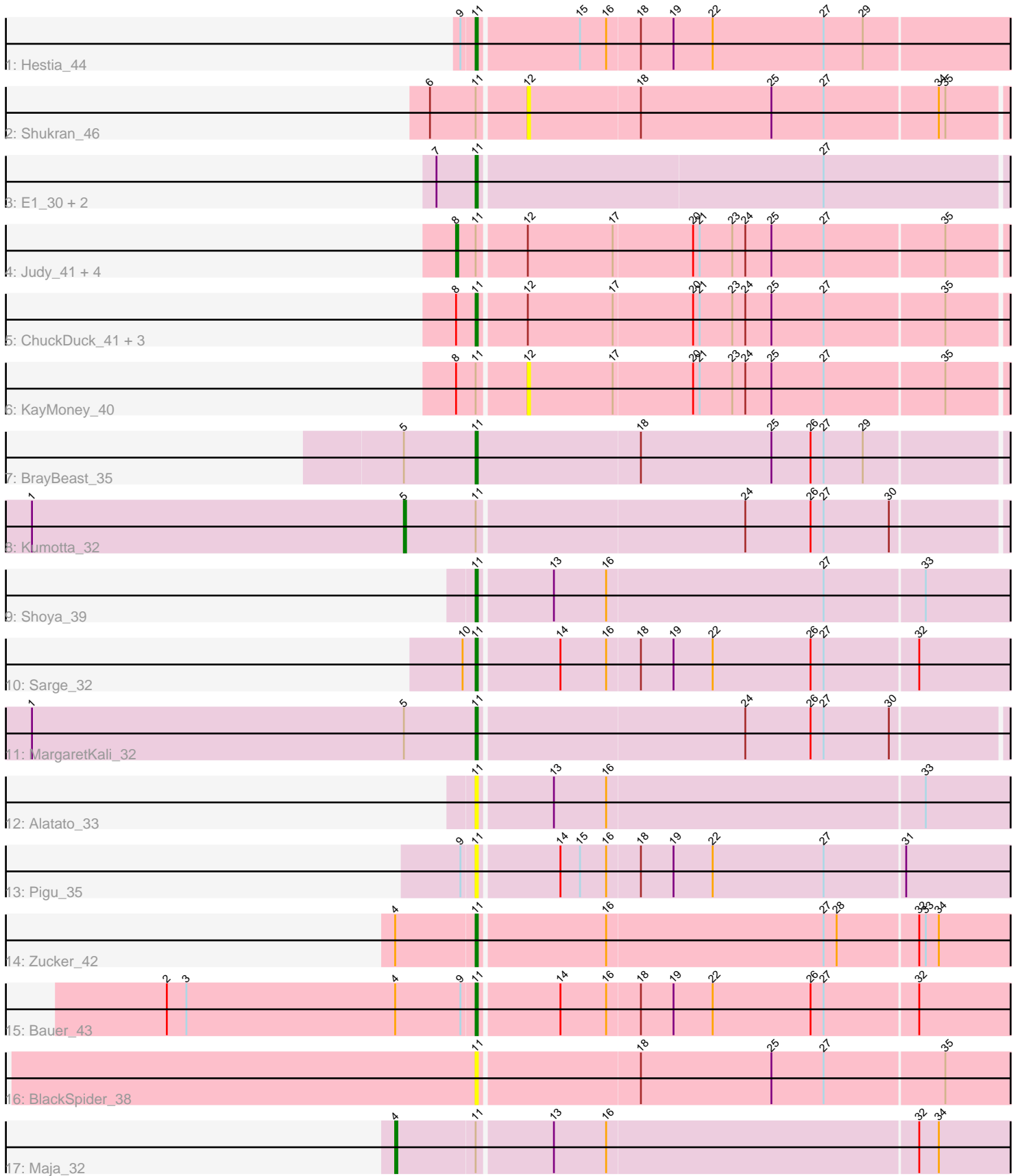


Pham 224835



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 224835 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224835 has 26 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Hestia_44
- Track 2 : Shukran_46
- Track 3 : E1_30, E6_30, Anatole_30
- Track 4 : Judy_41, FosterFrank_42, Bridgette_40, Peas_37, Eileen_36
- Track 5 : ChuckDuck_41, Constance_40, RootBeer_31, GlobiWarming_40
- Track 6 : KayMoney_40
- Track 7 : BrayBeast_35
- Track 8 : Kumotta_32
- Track 9 : Shoya_39
- Track 10 : Sarge_32
- Track 11 : MargaretKali_32
- Track 12 : Alatato_33
- Track 13 : Pigu_35
- Track 14 : Zucker_42
- Track 15 : Bauer_43
- Track 16 : BlackSpider_38
- Track 17 : Maja_32

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

The start number called the most often in the published annotations is 11, it was called in 14 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alatato_33, Anatole_30, Bauer_43, BlackSpider_38, BrayBeast_35, ChuckDuck_41, Constance_40, E1_30, E6_30, GlobiWarming_40, Hestia_44, MargaretKali_32, Pigu_35, RootBeer_31, Sarge_32, Shoya_39, Zucker_42,

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

- Bridgette_40, Eileen_36, FosterFrank_42, Judy_41, KayMoney_40, Kumotta_32, Maja_32, Peas_37, Shukran_46,

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

-

Summary by start number:

Start 4:

- Found in 3 of 26 (11.5%) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Maja_32 (FO),

Start 5:

- Found in 3 of 26 (11.5%) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Kumotta_32 (FB),

Start 8:

- Found in 10 of 26 (38.5%) of genes in pham
- Manual Annotations of this start: 4 of 20
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Bridgette_40 (FA), Eileen_36 (FA), FosterFrank_42 (FA), Judy_41 (FA), Peas_37 (FA),

Start 11:

- Found in 26 of 26 (100.0%) of genes in pham
- Manual Annotations of this start: 14 of 20
- Called 65.4% of time when present
- Phage (with cluster) where this start called: Alatato_33 (FB), Anatole_30 (BV), Bauer_43 (FN), BlackSpider_38 (FN), BrayBeast_35 (FB), ChuckDuck_41 (FA), Constance_40 (FA), E1_30 (BV), E6_30 (BW), GlobiWarming_40 (FA), Hestia_44 (AY), MargaretKali_32 (FB), Pigu_35 (FB), RootBeer_31 (FA), Sarge_32 (FB), Shoya_39 (FB), Zucker_42 (FN),

Start 12:

- Found in 11 of 26 (42.3%) of genes in pham
- No Manual Annotations of this start.
- Called 18.2% of time when present
- Phage (with cluster) where this start called: KayMoney_40 (FA), Shukran_46 (AY),

Summary by clusters:

There are 7 clusters represented in this pham: BV, FA, FB, BW, AY, 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 BV:

- Start number 11 was manually annotated 2 times for cluster BV.

Info for manual annotations of cluster BW:

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

Info for manual annotations of cluster FA:

- Start number 8 was manually annotated 4 times for cluster FA.

- Start number 11 was manually annotated 4 times for cluster FA.

Info for manual annotations of cluster FB:

- Start number 5 was manually annotated 1 time for cluster FB.
- Start number 11 was manually annotated 4 times for cluster FB.

Info for manual annotations of cluster FN:

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

Info for manual annotations of cluster FO:

- Start number 4 was manually annotated 1 time for cluster FO.

Gene Information:

Gene: Alatao_33 Start: 25274, Stop: 25020, Start Num: 11

Candidate Starts for Alatao_33:

(Start: 11 @25274 has 14 MA's), (13, 25241), (16, 25217), (33, 25073),

Gene: Anatole_30 Start: 23336, Stop: 23091, Start Num: 11

Candidate Starts for Anatole_30:

(7, 23354), (Start: 11 @23336 has 14 MA's), (27, 23180),

Gene: Bauer_43 Start: 29569, Stop: 29315, Start Num: 11

Candidate Starts for Bauer_43:

(2, 29710), (3, 29701), (Start: 4 @29605 has 1 MA's), (9, 29575), (Start: 11 @29569 has 14 MA's), (14, 29533), (16, 29512), (18, 29497), (19, 29482), (22, 29464), (26, 29419), (27, 29413), (32, 29371),

Gene: BlackSpider_38 Start: 28682, Stop: 28422, Start Num: 11

Candidate Starts for BlackSpider_38:

(Start: 11 @28682 has 14 MA's), (18, 28610), (25, 28550), (27, 28526), (35, 28472),

Gene: BrayBeast_35 Start: 26036, Stop: 25785, Start Num: 11

Candidate Starts for BrayBeast_35:

(Start: 5 @26069 has 1 MA's), (Start: 11 @26036 has 14 MA's), (18, 25961), (25, 25901), (26, 25883), (27, 25877), (29, 25859),

Gene: Bridgette_40 Start: 28778, Stop: 28521, Start Num: 8

Candidate Starts for Bridgette_40:

(Start: 8 @28778 has 4 MA's), (Start: 11 @28769 has 14 MA's), (12, 28748), (17, 28709), (20, 28673), (21, 28670), (23, 28655), (24, 28649), (25, 28637), (27, 28613), (35, 28559),

Gene: ChuckDuck_41 Start: 28592, Stop: 28344, Start Num: 11

Candidate Starts for ChuckDuck_41:

(Start: 8 @28601 has 4 MA's), (Start: 11 @28592 has 14 MA's), (12, 28571), (17, 28532), (20, 28496), (21, 28493), (23, 28478), (24, 28472), (25, 28460), (27, 28436), (35, 28382),

Gene: Constance_40 Start: 28921, Stop: 28673, Start Num: 11

Candidate Starts for Constance_40:

(Start: 8 @28930 has 4 MA's), (Start: 11 @28921 has 14 MA's), (12, 28900), (17, 28861), (20, 28825), (21, 28822), (23, 28807), (24, 28801), (25, 28789), (27, 28765), (35, 28711),

Gene: E1_30 Start: 23336, Stop: 23091, Start Num: 11
Candidate Starts for E1_30:
(7, 23354), (Start: 11 @23336 has 14 MA's), (27, 23180),

Gene: E6_30 Start: 23058, Stop: 22813, Start Num: 11
Candidate Starts for E6_30:
(7, 23076), (Start: 11 @23058 has 14 MA's), (27, 22902),

Gene: Eileen_36 Start: 27008, Stop: 26751, Start Num: 8
Candidate Starts for Eileen_36:
(Start: 8 @27008 has 4 MA's), (Start: 11 @26999 has 14 MA's), (12, 26978), (17, 26939), (20, 26903),
(21, 26900), (23, 26885), (24, 26879), (25, 26867), (27, 26843), (35, 26789),

Gene: FosterFrank_42 Start: 28660, Stop: 28403, Start Num: 8
Candidate Starts for FosterFrank_42:
(Start: 8 @28660 has 4 MA's), (Start: 11 @28651 has 14 MA's), (12, 28630), (17, 28591), (20, 28555),
(21, 28552), (23, 28537), (24, 28531), (25, 28519), (27, 28495), (35, 28441),

Gene: GlobiWarming_40 Start: 28175, Stop: 27927, Start Num: 11
Candidate Starts for GlobiWarming_40:
(Start: 8 @28184 has 4 MA's), (Start: 11 @28175 has 14 MA's), (12, 28154), (17, 28115), (20, 28079),
(21, 28076), (23, 28061), (24, 28055), (25, 28043), (27, 28019), (35, 27965),

Gene: Hestia_44 Start: 29360, Stop: 29106, Start Num: 11
Candidate Starts for Hestia_44:
(9, 29366), (Start: 11 @29360 has 14 MA's), (15, 29315), (16, 29303), (18, 29288), (19, 29273), (22,
29255), (27, 29204), (29, 29186),

Gene: Judy_41 Start: 29096, Stop: 28839, Start Num: 8
Candidate Starts for Judy_41:
(Start: 8 @29096 has 4 MA's), (Start: 11 @29087 has 14 MA's), (12, 29066), (17, 29027), (20, 28991),
(21, 28988), (23, 28973), (24, 28967), (25, 28955), (27, 28931), (35, 28877),

Gene: KayMoney_40 Start: 28243, Stop: 28016, Start Num: 12
Candidate Starts for KayMoney_40:
(Start: 8 @28273 has 4 MA's), (Start: 11 @28264 has 14 MA's), (12, 28243), (17, 28204), (20, 28168),
(21, 28165), (23, 28150), (24, 28144), (25, 28132), (27, 28108), (35, 28054),

Gene: Kumotta_32 Start: 26058, Stop: 25768, Start Num: 5
Candidate Starts for Kumotta_32:
(1, 26229), (Start: 5 @26058 has 1 MA's), (Start: 11 @26025 has 14 MA's), (24, 25905), (26, 25875),
(27, 25869), (30, 25839),

Gene: Maja_32 Start: 26527, Stop: 26237, Start Num: 4
Candidate Starts for Maja_32:
(Start: 4 @26527 has 1 MA's), (Start: 11 @26491 has 14 MA's), (13, 26458), (16, 26434), (32, 26293),
(34, 26284),

Gene: MargaretKali_32 Start: 25660, Stop: 25403, Start Num: 11
Candidate Starts for MargaretKali_32:
(1, 25864), (Start: 5 @25693 has 1 MA's), (Start: 11 @25660 has 14 MA's), (24, 25540), (26, 25510),
(27, 25504), (30, 25474),

Gene: Peas_37 Start: 29155, Stop: 28898, Start Num: 8

Candidate Starts for Peas_37:

(Start: 8 @29155 has 4 MA's), (Start: 11 @29146 has 14 MA's), (12, 29125), (17, 29086), (20, 29050), (21, 29047), (23, 29032), (24, 29026), (25, 29014), (27, 28990), (35, 28936),

Gene: Pigu_35 Start: 25236, Stop: 24982, Start Num: 11

Candidate Starts for Pigu_35:

(9, 25242), (Start: 11 @25236 has 14 MA's), (14, 25200), (15, 25191), (16, 25179), (18, 25164), (19, 25149), (22, 25131), (27, 25080), (31, 25044),

Gene: RootBeer_31 Start: 25049, Stop: 24801, Start Num: 11

Candidate Starts for RootBeer_31:

(Start: 8 @25058 has 4 MA's), (Start: 11 @25049 has 14 MA's), (12, 25028), (17, 24989), (20, 24953), (21, 24950), (23, 24935), (24, 24929), (25, 24917), (27, 24893), (35, 24839),

Gene: Sarge_32 Start: 23905, Stop: 23651, Start Num: 11

Candidate Starts for Sarge_32:

(10, 23911), (Start: 11 @23905 has 14 MA's), (14, 23869), (16, 23848), (18, 23833), (19, 23818), (22, 23800), (26, 23755), (27, 23749), (32, 23707),

Gene: Shoya_39 Start: 26307, Stop: 26053, Start Num: 11

Candidate Starts for Shoya_39:

(Start: 11 @26307 has 14 MA's), (13, 26274), (16, 26250), (27, 26151), (33, 26106),

Gene: Shukran_46 Start: 30035, Stop: 29808, Start Num: 12

Candidate Starts for Shukran_46:

(6, 30077), (Start: 11 @30056 has 14 MA's), (12, 30035), (18, 29984), (25, 29924), (27, 29900), (34, 29849), (35, 29846),

Gene: Zucker_42 Start: 30051, Stop: 29797, Start Num: 11

Candidate Starts for Zucker_42:

(Start: 4 @30087 has 1 MA's), (Start: 11 @30051 has 14 MA's), (16, 29994), (27, 29895), (28, 29889), (32, 29853), (33, 29850), (34, 29844),