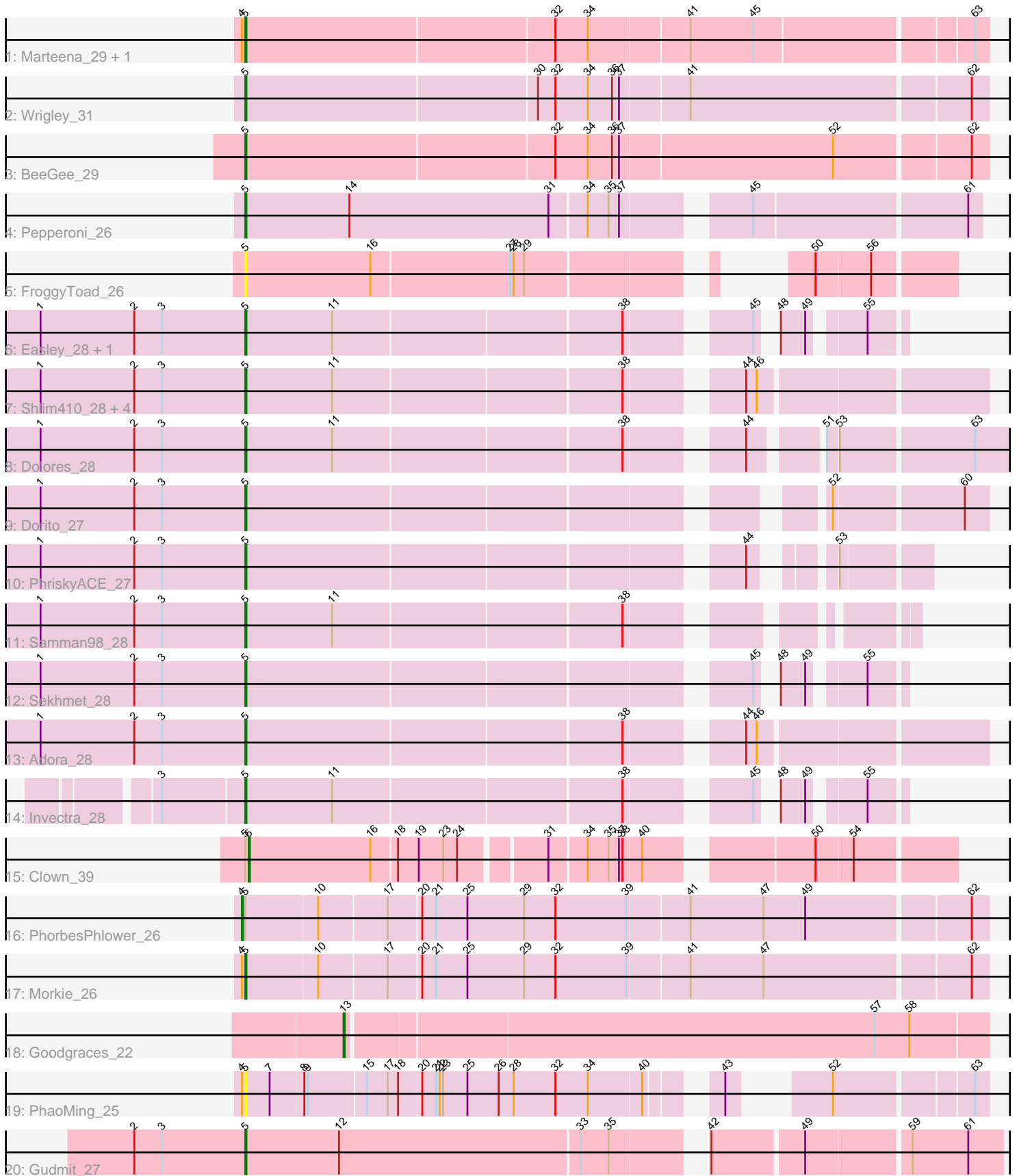


# Pham 305256



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 305256 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305256 has 26 members, 2 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 : Samman98\_28
- Track 12 : Sekhmet\_28
- Track 13 : Adora\_28
- Track 14 : Invectra\_28
- Track 15 : Clown\_39
- Track 16 : PhorbesPhlower\_26
- Track 17 : Morkie\_26
- Track 18 : Goodgraces\_22
- Track 19 : PhaoMing\_25
- Track 20 : 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, Dolores\_28, Dorito\_27, EMSquaredA\_29, Easley\_28, FroggyToad\_26, Gudmit\_27, Hortense\_28, Howe\_28, Invectra\_28, Marteena\_29, Mcklovin\_28, Morkie\_26, Pepperoni\_26, PhaoMing\_25, PhriskyACE\_27, Samman98\_28, 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 5 of 26 ( 19.2% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 20.0% of time when present
- Phage (with cluster) where this start called: PhorbesPhlower\_26 (DH),

Start 5:

- Found in 25 of 26 ( 96.2% ) of genes in pham
- Manual Annotations of this start: 21 of 24
- Called 92.0% of time when present
- Phage (with cluster) where this start called: Adora\_28 (CZ4), BeeGee\_29 (CY5), Dolores\_28 (CZ4), Dorito\_27 (CZ4), EMSquaredA\_29 (CY1), Easley\_28 (CZ4), FroggyToad\_26 (CZ2), Gudmit\_27 (singleton), Hortense\_28 (CZ4), Howe\_28 (CZ4), Invectra\_28 (CZ4), Marteena\_29 (CY1), Mcklovin\_28 (CZ4), Morkie\_26 (DH), Pepperoni\_26 (CZ), PhaoMing\_25 (UNK), PhriskyACE\_27 (CZ4), Samman98\_28 (CZ4), Sekhmet\_28 (CZ4), Shlim410\_28 (CZ4), Twinkle\_28 (CZ4), WinkNick\_28 (CZ4), Wrigley\_31 (CY4),

Start 6:

- Found in 1 of 26 ( 3.8% ) 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 26 ( 3.8% ) 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), (38, 24157), (44, 24238), (46, 24247),

Gene: BeeGee\_29 Start: 24605, Stop: 25225, Start Num: 5

Candidate Starts for BeeGee\_29:

(Start: 5 @24605 has 21 MA's), (32, 24866), (34, 24893), (36, 24914), (37, 24920), (52, 25100), (62, 25211),

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), (31, 32668), (34, 32698), (35, 32716), (37, 32725), (38, 32728), (40, 32743), (50, 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), (38, 23595), (44, 23676), (51, 23727), (53, 23736), (63, 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), (60, 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), (32, 24836), (34, 24863), (41, 24947), (45, 25001), (63, 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), (38, 23605), (45, 23692), (48, 23698), (49, 23719), (55, 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), (27, 22417), (28, 22420), (29, 22429), (50, 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), (57, 17024), (58, 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), (33, 21882), (35, 21906), (42, 21969), (49, 22044), (59, 22128), (61, 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), (38, 24204), (44, 24285), (46, 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), (38, 24204), (44, 24285), (46, 24294),

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), (38, 24262), (45, 24349), (48, 24355), (49, 24376), (55, 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), (32, 24836), (34, 24863), (41, 24947), (45, 25001), (63, 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), (38, 26373), (44, 26454), (46, 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), (32, 22236), (39, 22296), (41, 22347), (47, 22410), (62, 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), (31, 22112), (34, 22142), (35, 22160), (37, 22169), (45, 22259), (61, 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), (32, 23566), (34, 23593), (40, 23638), (43, 23680), (52, 23728), (63, 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), (32, 22236), (39, 22296), (41, 22347), (47, 22410), (49, 22446), (62, 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: Samman98\_28 Start: 23298, Stop: 23804, Start Num: 5

Candidate Starts for Samman98\_28:

(1, 23121), (2, 23202), (3, 23226), (Start: 5 @23298 has 21 MA's), (11, 23373), (38, 23613),

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), (45, 24060), (48, 24066), (49, 24087), (55, 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), (38, 24204), (44, 24285), (46, 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), (38, 25263), (44, 25344), (46, 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), (38, 23595), (45, 23682), (48, 23688), (49, 23709), (55, 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), (32, 25758), (34, 25785), (36, 25806), (37, 25812), (41, 25869), (62, 26103),