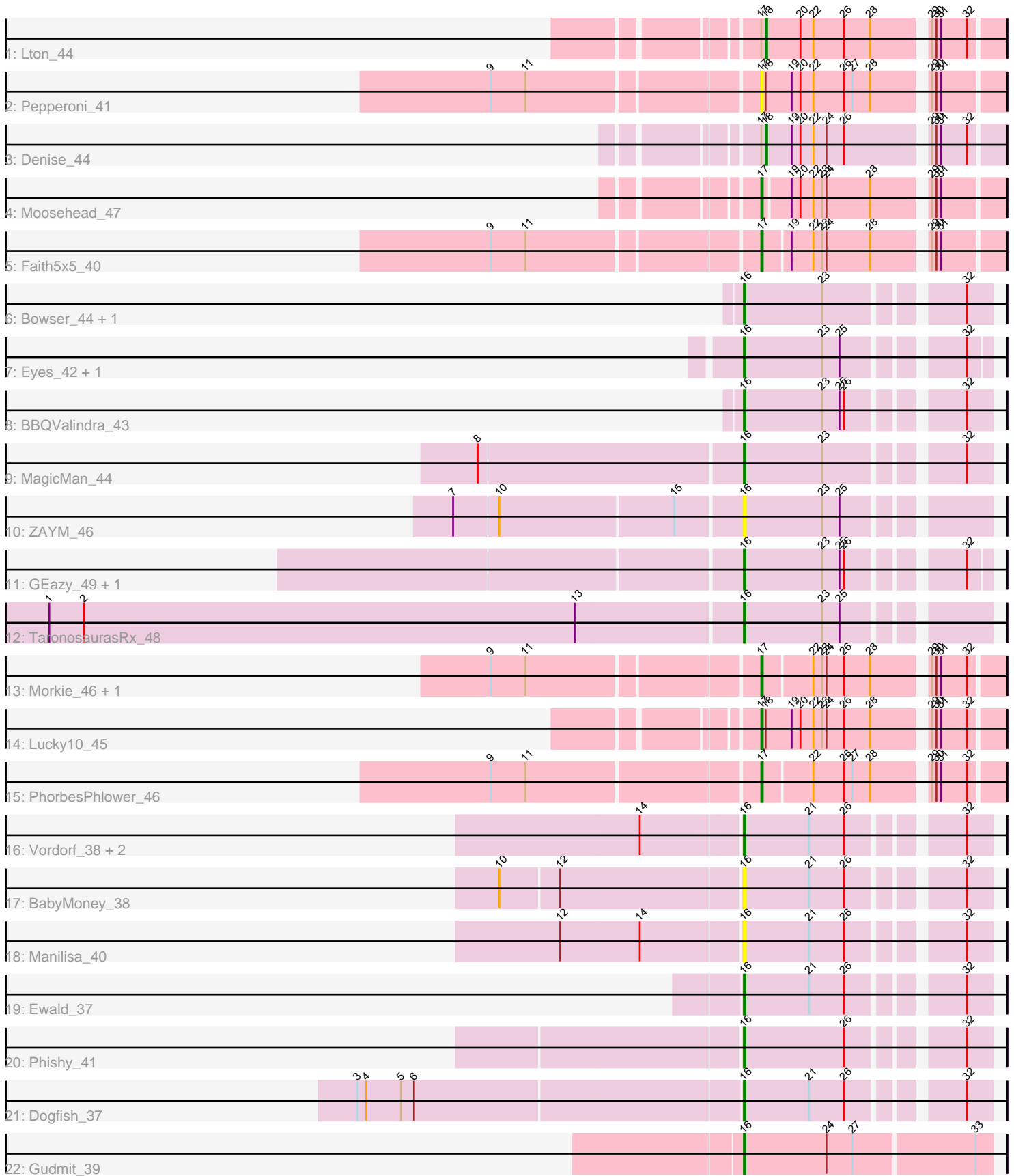


Pham 294987



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 294987 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294987 has 28 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Lton\_44
- Track 2 : Pepperoni\_41
- Track 3 : Denise\_44
- Track 4 : Moosehead\_47
- Track 5 : Faith5x5\_40
- Track 6 : Bowser\_44, Schnabeltier\_45
- Track 7 : Eyes\_42, Opie\_47
- Track 8 : BBQValindra\_43
- Track 9 : MagicMan\_44
- Track 10 : ZAYM\_46
- Track 11 : GEazy\_49, HannahD\_46
- Track 12 : TaronosaurusRx\_48
- Track 13 : Morkie\_46, OneDirection\_41
- Track 14 : Lucky10\_45
- Track 15 : PhorbesPhlower\_46
- Track 16 : Vordorf\_38, Meyran\_37, Nyceirae\_41
- Track 17 : BabyMoney\_38
- Track 18 : Manilisa\_40
- Track 19 : Ewald\_37
- Track 20 : Phishy\_41
- Track 21 : Dogfish\_37
- Track 22 : Gudmit\_39

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

The start number called the most often in the published annotations is 16, it was called in 15 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BBQValindra\_43, BabyMoney\_38, Bowser\_44, Dogfish\_37, Ewald\_37, Eyes\_42, GEazy\_49, Gudmit\_39, HannahD\_46, MagicMan\_44, Manilisa\_40, Meyran\_37, Nyceirae\_41, Opie\_47, Phishy\_41, Schnabeltier\_45, TaronosaurusRx\_48, Vordorf\_38, ZAYM\_46,

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

- 

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

- Denise\_44, Faith5x5\_40, Lton\_44, Lucky10\_45, Moosehead\_47, Morkie\_46, OneDirection\_41, Pepperoni\_41, PhorbesPhlower\_46,

### Summary by start number:

Start 16:

- Found in 19 of 28 ( 67.9% ) of genes in pham
- Manual Annotations of this start: 15 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BBQValindra\_43 (DB), BabyMoney\_38 (DT), Bowser\_44 (DB), Dogfish\_37 (DT), Ewald\_37 (DT), Eyes\_42 (DB), GEazy\_49 (DB), Gudmit\_39 (singleton), HannahD\_46 (DB), MagicMan\_44 (DB), Manilisa\_40 (DT), Meyran\_37 (DT), Nyceirae\_41 (DT), Opie\_47 (DB), Phishy\_41 (DT), Schnabeltier\_45 (DB), TaronosaurusRx\_48 (DB), Vordorf\_38 (DT), ZAYM\_46 (DB),

Start 17:

- Found in 9 of 28 ( 32.1% ) of genes in pham
- Manual Annotations of this start: 6 of 23
- Called 77.8% of time when present
- Phage (with cluster) where this start called: Faith5x5\_40 (CZ6), Lucky10\_45 (DH), Moosehead\_47 (CZ6), Morkie\_46 (DH), OneDirection\_41 (CZ6), Pepperoni\_41 (CZ), PhorbesPhlower\_46 (DH),

Start 18:

- Found in 4 of 28 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 2 of 23
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Denise\_44 (CZ5), Lton\_44 (CZ),

### Summary by clusters:

There are 7 clusters represented in this pham: singleton, DH, DB, CZ6, CZ5, CZ, DT,

Info for manual annotations of cluster CZ:

- Start number 18 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ5:

- Start number 18 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:

- Start number 17 was manually annotated 3 times for cluster CZ6.

Info for manual annotations of cluster DB:

- Start number 16 was manually annotated 9 times for cluster DB.

Info for manual annotations of cluster DH:

- Start number 17 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DT:

- Start number 16 was manually annotated 5 times for cluster DT.

**Gene Information:**

Gene: BBQValindra\_43 Start: 34125, Stop: 34277, Start Num: 16

Candidate Starts for BBQValindra\_43:

(Start: 16 @34125 has 15 MA's), (23, 34179), (25, 34191), (26, 34194), (32, 34260),

Gene: BabyMoney\_38 Start: 31354, Stop: 31506, Start Num: 16

Candidate Starts for BabyMoney\_38:

(10, 31195), (12, 31234), (Start: 16 @31354 has 15 MA's), (21, 31399), (26, 31423), (32, 31489),

Gene: Bowser\_44 Start: 33934, Stop: 34086, Start Num: 16

Candidate Starts for Bowser\_44:

(Start: 16 @33934 has 15 MA's), (23, 33988), (32, 34069),

Gene: Denise\_44 Start: 32315, Stop: 32467, Start Num: 18

Candidate Starts for Denise\_44:

(Start: 17 @32312 has 6 MA's), (Start: 18 @32315 has 2 MA's), (19, 32333), (20, 32339), (22, 32348), (24, 32357), (26, 32369), (29, 32420), (30, 32423), (31, 32426), (32, 32444),

Gene: Dogfish\_37 Start: 30784, Stop: 30936, Start Num: 16

Candidate Starts for Dogfish\_37:

(3, 30526), (4, 30532), (5, 30556), (6, 30565), (Start: 16 @30784 has 15 MA's), (21, 30829), (26, 30853), (32, 30919),

Gene: Ewald\_37 Start: 30602, Stop: 30754, Start Num: 16

Candidate Starts for Ewald\_37:

(Start: 16 @30602 has 15 MA's), (21, 30647), (26, 30671), (32, 30737),

Gene: Eyes\_42 Start: 33981, Stop: 34130, Start Num: 16

Candidate Starts for Eyes\_42:

(Start: 16 @33981 has 15 MA's), (23, 34035), (25, 34047), (32, 34116),

Gene: Faith5x5\_40 Start: 29956, Stop: 30108, Start Num: 17

Candidate Starts for Faith5x5\_40:

(9, 29782), (11, 29806), (Start: 17 @29956 has 6 MA's), (19, 29974), (22, 29989), (23, 29995), (24, 29998), (28, 30028), (29, 30061), (30, 30064), (31, 30067),

Gene: GEazy\_49 Start: 34256, Stop: 34405, Start Num: 16

Candidate Starts for GEazy\_49:

(Start: 16 @34256 has 15 MA's), (23, 34310), (25, 34322), (26, 34325), (32, 34391),

Gene: Gudmit\_39 Start: 27962, Stop: 28129, Start Num: 16

Candidate Starts for Gudmit\_39:

(Start: 16 @27962 has 15 MA's), (24, 28019), (27, 28037), (33, 28118),

Gene: HannahD\_46 Start: 33623, Stop: 33772, Start Num: 16

Candidate Starts for HannahD\_46:

(Start: 16 @33623 has 15 MA's), (23, 33677), (25, 33689), (26, 33692), (32, 33758),

Gene: Lton\_44 Start: 29999, Stop: 30151, Start Num: 18

Candidate Starts for Lton\_44:

(Start: 17 @29996 has 6 MA's), (Start: 18 @29999 has 2 MA's), (20, 30023), (22, 30032), (26, 30053), (28, 30071), (29, 30104), (30, 30107), (31, 30110), (32, 30128),

Gene: Lucky10\_45 Start: 32714, Stop: 32869, Start Num: 17

Candidate Starts for Lucky10\_45:

(Start: 17 @32714 has 6 MA's), (Start: 18 @32717 has 2 MA's), (19, 32735), (20, 32741), (22, 32750), (23, 32756), (24, 32759), (26, 32771), (28, 32789), (29, 32822), (30, 32825), (31, 32828), (32, 32846),

Gene: MagicMan\_44 Start: 33860, Stop: 34012, Start Num: 16

Candidate Starts for MagicMan\_44:

(8, 33686), (Start: 16 @33860 has 15 MA's), (23, 33914), (32, 33995),

Gene: Manilisa\_40 Start: 31756, Stop: 31908, Start Num: 16

Candidate Starts for Manilisa\_40:

(12, 31636), (14, 31690), (Start: 16 @31756 has 15 MA's), (21, 31801), (26, 31825), (32, 31891),

Gene: Meyran\_37 Start: 31676, Stop: 31828, Start Num: 16

Candidate Starts for Meyran\_37:

(14, 31610), (Start: 16 @31676 has 15 MA's), (21, 31721), (26, 31745), (32, 31811),

Gene: Moosehead\_47 Start: 30929, Stop: 31081, Start Num: 17

Candidate Starts for Moosehead\_47:

(Start: 17 @30929 has 6 MA's), (19, 30947), (20, 30953), (22, 30962), (23, 30968), (24, 30971), (28, 31001), (29, 31034), (30, 31037), (31, 31040),

Gene: Morkie\_46 Start: 31833, Stop: 31985, Start Num: 17

Candidate Starts for Morkie\_46:

(9, 31659), (11, 31683), (Start: 17 @31833 has 6 MA's), (22, 31866), (23, 31872), (24, 31875), (26, 31887), (28, 31905), (29, 31938), (30, 31941), (31, 31944), (32, 31962),

Gene: Nyceirae\_41 Start: 31490, Stop: 31639, Start Num: 16

Candidate Starts for Nyceirae\_41:

(14, 31421), (Start: 16 @31490 has 15 MA's), (21, 31535), (26, 31559), (32, 31625),

Gene: OneDirection\_41 Start: 29447, Stop: 29599, Start Num: 17

Candidate Starts for OneDirection\_41:

(9, 29273), (11, 29297), (Start: 17 @29447 has 6 MA's), (22, 29480), (23, 29486), (24, 29489), (26, 29501), (28, 29519), (29, 29552), (30, 29555), (31, 29558), (32, 29576),

Gene: Opie\_47 Start: 34808, Stop: 34957, Start Num: 16

Candidate Starts for Opie\_47:

(Start: 16 @34808 has 15 MA's), (23, 34862), (25, 34874), (32, 34943),

Gene: Pepperoni\_41 Start: 31009, Stop: 31164, Start Num: 17

Candidate Starts for Pepperoni\_41:

(9, 30835), (11, 30859), (Start: 17 @31009 has 6 MA's), (Start: 18 @31012 has 2 MA's), (19, 31030), (20, 31036), (22, 31045), (26, 31066), (27, 31072), (28, 31084), (29, 31117), (30, 31120), (31, 31123),

Gene: Phishy\_41 Start: 32661, Stop: 32813, Start Num: 16

Candidate Starts for Phishy\_41:

(Start: 16 @32661 has 15 MA's), (26, 32730), (32, 32796),

Gene: PhorbesPhlower\_46 Start: 31203, Stop: 31355, Start Num: 17

Candidate Starts for PhorbesPhlower\_46:

(9, 31026), (11, 31050), (Start: 17 @31203 has 6 MA's), (22, 31236), (26, 31257), (27, 31263), (28, 31275), (29, 31308), (30, 31311), (31, 31314), (32, 31332),

Gene: Schnabeltier\_45 Start: 34053, Stop: 34205, Start Num: 16

Candidate Starts for Schnabeltier\_45:

(Start: 16 @34053 has 15 MA's), (23, 34107), (32, 34188),

Gene: TaronosaurusRx\_48 Start: 33378, Stop: 33530, Start Num: 16

Candidate Starts for TaronosaurusRx\_48:

(1, 32904), (2, 32928), (13, 33267), (Start: 16 @33378 has 15 MA's), (23, 33432), (25, 33444),

Gene: Vordorf\_38 Start: 30951, Stop: 31103, Start Num: 16

Candidate Starts for Vordorf\_38:

(14, 30885), (Start: 16 @30951 has 15 MA's), (21, 30996), (26, 31020), (32, 31086),

Gene: ZAYM\_46 Start: 33126, Stop: 33278, Start Num: 16

Candidate Starts for ZAYM\_46:

(7, 32937), (10, 32967), (15, 33084), (Start: 16 @33126 has 15 MA's), (23, 33180), (25, 33192),