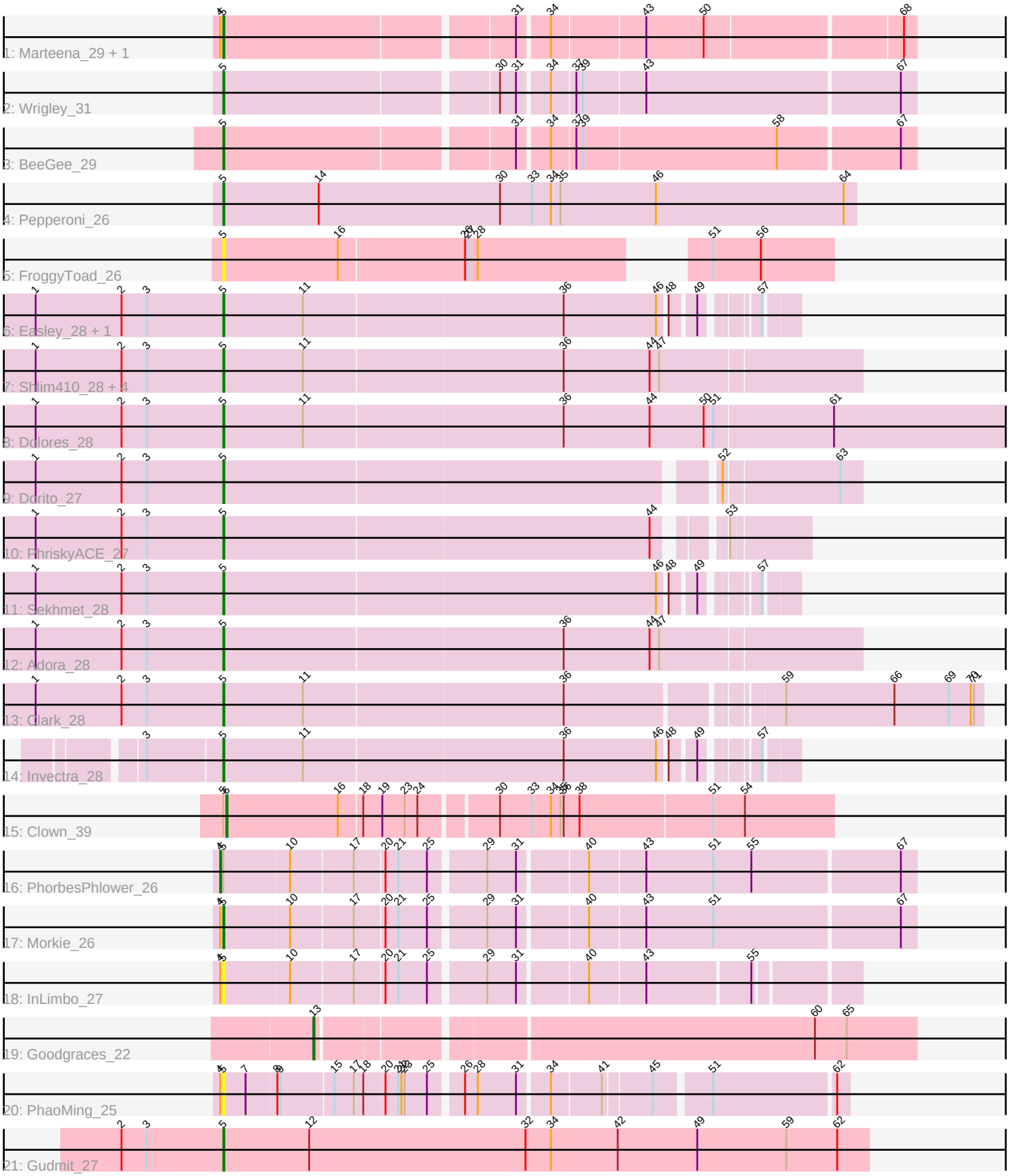
Pham 311923


1: Marteena_29 + 1
2: Wrigley_31
3: BeeGee_29
4: Pepperoni_26
5: FroggyToad_26
6: Easley_28 + 1
7: Shlim410_28 + 4
8: Dolores_28
9: Dorito_27
10: PhriskyACE_27
11: Sekhmet_28
12: Adora_28
13: Clark_28
14: Invectra_28
15: Clown_39
16: PhorbesPhlower_26
17: Morkie_26
18: InLimbo_27
19: Goodgraces_22
20: PhaoMing_25
21: Gudmit_27

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 311923 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311923 has 27 members, 3 are drafts.

Phages represented in each track:
- Track 1 : Marteena_29, EMsquaredA_29
- Track 2 : Wrigley_31
- Track 3 : BeeGee_29
- Track 4 : Pepperoni_26
- Track 5 : FroggyToad_26
- Track 6 : Easley_28, WinkNick_28
- Track 7 : Shlim410_28, Twinkle_28, Howe_28, Mcklovin_28, Hortense_28
- Track 8 : Dolores_28
- Track 9 : Dorito_27
- Track 10 : PhriskyACE_27
- Track 11 : Sekhmet_28
- Track 12 : Adora_28
- Track 13 : Clark_28
- Track 14 : Invectra_28
- Track 15 : Clown_39
- Track 16 : PhorbesPhlower_26
- Track 17 : Morkie_26
- Track 18 : InLimbo_27
- Track 19 : Goodgraces_22
- Track 20 : PhaoMing_25
- Track 21 : Gudmit_27

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

The start number called the most often in the published annotations is 5, it was called in 21 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Adora_28, BeeGee_29, Clark_28, Dolores_28, Dorito_27, EMsquaredA_29, Easley_28, FroggyToad_26, Gudmit_27, Hortense_28, Howe_28, InLimbo_27, Invectra_28, Marteena_29, Mcklovin_28, Morkie_26, Pepperoni_26, PhaoMing_25, PhriskyACE_27, Sekhmet_28, Shlim410_28, Twinkle_28, WinkNick_28, Wrigley_31,

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

• Clown_39, PhorbesPhlower_26,

Genes that do not have the "Most Annotated" start:
• Goodgraces_22,

Summary by start number:

Start 4:
• Found in 6 of 27 (22.2%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 16.7% of time when present
• Phage (with cluster) where this start called: PhorbesPhlower_26 (DH),

Start 5:
• Found in 26 of 27 (96.3%) of genes in pham
• Manual Annotations of this start: 21 of 24
• Called 92.3% of time when present
• Phage (with cluster) where this start called: Adora_28 (CZ4), BeeGee_29 (CY5), Clark_28 (CZ4), Dolores_28 (CZ4), Dorito_27 (CZ4), EMsquaredA_29 (CY1), Easley_28 (CZ4), FroggyToad_26 (CZ2), Gudmit_27 (singleton), Hortense_28 (CZ4), Howe_28 (CZ4), InLimbo_27 (DH), Invectra_28 (CZ4), Marteena_29 (CY1), Mcklovin_28 (CZ4), Morkie_26 (DH), Pepperoni_26 (CZ), PhaoMing_25 (UNK), PhriskyACE_27 (CZ4), Sekhmet_28 (CZ4), Shlim410_28 (CZ4), Twinkle_28 (CZ4), WinkNick_28 (CZ4), Wrigley_31 (CY4),

Start 6:
• Found in 1 of 27 (3.7%) 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: Clown_39 (DC2),

Start 13:
• Found in 1 of 27 (3.7%) 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: Goodgraces_22 (FD),

Summary by clusters:

There are 11 clusters represented in this pham: CY1, CY5, DH, CY4, CZ2, singleton, CZ4, CZ, FD, UNK, DC2,

Info for manual annotations of cluster CY1:
•Start number 5 was manually annotated 2 times for cluster CY1.

Info for manual annotations of cluster CY4:
•Start number 5 was manually annotated 1 time for cluster CY4.

Info for manual annotations of cluster CY5:
•Start number 5 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CZ:
•Start number 5 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ4:
•Start number 5 was manually annotated 14 times for cluster CZ4.

Info for manual annotations of cluster DC2:
•Start number 6 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DH:
•Start number 4 was manually annotated 1 time for cluster DH.
•Start number 5 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster FD:
•Start number 13 was manually annotated 1 time for cluster FD.

Gene Information:

Gene: Adora_28 Start: 23842, Stop: 24432, Start Num: 5
Candidate Starts for Adora_28:
(1, 23665), (2, 23746), (3, 23770), (Start: 5 @23842 has 21 MA's), (36, 24157), (44, 24238), (47, 24247),

Gene: BeeGee_29 Start: 24605, Stop: 25225, Start Num: 5
Candidate Starts for BeeGee_29:
(Start: 5 @24605 has 21 MA's), (31, 24866), (34, 24893), (37, 24914), (39, 24920), (58, 25100), (67, 25211),

Gene: Clark_28 Start: 23304, Stop: 23987, Start Num: 5
Candidate Starts for Clark_28:
(1, 23127), (2, 23208), (3, 23232), (Start: 5 @23304 has 21 MA's), (11, 23379), (36, 23619), (59, 23802), (66, 23904), (69, 23955), (70, 23976), (71, 23979),

Gene: Clown_39 Start: 32425, Stop: 32979, Start Num: 6
Candidate Starts for Clown_39:
(Start: 5 @32422 has 21 MA's), (Start: 6 @32425 has 1 MA's), (16, 32530), (18, 32551), (19, 32569), (23, 32590), (24, 32602), (30, 32668), (33, 32698), (34, 32716), (35, 32725), (36, 32728), (38, 32743), (51, 32866), (54, 32896),

Gene: Dolores_28 Start: 23280, Stop: 24047, Start Num: 5
Candidate Starts for Dolores_28:
(1, 23103), (2, 23184), (3, 23208), (Start: 5 @23280 has 21 MA's), (11, 23355), (36, 23595), (44, 23676), (50, 23727), (51, 23736), (61, 23847),

Gene: Dorito_27 Start: 22746, Stop: 23312, Start Num: 5
Candidate Starts for Dorito_27:
(1, 22569), (2, 22650), (3, 22674), (Start: 5 @22746 has 21 MA's), (52, 23187), (63, 23292),

Gene: EMsquaredA_29 Start: 24575, Stop: 25189, Start Num: 5
Candidate Starts for EMsquaredA_29:

(Start: 4 @24572 has 1 MA's), (Start: 5 @24575 has 21 MA's), (31, 24836), (34, 24863), (43, 24947), (50, 25001), (68, 25178),

Gene: Easley_28 Start: 23290, Stop: 23787, Start Num: 5
Candidate Starts for Easley_28:
(1, 23113), (2, 23194), (3, 23218), (Start: 5 @23290 has 21 MA's), (11, 23365), (36, 23605), (46, 23692), (48, 23698), (49, 23719), (57, 23758),

Gene: FroggyToad_26 Start: 22192, Stop: 22704, Start Num: 5
Candidate Starts for FroggyToad_26:
(Start: 5 @22192 has 21 MA's), (16, 22300), (26, 22417), (27, 22420), (28, 22429), (51, 22591), (56, 22636),

Gene: Goodgraces_22 Start: 16580, Stop: 17119, Start Num: 13
Candidate Starts for Goodgraces_22:
(Start: 13 @16580 has 1 MA's), (60, 17024), (65, 17054),

Gene: Gudmit_27 Start: 21597, Stop: 22205, Start Num: 5
Candidate Starts for Gudmit_27:
(2, 21501), (3, 21525), (Start: 5 @21597 has 21 MA's), (12, 21678), (32, 21882), (34, 21906), (42, 21969), (49, 22044), (59, 22128), (62, 22176),

Gene: Hortense_28 Start: 23889, Stop: 24479, Start Num: 5
Candidate Starts for Hortense_28:
(1, 23712), (2, 23793), (3, 23817), (Start: 5 @23889 has 21 MA's), (11, 23964), (36, 24204), (44, 24285), (47, 24294),

Gene: Howe_28 Start: 23889, Stop: 24479, Start Num: 5
Candidate Starts for Howe_28:
(1, 23712), (2, 23793), (3, 23817), (Start: 5 @23889 has 21 MA's), (11, 23964), (36, 24204), (44, 24285), (47, 24294),

Gene: InLimbo_27 Start: 21978, Stop: 22529, Start Num: 5
Candidate Starts for InLimbo_27:
(Start: 4 @21975 has 1 MA's), (Start: 5 @21978 has 21 MA's), (10, 22038), (17, 22095), (20, 22122), (21, 22134), (25, 22161), (29, 22209), (31, 22236), (40, 22296), (43, 22347), (55, 22440),

Gene: Invectra_28 Start: 23947, Stop: 24444, Start Num: 5
Candidate Starts for Invectra_28:
(3, 23878), (Start: 5 @23947 has 21 MA's), (11, 24022), (36, 24262), (46, 24349), (48, 24355), (49, 24376), (57, 24415),

Gene: Marteena_29 Start: 24575, Stop: 25189, Start Num: 5
Candidate Starts for Marteena_29:
(Start: 4 @24572 has 1 MA's), (Start: 5 @24575 has 21 MA's), (31, 24836), (34, 24863), (43, 24947), (50, 25001), (68, 25178),

Gene: Mcklovin_28 Start: 26058, Stop: 26648, Start Num: 5
Candidate Starts for Mcklovin_28:
(1, 25881), (2, 25962), (3, 25986), (Start: 5 @26058 has 21 MA's), (11, 26133), (36, 26373), (44, 26454), (47, 26463),

Gene: Morkie_26 Start: 21978, Stop: 22595, Start Num: 5

Candidate Starts for Morkie_26:
(Start: 4 @21975 has 1 MA's), (Start: 5 @21978 has 21 MA's), (10, 22038), (17, 22095), (20, 22122), (21, 22134), (25, 22161), (29, 22209), (31, 22236), (40, 22296), (43, 22347), (51, 22410), (67, 22581),

Gene: Pepperoni_26 Start: 21851, Stop: 22447, Start Num: 5
Candidate Starts for Pepperoni_26:
(Start: 5 @21851 has 21 MA's), (14, 21941), (30, 22112), (33, 22142), (34, 22160), (35, 22169), (46, 22259), (64, 22436),

Gene: PhaoMing_25 Start: 23308, Stop: 23850, Start Num: 5
Candidate Starts for PhaoMing_25:
(Start: 4 @23305 has 1 MA's), (Start: 5 @23308 has 21 MA's), (7, 23329), (8, 23356), (9, 23359), (15, 23407), (17, 23425), (18, 23434), (20, 23452), (21, 23464), (22, 23467), (23, 23470), (25, 23491), (26, 23518), (28, 23530), (31, 23566), (34, 23593), (41, 23638), (45, 23680), (51, 23728), (62, 23839),

Gene: PhorbesPhlower_26 Start: 21975, Stop: 22595, Start Num: 4
Candidate Starts for PhorbesPhlower_26:
(Start: 4 @21975 has 1 MA's), (Start: 5 @21978 has 21 MA's), (10, 22038), (17, 22095), (20, 22122), (21, 22134), (25, 22161), (29, 22209), (31, 22236), (40, 22296), (43, 22347), (51, 22410), (55, 22446), (67, 22581),

Gene: PhriskyACE_27 Start: 22746, Stop: 23258, Start Num: 5
Candidate Starts for PhriskyACE_27:
(1, 22569), (2, 22650), (3, 22674), (Start: 5 @22746 has 21 MA's), (44, 23142), (53, 23187),

Gene: Sekhmet_28 Start: 23658, Stop: 24155, Start Num: 5
Candidate Starts for Sekhmet_28:
(1, 23481), (2, 23562), (3, 23586), (Start: 5 @23658 has 21 MA's), (46, 24060), (48, 24066), (49, 24087), (57, 24126),

Gene: Shlim410_28 Start: 23889, Stop: 24479, Start Num: 5
Candidate Starts for Shlim410_28:
(1, 23712), (2, 23793), (3, 23817), (Start: 5 @23889 has 21 MA's), (11, 23964), (36, 24204), (44, 24285), (47, 24294),

Gene: Twinkle_28 Start: 24948, Stop: 25538, Start Num: 5
Candidate Starts for Twinkle_28:
(1, 24771), (2, 24852), (3, 24876), (Start: 5 @24948 has 21 MA's), (11, 25023), (36, 25263), (44, 25344), (47, 25353),

Gene: WinkNick_28 Start: 23280, Stop: 23777, Start Num: 5
Candidate Starts for WinkNick_28:
(1, 23103), (2, 23184), (3, 23208), (Start: 5 @23280 has 21 MA's), (11, 23355), (36, 23595), (46, 23682), (48, 23688), (49, 23709), (57, 23748),

Gene: Wrigley_31 Start: 25497, Stop: 26117, Start Num: 5
Candidate Starts for Wrigley_31:
(Start: 5 @25497 has 21 MA's), (30, 25743), (31, 25758), (34, 25785), (37, 25806), (39, 25812), (43, 25869), (67, 26103),