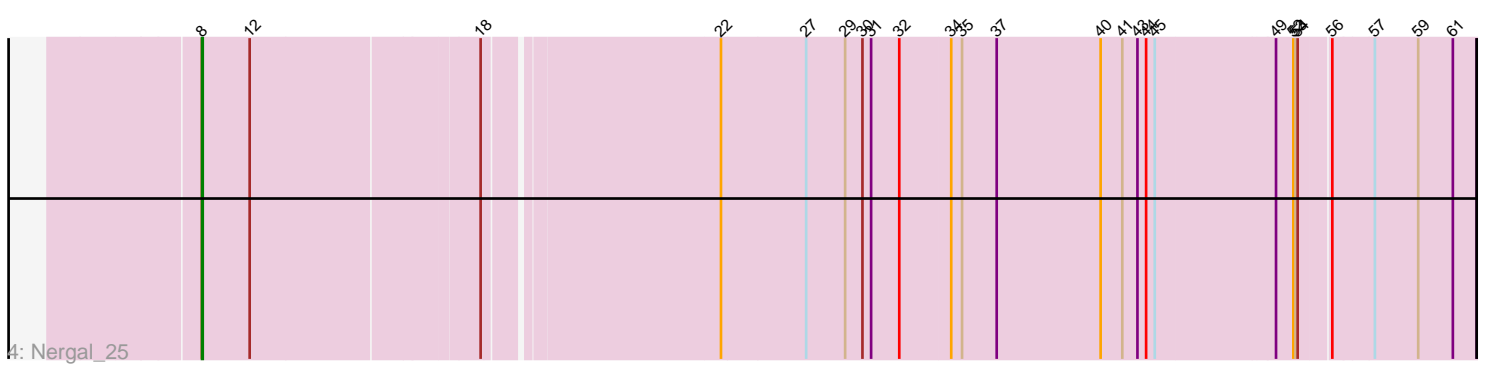
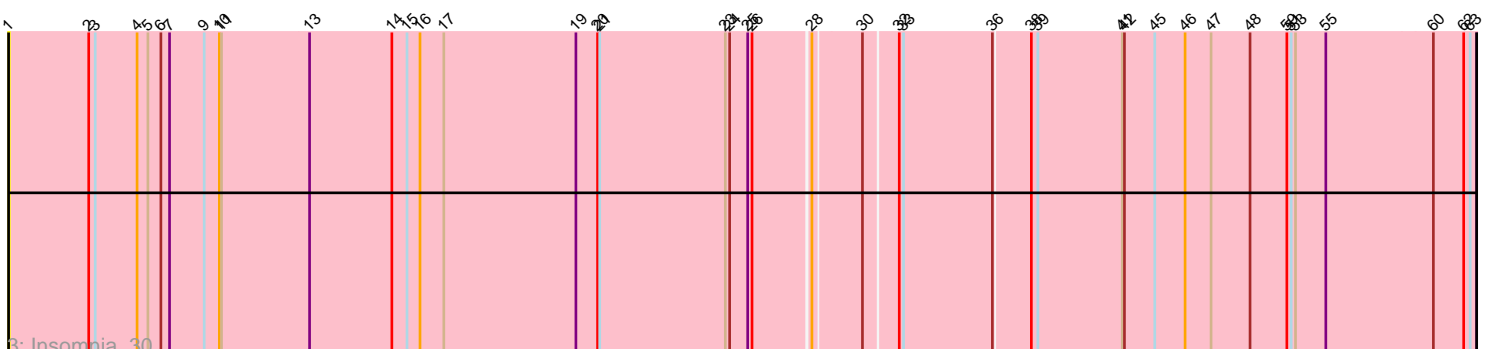
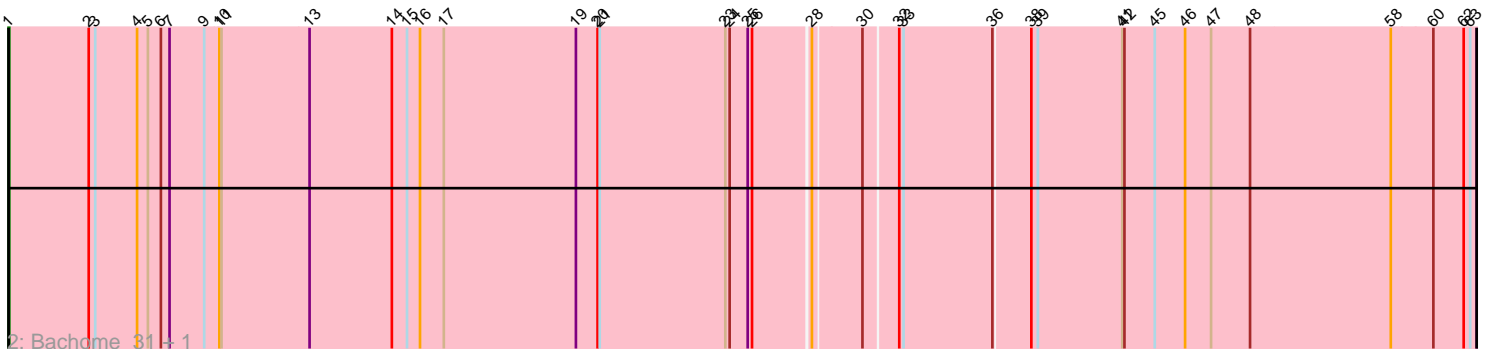
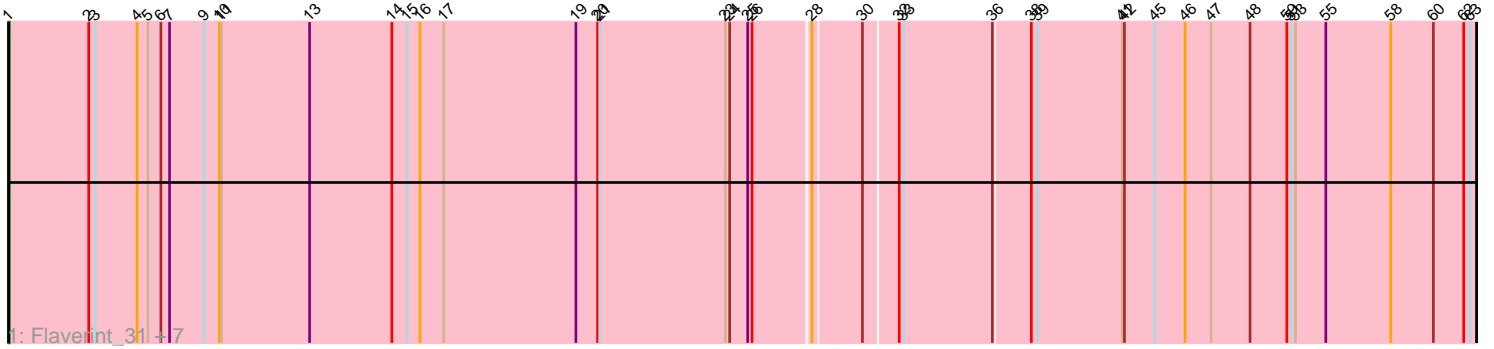


Pham 163097



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 163097 Report

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

Pham number 163097 has 12 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Flaverint\_31, Aneem\_31, Bowtie\_31, Jabith\_31, Joselito\_31, Gilberta\_31, Munch\_31, Lucivia\_31
- Track 2 : Bachome\_31, MaCh\_31
- Track 3 : Insomnia\_30
- Track 4 : Nergal\_25

### ***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 10 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aneem\_31, Bachome\_31, Bowtie\_31, Flaverint\_31, Gilberta\_31, Insomnia\_30, Jabith\_31, Joselito\_31, Lucivia\_31, MaCh\_31, Munch\_31,

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

- 

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

- Nergal\_25,

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

Start 1:

- Found in 11 of 12 ( 91.7% ) of genes in pham
- Manual Annotations of this start: 10 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aneem\_31 (A11), Bachome\_31 (A11), Bowtie\_31 (A11), Flaverint\_31 (A11), Gilberta\_31 (A11), Insomnia\_30 (A11), Jabith\_31 (A11), Joselito\_31 (A11), Lucivia\_31 (A11), MaCh\_31 (A11), Munch\_31 (A11),

Start 8:

- Found in 1 of 12 ( 8.3% ) of genes in pham

- Manual Annotations of this start: 1 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nergal\_25 (AG),

### Summary by clusters:

There are 2 clusters represented in this pham: A11, AG,

Info for manual annotations of cluster A11:

- Start number 1 was manually annotated 10 times for cluster A11.

Info for manual annotations of cluster AG:

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

### Gene Information:

Gene: Aneem\_31 Start: 23397, Stop: 25388, Start Num: 1

Candidate Starts for Aneem\_31:

(Start: 1 @23397 has 10 MA's), (2, 23508), (3, 23517), (4, 23574), (5, 23589), (6, 23607), (7, 23619), (9, 23667), (10, 23685), (11, 23688), (13, 23808), (14, 23922), (15, 23943), (16, 23961), (17, 23994), (19, 24177), (20, 24207), (21, 24210), (23, 24384), (24, 24390), (25, 24414), (26, 24420), (28, 24495), (30, 24558), (32, 24600), (33, 24606), (36, 24729), (38, 24777), (39, 24786), (41, 24903), (42, 24906), (45, 24948), (46, 24990), (47, 25026), (48, 25080), (50, 25131), (51, 25137), (53, 25143), (55, 25185), (58, 25275), (60, 25332), (62, 25371), (63, 25380),

Gene: Bachome\_31 Start: 23388, Stop: 25376, Start Num: 1

Candidate Starts for Bachome\_31:

(Start: 1 @23388 has 10 MA's), (2, 23499), (3, 23508), (4, 23565), (5, 23580), (6, 23598), (7, 23610), (9, 23658), (10, 23676), (11, 23679), (13, 23799), (14, 23913), (15, 23934), (16, 23952), (17, 23985), (19, 24168), (20, 24198), (21, 24201), (23, 24375), (24, 24381), (25, 24405), (26, 24411), (28, 24486), (30, 24549), (32, 24591), (33, 24597), (36, 24720), (38, 24768), (39, 24777), (41, 24894), (42, 24897), (45, 24939), (46, 24981), (47, 25017), (48, 25071), (58, 25263), (60, 25320), (62, 25359), (63, 25368),

Gene: Bowtie\_31 Start: 23397, Stop: 25388, Start Num: 1

Candidate Starts for Bowtie\_31:

(Start: 1 @23397 has 10 MA's), (2, 23508), (3, 23517), (4, 23574), (5, 23589), (6, 23607), (7, 23619), (9, 23667), (10, 23685), (11, 23688), (13, 23808), (14, 23922), (15, 23943), (16, 23961), (17, 23994), (19, 24177), (20, 24207), (21, 24210), (23, 24384), (24, 24390), (25, 24414), (26, 24420), (28, 24495), (30, 24558), (32, 24600), (33, 24606), (36, 24729), (38, 24777), (39, 24786), (41, 24903), (42, 24906), (45, 24948), (46, 24990), (47, 25026), (48, 25080), (50, 25131), (51, 25137), (53, 25143), (55, 25185), (58, 25275), (60, 25332), (62, 25371), (63, 25380),

Gene: Flaverint\_31 Start: 23391, Stop: 25382, Start Num: 1

Candidate Starts for Flaverint\_31:

(Start: 1 @23391 has 10 MA's), (2, 23502), (3, 23511), (4, 23568), (5, 23583), (6, 23601), (7, 23613), (9, 23661), (10, 23679), (11, 23682), (13, 23802), (14, 23916), (15, 23937), (16, 23955), (17, 23988), (19, 24171), (20, 24201), (21, 24204), (23, 24378), (24, 24384), (25, 24408), (26, 24414), (28, 24489), (30, 24552), (32, 24594), (33, 24600), (36, 24723), (38, 24771), (39, 24780), (41, 24897), (42, 24900), (45, 24942), (46, 24984), (47, 25020), (48, 25074), (50, 25125), (51, 25131), (53, 25137), (55, 25179), (58, 25269), (60, 25326), (62, 25365), (63, 25374),

Gene: Gilberta\_31 Start: 23388, Stop: 25379, Start Num: 1

Candidate Starts for Gilberta\_31:

(Start: 1 @23388 has 10 MA's), (2, 23499), (3, 23508), (4, 23565), (5, 23580), (6, 23598), (7, 23610), (9, 23658), (10, 23676), (11, 23679), (13, 23799), (14, 23913), (15, 23934), (16, 23952), (17, 23985), (19, 24168), (20, 24198), (21, 24201), (23, 24375), (24, 24381), (25, 24405), (26, 24411), (28, 24486), (30, 24549), (32, 24591), (33, 24597), (36, 24720), (38, 24768), (39, 24777), (41, 24894), (42, 24897), (45, 24939), (46, 24981), (47, 25017), (48, 25071), (50, 25122), (51, 25128), (53, 25134), (55, 25176), (58, 25266), (60, 25323), (62, 25362), (63, 25371),

Gene: Insomnia\_30 Start: 23449, Stop: 25440, Start Num: 1

Candidate Starts for Insomnia\_30:

(Start: 1 @23449 has 10 MA's), (2, 23560), (3, 23569), (4, 23626), (5, 23641), (6, 23659), (7, 23671), (9, 23719), (10, 23737), (11, 23740), (13, 23860), (14, 23974), (15, 23995), (16, 24013), (17, 24046), (19, 24229), (20, 24259), (21, 24262), (23, 24436), (24, 24442), (25, 24466), (26, 24472), (28, 24547), (30, 24610), (32, 24652), (33, 24658), (36, 24781), (38, 24829), (39, 24838), (41, 24955), (42, 24958), (45, 25000), (46, 25042), (47, 25078), (48, 25132), (50, 25183), (51, 25189), (53, 25195), (55, 25237), (60, 25384), (62, 25423), (63, 25432),

Gene: Jabith\_31 Start: 23449, Stop: 25440, Start Num: 1

Candidate Starts for Jabith\_31:

(Start: 1 @23449 has 10 MA's), (2, 23560), (3, 23569), (4, 23626), (5, 23641), (6, 23659), (7, 23671), (9, 23719), (10, 23737), (11, 23740), (13, 23860), (14, 23974), (15, 23995), (16, 24013), (17, 24046), (19, 24229), (20, 24259), (21, 24262), (23, 24436), (24, 24442), (25, 24466), (26, 24472), (28, 24547), (30, 24610), (32, 24652), (33, 24658), (36, 24781), (38, 24829), (39, 24838), (41, 24955), (42, 24958), (45, 25000), (46, 25042), (47, 25078), (48, 25132), (50, 25183), (51, 25189), (53, 25195), (55, 25237), (58, 25327), (60, 25384), (62, 25423), (63, 25432),

Gene: Joselito\_31 Start: 23397, Stop: 25388, Start Num: 1

Candidate Starts for Joselito\_31:

(Start: 1 @23397 has 10 MA's), (2, 23508), (3, 23517), (4, 23574), (5, 23589), (6, 23607), (7, 23619), (9, 23667), (10, 23685), (11, 23688), (13, 23808), (14, 23922), (15, 23943), (16, 23961), (17, 23994), (19, 24177), (20, 24207), (21, 24210), (23, 24384), (24, 24390), (25, 24414), (26, 24420), (28, 24495), (30, 24558), (32, 24600), (33, 24606), (36, 24729), (38, 24777), (39, 24786), (41, 24903), (42, 24906), (45, 24948), (46, 24990), (47, 25026), (48, 25080), (50, 25131), (51, 25137), (53, 25143), (55, 25185), (58, 25275), (60, 25332), (62, 25371), (63, 25380),

Gene: Lucivia\_31 Start: 23446, Stop: 25437, Start Num: 1

Candidate Starts for Lucivia\_31:

(Start: 1 @23446 has 10 MA's), (2, 23557), (3, 23566), (4, 23623), (5, 23638), (6, 23656), (7, 23668), (9, 23716), (10, 23734), (11, 23737), (13, 23857), (14, 23971), (15, 23992), (16, 24010), (17, 24043), (19, 24226), (20, 24256), (21, 24259), (23, 24433), (24, 24439), (25, 24463), (26, 24469), (28, 24544), (30, 24607), (32, 24649), (33, 24655), (36, 24778), (38, 24826), (39, 24835), (41, 24952), (42, 24955), (45, 24997), (46, 25039), (47, 25075), (48, 25129), (50, 25180), (51, 25186), (53, 25192), (55, 25234), (58, 25324), (60, 25381), (62, 25420), (63, 25429),

Gene: MaCh\_31 Start: 23388, Stop: 25376, Start Num: 1

Candidate Starts for MaCh\_31:

(Start: 1 @23388 has 10 MA's), (2, 23499), (3, 23508), (4, 23565), (5, 23580), (6, 23598), (7, 23610), (9, 23658), (10, 23676), (11, 23679), (13, 23799), (14, 23913), (15, 23934), (16, 23952), (17, 23985), (19, 24168), (20, 24198), (21, 24201), (23, 24375), (24, 24381), (25, 24405), (26, 24411), (28, 24486), (30, 24549), (32, 24591), (33, 24597), (36, 24720), (38, 24768), (39, 24777), (41, 24894), (42, 24897), (45, 24939), (46, 24981), (47, 25017), (48, 25071), (58, 25263), (60, 25320), (62, 25359), (63, 25368),

Gene: Munch\_31 Start: 23397, Stop: 25388, Start Num: 1

Candidate Starts for Munch\_31:

(Start: 1 @23397 has 10 MA's), (2, 23508), (3, 23517), (4, 23574), (5, 23589), (6, 23607), (7, 23619), (9, 23667), (10, 23685), (11, 23688), (13, 23808), (14, 23922), (15, 23943), (16, 23961), (17, 23994), (19, 24177), (20, 24207), (21, 24210), (23, 24384), (24, 24390), (25, 24414), (26, 24420), (28, 24495), (30, 24558), (32, 24600), (33, 24606), (36, 24729), (38, 24777), (39, 24786), (41, 24903), (42, 24906), (45, 24948), (46, 24990), (47, 25026), (48, 25080), (50, 25131), (51, 25137), (53, 25143), (55, 25185), (58, 25275), (60, 25332), (62, 25371), (63, 25380),

Gene: Nergal\_25 Start: 20708, Stop: 22390, Start Num: 8

Candidate Starts for Nergal\_25:

(Start: 8 @20708 has 1 MA's), (12, 20774), (18, 21074), (22, 21374), (27, 21488), (29, 21542), (30, 21566), (31, 21578), (32, 21617), (34, 21686), (35, 21701), (37, 21749), (40, 21893), (41, 21923), (43, 21944), (44, 21956), (45, 21968), (49, 22127), (52, 22151), (53, 22154), (54, 22157), (56, 22196), (57, 22250), (59, 22310), (61, 22358),