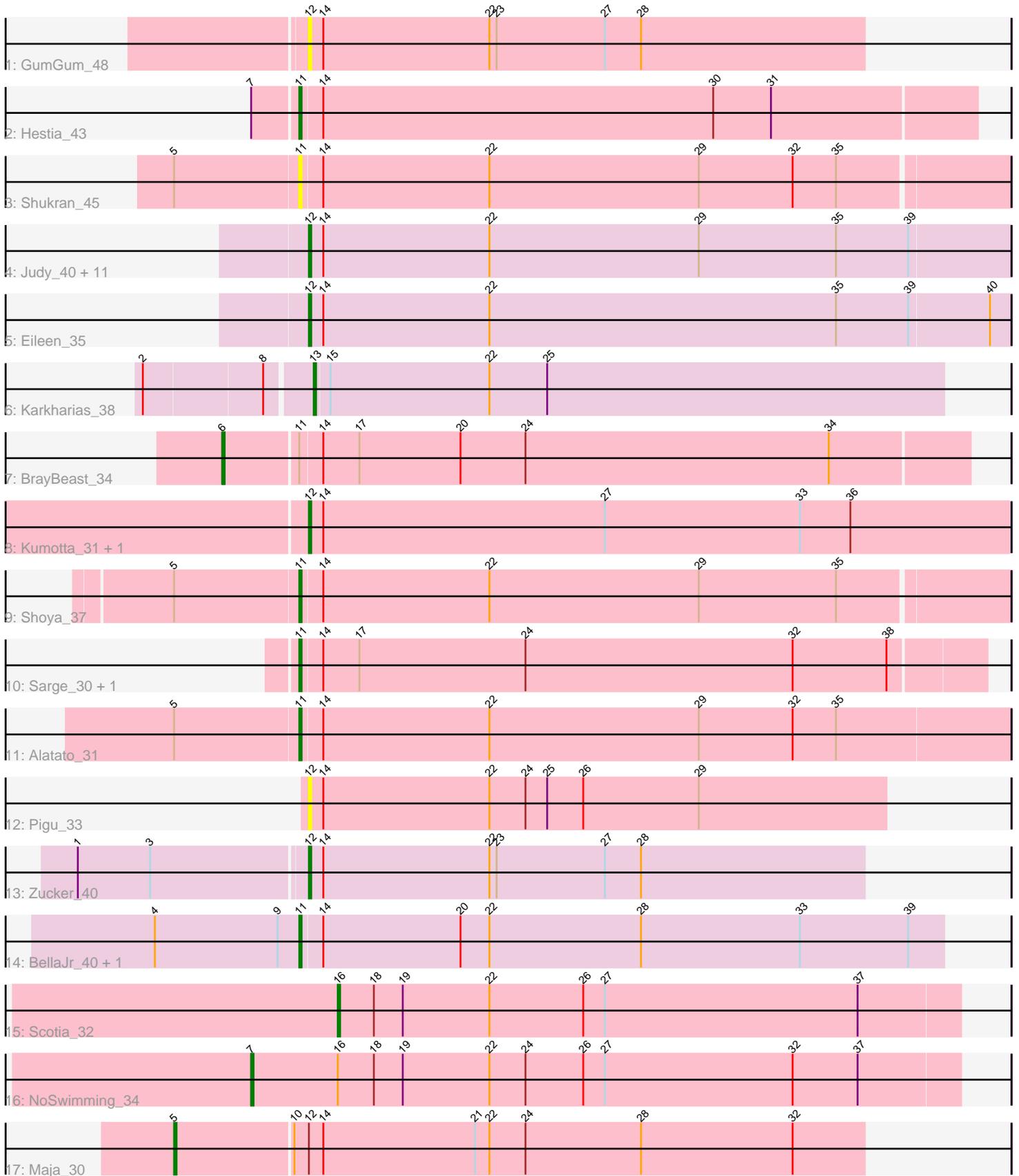


Pham 289627



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 289627 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289627 has 31 members, 8 are drafts.

Phages represented in each track:

- Track 1 : GumGum_48
- Track 2 : Hestia_43
- Track 3 : Shukran_45
- Track 4 : Judy_40, FosterFrank_41, Constance_39, NidoQ_34, Peas_36, KayMoney_39, LittleRon_37, ChuckDuck_40, LilyBell_39, GlobiWarming_39, RootBeer_30, Bridgette_39
- Track 5 : Eileen_35
- Track 6 : Karkharias_38
- Track 7 : BrayBeast_34
- Track 8 : Kumotta_31, MargaretKali_31
- Track 9 : Shoya_37
- Track 10 : Sarge_30, Bauer_41
- Track 11 : Alatato_31
- Track 12 : Pigu_33
- Track 13 : Zucker_40
- Track 14 : BellaJr_40, BlackSpider_37
- Track 15 : Scotia_32
- Track 16 : NoSwimming_34
- Track 17 : Maja_30

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

The start number called the most often in the published annotations is 12, it was called in 12 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bridgette_39, ChuckDuck_40, Constance_39, Eileen_35, 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:

- Maja_30,

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

• Alatato_31, Bauer_41, BellaJr_40, BlackSpider_37, BrayBeast_34, Hestia_43, Karkharias_38, NoSwimming_34, Sarge_30, Scotia_32, Shoya_37, Shukran_45,

Summary by start number:

Start 5:

- Found in 4 of 31 (12.9%) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Maja_30 (FO),

Start 6:

- Found in 1 of 31 (3.2%) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrayBeast_34 (FB),

Start 7:

- Found in 2 of 31 (6.5%) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 50.0% of time when present
- Phage (with cluster) where this start called: NoSwimming_34 (FO),

Start 11:

- Found in 9 of 31 (29.0%) of genes in pham
- Manual Annotations of this start: 6 of 23
- Called 88.9% 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 12:

- Found in 19 of 31 (61.3%) of genes in pham
- Manual Annotations of this start: 12 of 23
- Called 94.7% of time when present
- Phage (with cluster) where this start called: Bridgette_39 (FA), ChuckDuck_40 (FA), Constance_39 (FA), Eileen_35 (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 1 of 31 (3.2%) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Karkharias_38 (FA),

Start 16:

- Found in 2 of 31 (6.5%) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Scotia_32 (FO),

Summary by clusters:

There are 5 clusters represented in this pham: AY, FA, FB, FN, FO,

Info for manual annotations of cluster AY:

- Start number 11 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster FA:

- Start number 12 was manually annotated 9 times for cluster FA.
- Start number 13 was manually annotated 1 time for cluster FA.

Info for manual annotations of cluster FB:

- Start number 6 was manually annotated 1 time for cluster FB.
- Start number 11 was manually annotated 3 times for cluster FB.
- Start number 12 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster FN:

- Start number 11 was manually annotated 2 times for cluster FN.
- Start number 12 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster FO:

- Start number 5 was manually annotated 1 time for cluster FO.
- Start number 7 was manually annotated 1 time for cluster FO.
- Start number 16 was manually annotated 1 time for cluster FO.

Gene Information:

Gene: Alata_31 Start: 24615, Stop: 24322, Start Num: 11

Candidate Starts for Alata_31:

(Start: 5 @24666 has 1 MA's), (Start: 11 @24615 has 6 MA's), (14, 24606), (22, 24537), (29, 24450), (32, 24411), (35, 24393),

Gene: Bauer_41 Start: 28925, Stop: 28644, Start Num: 11

Candidate Starts for Bauer_41:

(Start: 11 @28925 has 6 MA's), (14, 28916), (17, 28901), (24, 28832), (32, 28721), (38, 28682),

Gene: BellaJr_40 Start: 29513, Stop: 29247, Start Num: 11

Candidate Starts for BellaJr_40:

(4, 29573), (9, 29522), (Start: 11 @29513 has 6 MA's), (14, 29504), (20, 29447), (22, 29435), (28, 29372), (33, 29306), (39, 29261),

Gene: BlackSpider_37 Start: 28105, Stop: 27839, Start Num: 11

Candidate Starts for BlackSpider_37:

(4, 28165), (9, 28114), (Start: 11 @28105 has 6 MA's), (14, 28096), (20, 28039), (22, 28027), (28, 27964), (33, 27898), (39, 27853),

Gene: BrayBeast_34 Start: 25453, Stop: 25148, Start Num: 6

Candidate Starts for BrayBeast_34:

(Start: 6 @25453 has 1 MA's), (Start: 11 @25423 has 6 MA's), (14, 25414), (17, 25399), (20, 25357), (24, 25330), (34, 25204),

Gene: Bridgette_39 Start: 28174, Stop: 27884, Start Num: 12

Candidate Starts for Bridgette_39:

(Start: 12 @28174 has 12 MA's), (14, 28168), (22, 28099), (29, 28012), (35, 27955), (39, 27925),

Gene: ChuckDuck_40 Start: 27998, Stop: 27708, Start Num: 12

Candidate Starts for ChuckDuck_40:

(Start: 12 @27998 has 12 MA's), (14, 27992), (22, 27923), (29, 27836), (35, 27779), (39, 27749),

Gene: Constance_39 Start: 28327, Stop: 28037, Start Num: 12

Candidate Starts for Constance_39:

(Start: 12 @28327 has 12 MA's), (14, 28321), (22, 28252), (29, 28165), (35, 28108), (39, 28078),

Gene: Eileen_35 Start: 26405, Stop: 26115, Start Num: 12

Candidate Starts for Eileen_35:

(Start: 12 @26405 has 12 MA's), (14, 26399), (22, 26330), (35, 26186), (39, 26156), (40, 26123),

Gene: FosterFrank_41 Start: 28057, Stop: 27767, Start Num: 12

Candidate Starts for FosterFrank_41:

(Start: 12 @28057 has 12 MA's), (14, 28051), (22, 27982), (29, 27895), (35, 27838), (39, 27808),

Gene: GlobiWarming_39 Start: 27581, Stop: 27291, Start Num: 12

Candidate Starts for GlobiWarming_39:

(Start: 12 @27581 has 12 MA's), (14, 27575), (22, 27506), (29, 27419), (35, 27362), (39, 27332),

Gene: GumGum_48 Start: 30386, Stop: 30156, Start Num: 12

Candidate Starts for GumGum_48:

(Start: 12 @30386 has 12 MA's), (14, 30380), (22, 30311), (23, 30308), (27, 30263), (28, 30248),

Gene: Hestia_43 Start: 28715, Stop: 28437, Start Num: 11

Candidate Starts for Hestia_43:

(Start: 7 @28733 has 1 MA's), (Start: 11 @28715 has 6 MA's), (14, 28706), (30, 28544), (31, 28520),

Gene: Judy_40 Start: 28493, Stop: 28203, Start Num: 12

Candidate Starts for Judy_40:

(Start: 12 @28493 has 12 MA's), (14, 28487), (22, 28418), (29, 28331), (35, 28274), (39, 28244),

Gene: Karkharias_38 Start: 28017, Stop: 27757, Start Num: 13

Candidate Starts for Karkharias_38:

(2, 28083), (8, 28035), (Start: 13 @28017 has 1 MA's), (15, 28011), (22, 27945), (25, 27921),

Gene: KayMoney_39 Start: 27670, Stop: 27380, Start Num: 12

Candidate Starts for KayMoney_39:

(Start: 12 @27670 has 12 MA's), (14, 27664), (22, 27595), (29, 27508), (35, 27451), (39, 27421),

Gene: Kumotta_31 Start: 25315, Stop: 25025, Start Num: 12

Candidate Starts for Kumotta_31:

(Start: 12 @25315 has 12 MA's), (14, 25309), (27, 25192), (33, 25111), (36, 25090),

Gene: LilyBell_39 Start: 27899, Stop: 27609, Start Num: 12

Candidate Starts for LilyBell_39:

(Start: 12 @27899 has 12 MA's), (14, 27893), (22, 27824), (29, 27737), (35, 27680), (39, 27650),

Gene: LittleRon_37 Start: 27279, Stop: 26989, Start Num: 12

Candidate Starts for LittleRon_37:

(Start: 12 @27279 has 12 MA's), (14, 27273), (22, 27204), (29, 27117), (35, 27060), (39, 27030),

Gene: Maja_30 Start: 25873, Stop: 25589, Start Num: 5

Candidate Starts for Maja_30:

(Start: 5 @25873 has 1 MA's), (10, 25825), (Start: 12 @25819 has 12 MA's), (14, 25813), (21, 25750), (22, 25744), (24, 25729), (28, 25681), (32, 25618),

Gene: MargaretKali_31 Start: 24950, Stop: 24660, Start Num: 12

Candidate Starts for MargaretKali_31:

(Start: 12 @24950 has 12 MA's), (14, 24944), (27, 24827), (33, 24746), (36, 24725),

Gene: NidoQ_34 Start: 27004, Stop: 26714, Start Num: 12

Candidate Starts for NidoQ_34:

(Start: 12 @27004 has 12 MA's), (14, 26998), (22, 26929), (29, 26842), (35, 26785), (39, 26755),

Gene: NoSwimming_34 Start: 27843, Stop: 27550, Start Num: 7

Candidate Starts for NoSwimming_34:

(Start: 7 @27843 has 1 MA's), (Start: 16 @27807 has 1 MA's), (18, 27792), (19, 27780), (22, 27744), (24, 27729), (26, 27705), (27, 27696), (32, 27618), (37, 27591),

Gene: Peas_36 Start: 28552, Stop: 28262, Start Num: 12

Candidate Starts for Peas_36:

(Start: 12 @28552 has 12 MA's), (14, 28546), (22, 28477), (29, 28390), (35, 28333), (39, 28303),

Gene: Pigu_33 Start: 24557, Stop: 24318, Start Num: 12

Candidate Starts for Pigu_33:

(Start: 12 @24557 has 12 MA's), (14, 24551), (22, 24482), (24, 24467), (25, 24458), (26, 24443), (29, 24395),

Gene: RootBeer_30 Start: 24454, Stop: 24164, Start Num: 12

Candidate Starts for RootBeer_30:

(Start: 12 @24454 has 12 MA's), (14, 24448), (22, 24379), (29, 24292), (35, 24235), (39, 24205),

Gene: Sarge_30 Start: 23262, Stop: 22981, Start Num: 11

Candidate Starts for Sarge_30:

(Start: 11 @23262 has 6 MA's), (14, 23253), (17, 23238), (24, 23169), (32, 23058), (38, 23019),

Gene: Scotia_32 Start: 26848, Stop: 26591, Start Num: 16

Candidate Starts for Scotia_32:

(Start: 16 @26848 has 1 MA's), (18, 26833), (19, 26821), (22, 26785), (26, 26746), (27, 26737), (37, 26632),

Gene: Shoya_37 Start: 25648, Stop: 25358, Start Num: 11

Candidate Starts for Shoya_37:

(Start: 5 @25699 has 1 MA's), (Start: 11 @25648 has 6 MA's), (14, 25639), (22, 25570), (29, 25483), (35, 25426),

Gene: Shukran_45 Start: 29468, Stop: 29178, Start Num: 11

Candidate Starts for Shukran_45:

(Start: 5 @29519 has 1 MA's), (Start: 11 @29468 has 6 MA's), (14, 29459), (22, 29390), (29, 29303), (32, 29264), (35, 29246),

Gene: Zucker_40 Start: 29401, Stop: 29171, Start Num: 12

Candidate Starts for Zucker_40:

(1, 29494), (3, 29464), (Start: 12 @29401 has 12 MA's), (14, 29395), (22, 29326), (23, 29323), (27, 29278), (28, 29263),