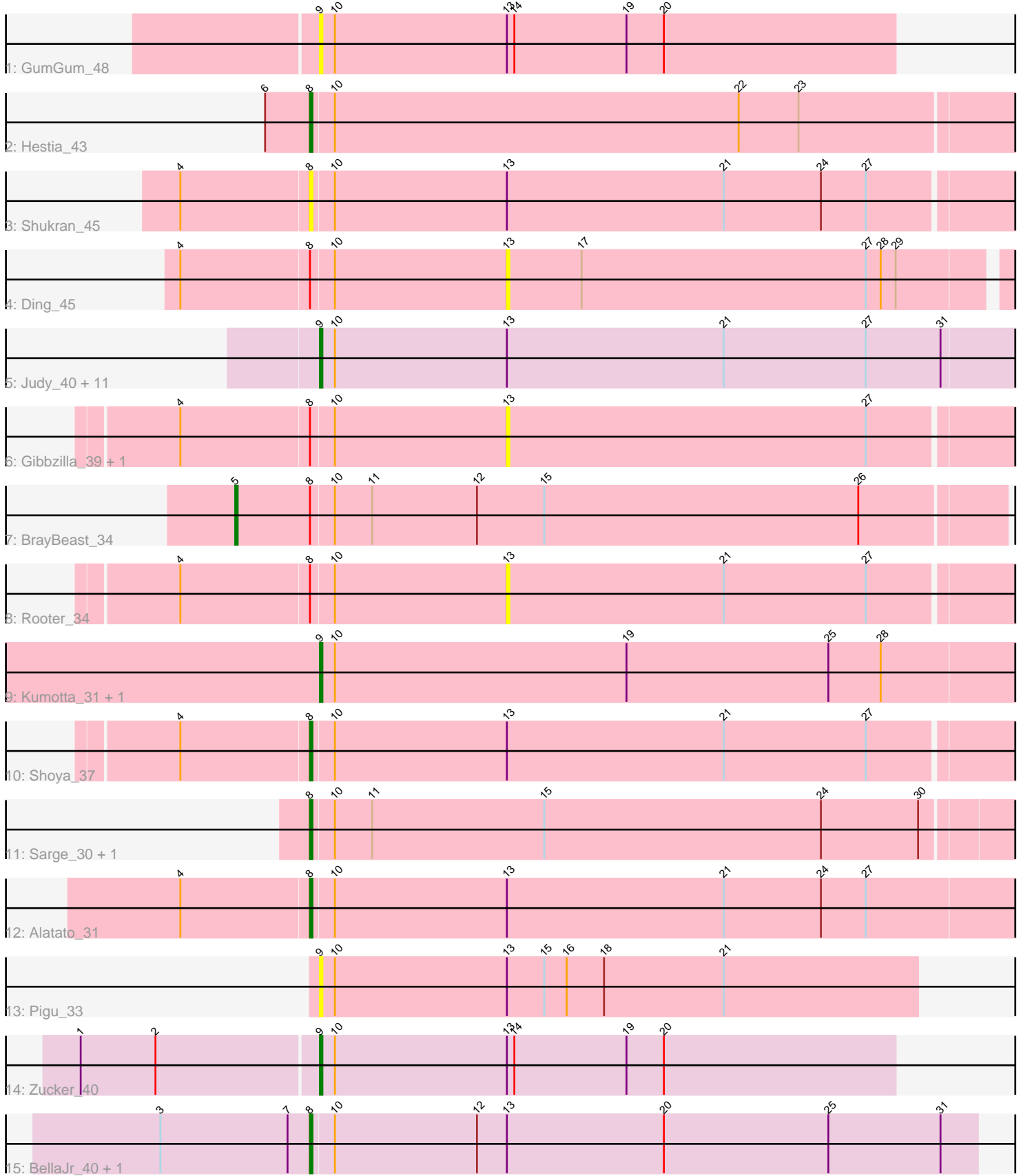


Pham 303589



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 303589 Report

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

Pham number 303589 has 30 members, 11 are drafts.

Phages represented in each track:

- Track 1 : GumGum\_48
- Track 2 : Hestia\_43
- Track 3 : Shukran\_45
- Track 4 : Ding\_45
- Track 5 : Judy\_40, FosterFrank\_41, NidoQ\_34, Peas\_36, KayMoney\_39, ChuckDuck\_40, LittleRon\_37, Constance\_39, LilyBell\_39, GlobiWarming\_39, RootBeer\_30, Bridgette\_39
- Track 6 : Gibbzilla\_39, JeanClaude\_35
- Track 7 : BrayBeast\_34
- Track 8 : Rooter\_34
- Track 9 : Kumotta\_31, MargaretKali\_31
- Track 10 : Shoya\_37
- Track 11 : Sarge\_30, Bauer\_41
- Track 12 : Alatato\_31
- Track 13 : Pigu\_33
- Track 14 : Zucker\_40
- Track 15 : BellaJr\_40, BlackSpider\_37

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

The start number called the most often in the published annotations is 9, it was called in 12 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bridgette\_39, ChuckDuck\_40, Constance\_39, FosterFrank\_41, GlobiWarming\_39, GumGum\_48, Judy\_40, KayMoney\_39, Kumotta\_31, LilyBell\_39, LittleRon\_37, MargaretKali\_31, NidoQ\_34, Peas\_36, Pigu\_33, RootBeer\_30, Zucker\_40,

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

- 

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

- Alatato\_31, Bauer\_41, BellaJr\_40, BlackSpider\_37, BrayBeast\_34, Ding\_45, Gibbzilla\_39, Hestia\_43, JeanClaude\_35, Rooter\_34, Sarge\_30, Shoya\_37,

Shukran\_45,

### Summary by start number:

Start 5:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrayBeast\_34 (FB),

Start 8:

- Found in 13 of 30 ( 43.3% ) of genes in pham
- Manual Annotations of this start: 6 of 19
- Called 61.5% of time when present
- Phage (with cluster) where this start called: Alatato\_31 (FB), Bauer\_41 (FN), BellaJr\_40 (FN), BlackSpider\_37 (FN), Hestia\_43 (AY), Sarge\_30 (FB), Shoya\_37 (FB), Shukran\_45 (AY),

Start 9:

- Found in 17 of 30 ( 56.7% ) of genes in pham
- Manual Annotations of this start: 12 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bridgette\_39 (FA), ChuckDuck\_40 (FA), Constance\_39 (FA), FosterFrank\_41 (FA), GlobiWarming\_39 (FA), GumGum\_48 (AY), Judy\_40 (FA), KayMoney\_39 (FA), Kumotta\_31 (FB), LilyBell\_39 (FA), LittleRon\_37 (FA), MargaretKali\_31 (FB), NidoQ\_34 (FA), Peas\_36 (FA), Pigu\_33 (FB), RootBeer\_30 (FA), Zucker\_40 (FN),

Start 13:

- Found in 24 of 30 ( 80.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Ding\_45 (AY), Gibbzilla\_39 (FB), JeanClaude\_35 (FB), Rooter\_34 (FB),

### Summary by clusters:

There are 4 clusters represented in this pham: AY, FA, FB, FN,

Info for manual annotations of cluster AY:

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

Info for manual annotations of cluster FA:

- Start number 9 was manually annotated 9 times for cluster FA.

Info for manual annotations of cluster FB:

- Start number 5 was manually annotated 1 time for cluster FB.
- Start number 8 was manually annotated 3 times for cluster FB.
- Start number 9 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster FN:

- Start number 8 was manually annotated 2 times for cluster FN.
- Start number 9 was manually annotated 1 time for cluster FN.

**Gene Information:**

Gene: Alatato\_31 Start: 24615, Stop: 24322, Start Num: 8

Candidate Starts for Alatato\_31:

(4, 24666), (Start: 8 @24615 has 6 MA's), (10, 24606), (13, 24537), (21, 24450), (24, 24411), (27, 24393),

Gene: Bauer\_41 Start: 28925, Stop: 28644, Start Num: 8

Candidate Starts for Bauer\_41:

(Start: 8 @28925 has 6 MA's), (10, 28916), (11, 28901), (15, 28832), (24, 28721), (30, 28682),

Gene: BellaJr\_40 Start: 29513, Stop: 29247, Start Num: 8

Candidate Starts for BellaJr\_40:

(3, 29573), (7, 29522), (Start: 8 @29513 has 6 MA's), (10, 29504), (12, 29447), (13, 29435), (20, 29372), (25, 29306), (31, 29261),

Gene: BlackSpider\_37 Start: 28105, Stop: 27839, Start Num: 8

Candidate Starts for BlackSpider\_37:

(3, 28165), (7, 28114), (Start: 8 @28105 has 6 MA's), (10, 28096), (12, 28039), (13, 28027), (20, 27964), (25, 27898), (31, 27853),

Gene: BrayBeast\_34 Start: 25453, Stop: 25148, Start Num: 5

Candidate Starts for BrayBeast\_34:

(Start: 5 @25453 has 1 MA's), (Start: 8 @25423 has 6 MA's), (10, 25414), (11, 25399), (12, 25357), (15, 25330), (26, 25204),

Gene: Bridgette\_39 Start: 28174, Stop: 27884, Start Num: 9

Candidate Starts for Bridgette\_39:

(Start: 9 @28174 has 12 MA's), (10, 28168), (13, 28099), (21, 28012), (27, 27955), (31, 27925),

Gene: ChuckDuck\_40 Start: 27998, Stop: 27708, Start Num: 9

Candidate Starts for ChuckDuck\_40:

(Start: 9 @27998 has 12 MA's), (10, 27992), (13, 27923), (21, 27836), (27, 27779), (31, 27749),

Gene: Constance\_39 Start: 28327, Stop: 28037, Start Num: 9

Candidate Starts for Constance\_39:

(Start: 9 @28327 has 12 MA's), (10, 28321), (13, 28252), (21, 28165), (27, 28108), (31, 28078),

Gene: Ding\_45 Start: 29827, Stop: 29618, Start Num: 13

Candidate Starts for Ding\_45:

(4, 29956), (Start: 8 @29905 has 6 MA's), (10, 29896), (13, 29827), (17, 29797), (27, 29683), (28, 29677), (29, 29671),

Gene: FosterFrank\_41 Start: 28057, Stop: 27767, Start Num: 9

Candidate Starts for FosterFrank\_41:

(Start: 9 @28057 has 12 MA's), (10, 28051), (13, 27982), (21, 27895), (27, 27838), (31, 27808),

Gene: Gibbzilla\_39 Start: 25810, Stop: 25598, Start Num: 13

Candidate Starts for Gibbzilla\_39:

(4, 25939), (Start: 8 @25888 has 6 MA's), (10, 25879), (13, 25810), (27, 25666),

Gene: GlobiWarming\_39 Start: 27581, Stop: 27291, Start Num: 9  
Candidate Starts for GlobiWarming\_39:  
(Start: 9 @27581 has 12 MA's), (10, 27575), (13, 27506), (21, 27419), (27, 27362), (31, 27332),

Gene: GumGum\_48 Start: 30386, Stop: 30156, Start Num: 9  
Candidate Starts for GumGum\_48:  
(Start: 9 @30386 has 12 MA's), (10, 30380), (13, 30311), (14, 30308), (19, 30263), (20, 30248),

Gene: Hestia\_43 Start: 28715, Stop: 28437, Start Num: 8  
Candidate Starts for Hestia\_43:  
(6, 28733), (Start: 8 @28715 has 6 MA's), (10, 28706), (22, 28544), (23, 28520),

Gene: JeanClaude\_35 Start: 24303, Stop: 24091, Start Num: 13  
Candidate Starts for JeanClaude\_35:  
(4, 24432), (Start: 8 @24381 has 6 MA's), (10, 24372), (13, 24303), (27, 24159),

Gene: Judy\_40 Start: 28493, Stop: 28203, Start Num: 9  
Candidate Starts for Judy\_40:  
(Start: 9 @28493 has 12 MA's), (10, 28487), (13, 28418), (21, 28331), (27, 28274), (31, 28244),

Gene: KayMoney\_39 Start: 27670, Stop: 27380, Start Num: 9  
Candidate Starts for KayMoney\_39:  
(Start: 9 @27670 has 12 MA's), (10, 27664), (13, 27595), (21, 27508), (27, 27451), (31, 27421),

Gene: Kumotta\_31 Start: 25315, Stop: 25025, Start Num: 9  
Candidate Starts for Kumotta\_31:  
(Start: 9 @25315 has 12 MA's), (10, 25309), (19, 25192), (25, 25111), (28, 25090),

Gene: LilyBell\_39 Start: 27899, Stop: 27609, Start Num: 9  
Candidate Starts for LilyBell\_39:  
(Start: 9 @27899 has 12 MA's), (10, 27893), (13, 27824), (21, 27737), (27, 27680), (31, 27650),

Gene: LittleRon\_37 Start: 27279, Stop: 26989, Start Num: 9  
Candidate Starts for LittleRon\_37:  
(Start: 9 @27279 has 12 MA's), (10, 27273), (13, 27204), (21, 27117), (27, 27060), (31, 27030),

Gene: MargaretKali\_31 Start: 24950, Stop: 24660, Start Num: 9  
Candidate Starts for MargaretKali\_31:  
(Start: 9 @24950 has 12 MA's), (10, 24944), (19, 24827), (25, 24746), (28, 24725),

Gene: NidoQ\_34 Start: 27004, Stop: 26714, Start Num: 9  
Candidate Starts for NidoQ\_34:  
(Start: 9 @27004 has 12 MA's), (10, 26998), (13, 26929), (21, 26842), (27, 26785), (31, 26755),

Gene: Peas\_36 Start: 28552, Stop: 28262, Start Num: 9  
Candidate Starts for Peas\_36:  
(Start: 9 @28552 has 12 MA's), (10, 28546), (13, 28477), (21, 28390), (27, 28333), (31, 28303),

Gene: Pigu\_33 Start: 24557, Stop: 24318, Start Num: 9  
Candidate Starts for Pigu\_33:  
(Start: 9 @24557 has 12 MA's), (10, 24551), (13, 24482), (15, 24467), (16, 24458), (18, 24443), (21, 24395),

Gene: RootBeer\_30 Start: 24454, Stop: 24164, Start Num: 9

Candidate Starts for RootBeer\_30:

(Start: 9 @24454 has 12 MA's), (10, 24448), (13, 24379), (21, 24292), (27, 24235), (31, 24205),

Gene: Rooter\_34 Start: 24794, Stop: 24582, Start Num: 13

Candidate Starts for Rooter\_34:

(4, 24923), (Start: 8 @24872 has 6 MA's), (10, 24863), (13, 24794), (21, 24707), (27, 24650),

Gene: Sarge\_30 Start: 23262, Stop: 22981, Start Num: 8

Candidate Starts for Sarge\_30:

(Start: 8 @23262 has 6 MA's), (10, 23253), (11, 23238), (15, 23169), (24, 23058), (30, 23019),

Gene: Shoya\_37 Start: 25648, Stop: 25358, Start Num: 8

Candidate Starts for Shoya\_37:

(4, 25699), (Start: 8 @25648 has 6 MA's), (10, 25639), (13, 25570), (21, 25483), (27, 25426),

Gene: Shukran\_45 Start: 29468, Stop: 29178, Start Num: 8

Candidate Starts for Shukran\_45:

(4, 29519), (Start: 8 @29468 has 6 MA's), (10, 29459), (13, 29390), (21, 29303), (24, 29264), (27, 29246),

Gene: Zucker\_40 Start: 29401, Stop: 29171, Start Num: 9

Candidate Starts for Zucker\_40:

(1, 29494), (2, 29464), (Start: 9 @29401 has 12 MA's), (10, 29395), (13, 29326), (14, 29323), (19, 29278), (20, 29263),