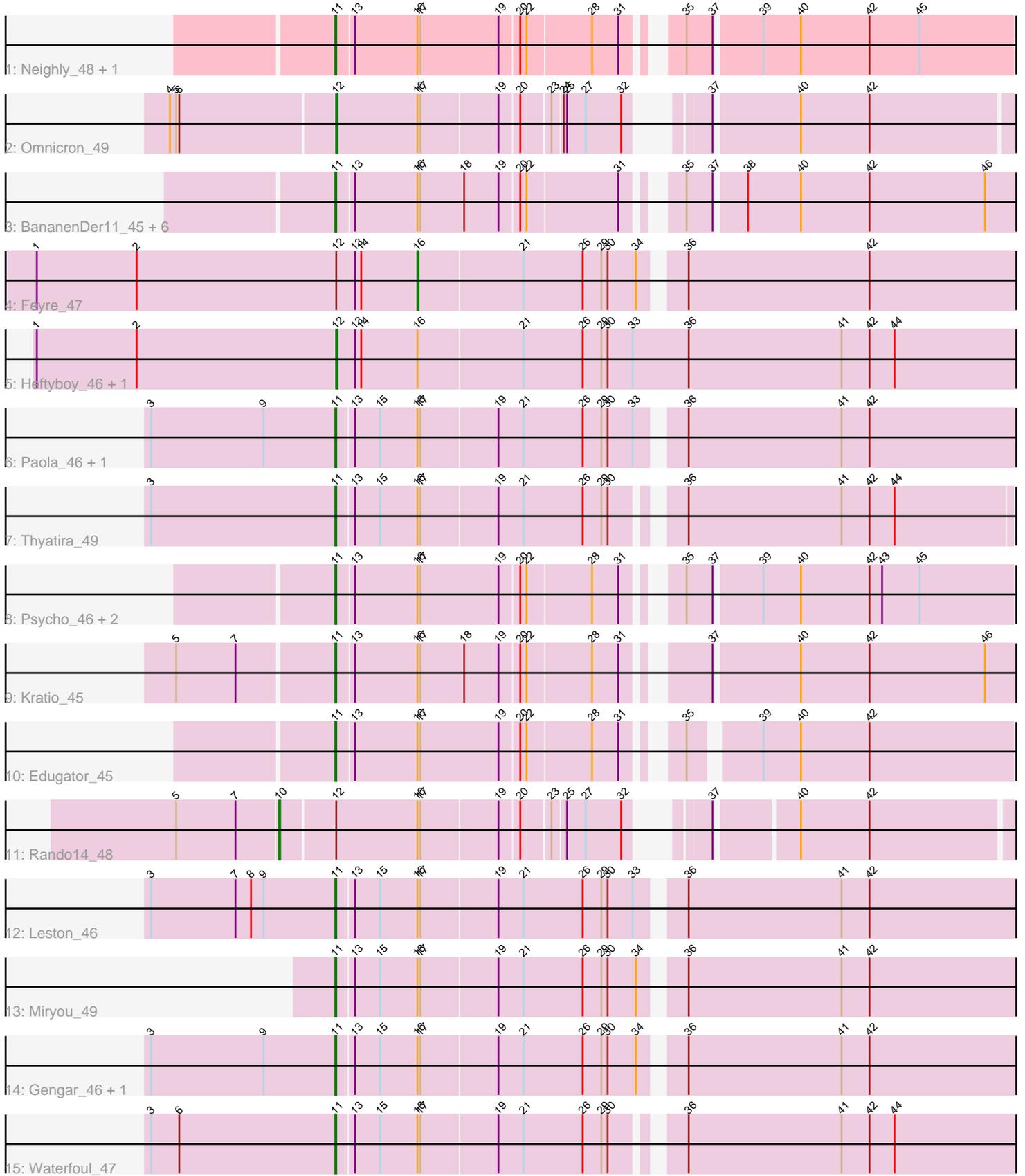


# Pham 282417



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 282417 Report

This analysis was run 02/23/26 on database version 636.

Pham number 282417 has 27 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Neighly\_48, Larva\_47
- Track 2 : Omnicron\_49
- Track 3 : BananenDer11\_45, ViviJ\_47, LilDirt\_45, Collard\_46, Agent47\_48, InvictusManeo\_46, DoubleChamp\_45
- Track 4 : Feyre\_47
- Track 5 : Heftyboy\_46, SoSeph\_46
- Track 6 : Paola\_46, Guillsminger\_47
- Track 7 : Thyatira\_49
- Track 8 : Psycho\_46, AlleyCat\_48, Dadosky\_48
- Track 9 : Kratio\_45
- Track 10 : Edugator\_45
- Track 11 : Rando14\_48
- Track 12 : Leston\_46
- Track 13 : Miryou\_49
- Track 14 : Gengar\_46, OkiRoe\_46
- Track 15 : Waterfoul\_47

### ***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 18 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agent47\_48, AlleyCat\_48, BananenDer11\_45, Collard\_46, Dadosky\_48, DoubleChamp\_45, Edugator\_45, Gengar\_46, Guillsminger\_47, InvictusManeo\_46, Kratio\_45, Larva\_47, Leston\_46, LilDirt\_45, Miryou\_49, Neighly\_48, OkiRoe\_46, Paola\_46, Psycho\_46, Thyatira\_49, ViviJ\_47, Waterfoul\_47,

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

- 

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

- Feyre\_47, Heftyboy\_46, Omnicron\_49, Rando14\_48, SoSeph\_46,

## Summary by start number:

### Start 10:

- Found in 1 of 27 ( 3.7% ) 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: Rando14\_48 (K5),

### Start 11:

- Found in 22 of 27 ( 81.5% ) of genes in pham
- Manual Annotations of this start: 18 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agent47\_48 (K5), AlleyCat\_48 (K5), BananenDer11\_45 (K5), Collard\_46 (K5), Dadosky\_48 (K5), DoubleChamp\_45 (K5), Edugator\_45 (K5), Gengar\_46 (K5), Guillsminger\_47 (K5), InvictusManeo\_46 (K5), Kratio\_45 (K5), Larva\_47 (K5), Leston\_46 (K5), LiIDirt\_45 (K5), Miryou\_49 (K5), Neighly\_48 (K3), OkiRoe\_46 (K5), Paola\_46 (K5), Psycho\_46 (K5), Thyatira\_49 (K5), ViviJ\_47 (K5), Waterfoul\_47 (K5),

### Start 12:

- Found in 5 of 27 ( 18.5% ) of genes in pham
- Manual Annotations of this start: 3 of 23
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Heftyboy\_46 (K5), Omnicron\_49 (K5), SoSeph\_46 (K5),

### Start 16:

- Found in 27 of 27 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 3.7% of time when present
- Phage (with cluster) where this start called: Feyre\_47 (K5),

## Summary by clusters:

There are 2 clusters represented in this pham: K3, K5,

### Info for manual annotations of cluster K5:

- Start number 10 was manually annotated 1 time for cluster K5.
- Start number 11 was manually annotated 18 times for cluster K5.
- Start number 12 was manually annotated 3 times for cluster K5.
- Start number 16 was manually annotated 1 time for cluster K5.

## Gene Information:

Gene: Agent47\_48 Start: 36423, Stop: 37028, Start Num: 11

Candidate Starts for Agent47\_48:

(Start: 11 @36423 has 18 MA's), (13, 36438), (Start: 16 @36498 has 1 MA's), (17, 36501), (18, 36543), (19, 36576), (20, 36594), (22, 36600), (31, 36684), (35, 36720), (37, 36744), (38, 36771), (40, 36822), (42, 36888), (46, 36999),

Gene: AlleyCat\_48 Start: 36277, Stop: 36879, Start Num: 11

Candidate Starts for AlleyCat\_48:

(Start: 11 @36277 has 18 MA's), (13, 36292), (Start: 16 @36352 has 1 MA's), (17, 36355), (19, 36430), (20, 36448), (22, 36454), (28, 36514), (31, 36538), (35, 36574), (37, 36598), (39, 36640), (40, 36676), (42, 36742), (43, 36754), (45, 36790),

Gene: BananenDer11\_45 Start: 36384, Stop: 36989, Start Num: 11

Candidate Starts for BananenDer11\_45:

(Start: 11 @36384 has 18 MA's), (13, 36399), (Start: 16 @36459 has 1 MA's), (17, 36462), (18, 36504), (19, 36537), (20, 36555), (22, 36561), (31, 36645), (35, 36681), (37, 36705), (38, 36732), (40, 36783), (42, 36849), (46, 36960),

Gene: Collard\_46 Start: 36384, Stop: 36989, Start Num: 11

Candidate Starts for Collard\_46:

(Start: 11 @36384 has 18 MA's), (13, 36399), (Start: 16 @36459 has 1 MA's), (17, 36462), (18, 36504), (19, 36537), (20, 36555), (22, 36561), (31, 36645), (35, 36681), (37, 36705), (38, 36732), (40, 36783), (42, 36849), (46, 36960),

Gene: Dadosky\_48 Start: 36279, Stop: 36881, Start Num: 11

Candidate Starts for Dadosky\_48:

(Start: 11 @36279 has 18 MA's), (13, 36294), (Start: 16 @36354 has 1 MA's), (17, 36357), (19, 36432), (20, 36450), (22, 36456), (28, 36516), (31, 36540), (35, 36576), (37, 36600), (39, 36642), (40, 36678), (42, 36744), (43, 36756), (45, 36792),

Gene: DoubleChamp\_45 Start: 36384, Stop: 36989, Start Num: 11

Candidate Starts for DoubleChamp\_45:

(Start: 11 @36384 has 18 MA's), (13, 36399), (Start: 16 @36459 has 1 MA's), (17, 36462), (18, 36504), (19, 36537), (20, 36555), (22, 36561), (31, 36645), (35, 36681), (37, 36705), (38, 36732), (40, 36783), (42, 36849), (46, 36960),

Gene: Edugator\_45 Start: 36704, Stop: 37297, Start Num: 11

Candidate Starts for Edugator\_45:

(Start: 11 @36704 has 18 MA's), (13, 36719), (Start: 16 @36779 has 1 MA's), (17, 36782), (19, 36857), (20, 36875), (22, 36881), (28, 36941), (31, 36965), (35, 37001), (39, 37058), (40, 37094), (42, 37160),

Gene: Feyre\_47 Start: 37611, Stop: 38171, Start Num: 16

Candidate Starts for Feyre\_47:

(1, 37245), (2, 37341), (Start: 12 @37533 has 3 MA's), (13, 37551), (14, 37557), (Start: 16 @37611 has 1 MA's), (21, 37710), (26, 37767), (29, 37785), (30, 37791), (34, 37818), (36, 37851), (42, 38025),

Gene: Gengar\_46 Start: 36147, Stop: 36782, Start Num: 11

Candidate Starts for Gengar\_46:

(3, 35970), (9, 36078), (Start: 11 @36147 has 18 MA's), (13, 36162), (15, 36186), (Start: 16 @36222 has 1 MA's), (17, 36225), (19, 36297), (21, 36321), (26, 36378), (29, 36396), (30, 36402), (34, 36429), (36, 36462), (41, 36609), (42, 36636),

Gene: Guillsminger\_47 Start: 36118, Stop: 36753, Start Num: 11

Candidate Starts for Guillsminger\_47:

(3, 35941), (9, 36049), (Start: 11 @36118 has 18 MA's), (13, 36133), (15, 36157), (Start: 16 @36193 has 1 MA's), (17, 36196), (19, 36268), (21, 36292), (26, 36349), (29, 36367), (30, 36373), (33, 36397), (36, 36433), (41, 36580), (42, 36607),

Gene: Heftyboy\_46 Start: 36269, Stop: 36925, Start Num: 12

Candidate Starts for Heftyboy\_46:

(1, 35981), (2, 36077), (Start: 12 @36269 has 3 MA's), (13, 36287), (14, 36293), (Start: 16 @36347 has 1 MA's), (21, 36446), (26, 36503), (29, 36521), (30, 36527), (33, 36551), (36, 36605), (41, 36752), (42, 36779), (44, 36803),

Gene: InvictusManeo\_46 Start: 36427, Stop: 37032, Start Num: 11

Candidate Starts for InvictusManeo\_46:

(Start: 11 @36427 has 18 MA's), (13, 36442), (Start: 16 @36502 has 1 MA's), (17, 36505), (18, 36547), (19, 36580), (20, 36598), (22, 36604), (31, 36688), (35, 36724), (37, 36748), (38, 36775), (40, 36826), (42, 36892), (46, 37003),

Gene: Kratio\_45 Start: 35977, Stop: 36582, Start Num: 11

Candidate Starts for Kratio\_45:

(5, 35833), (7, 35890), (Start: 11 @35977 has 18 MA's), (13, 35992), (Start: 16 @36052 has 1 MA's), (17, 36055), (18, 36097), (19, 36130), (20, 36148), (22, 36154), (28, 36214), (31, 36238), (37, 36298), (40, 36376), (42, 36442), (46, 36553),

Gene: Larva\_47 Start: 36146, Stop: 36748, Start Num: 11

Candidate Starts for Larva\_47:

(Start: 11 @36146 has 18 MA's), (13, 36161), (Start: 16 @36221 has 1 MA's), (17, 36224), (19, 36299), (20, 36317), (22, 36323), (28, 36383), (31, 36407), (35, 36443), (37, 36467), (39, 36509), (40, 36545), (42, 36611), (45, 36659),

Gene: Leston\_46 Start: 36247, Stop: 36882, Start Num: 11

Candidate Starts for Leston\_46:

(3, 36070), (7, 36151), (8, 36166), (9, 36178), (Start: 11 @36247 has 18 MA's), (13, 36262), (15, 36286), (Start: 16 @36322 has 1 MA's), (17, 36325), (19, 36397), (21, 36421), (26, 36478), (29, 36496), (30, 36502), (33, 36526), (36, 36562), (41, 36709), (42, 36736),

Gene: LilDirt\_45 Start: 36185, Stop: 36790, Start Num: 11

Candidate Starts for LilDirt\_45:

(Start: 11 @36185 has 18 MA's), (13, 36200), (Start: 16 @36260 has 1 MA's), (17, 36263), (18, 36305), (19, 36338), (20, 36356), (22, 36362), (31, 36446), (35, 36482), (37, 36506), (38, 36533), (40, 36584), (42, 36650), (46, 36761),

Gene: Miryou\_49 Start: 38449, Stop: 39084, Start Num: 11

Candidate Starts for Miryou\_49:

(Start: 11 @38449 has 18 MA's), (13, 38464), (15, 38488), (Start: 16 @38524 has 1 MA's), (17, 38527), (19, 38599), (21, 38623), (26, 38680), (29, 38698), (30, 38704), (34, 38731), (36, 38764), (41, 38911), (42, 38938),

Gene: Neighly\_48 Start: 36145, Stop: 36747, Start Num: 11

Candidate Starts for Neighly\_48:

(Start: 11 @36145 has 18 MA's), (13, 36160), (Start: 16 @36220 has 1 MA's), (17, 36223), (19, 36298), (20, 36316), (22, 36322), (28, 36382), (31, 36406), (35, 36442), (37, 36466), (39, 36508), (40, 36544), (42, 36610), (45, 36658),

Gene: OkiRoe\_46 Start: 36120, Stop: 36755, Start Num: 11

Candidate Starts for OkiRoe\_46:

(3, 35943), (9, 36051), (Start: 11 @36120 has 18 MA's), (13, 36135), (15, 36159), (Start: 16 @36195 has 1 MA's), (17, 36198), (19, 36270), (21, 36294), (26, 36351), (29, 36369), (30, 36375), (34, 36402), (36, 36435), (41, 36582), (42, 36609),

Gene: Omnicron\_49 Start: 35732, Stop: 36313, Start Num: 12

Candidate Starts for Omnicron\_49:

(4, 35576), (5, 35582), (6, 35585), (Start: 12 @35732 has 3 MA's), (Start: 16 @35810 has 1 MA's), (17, 35813), (19, 35885), (20, 35903), (23, 35927), (24, 35936), (25, 35939), (27, 35957), (32, 35990), (37, 36032), (40, 36110), (42, 36176),

Gene: Paola\_46 Start: 36118, Stop: 36753, Start Num: 11

Candidate Starts for Paola\_46:

(3, 35941), (9, 36049), (Start: 11 @36118 has 18 MA's), (13, 36133), (15, 36157), (Start: 16 @36193 has 1 MA's), (17, 36196), (19, 36268), (21, 36292), (26, 36349), (29, 36367), (30, 36373), (33, 36397), (36, 36433), (41, 36580), (42, 36607),

Gene: Psycho\_46 Start: 36276, Stop: 36878, Start Num: 11

Candidate Starts for Psycho\_46:

(Start: 11 @36276 has 18 MA's), (13, 36291), (Start: 16 @36351 has 1 MA's), (17, 36354), (19, 36429), (20, 36447), (22, 36453), (28, 36513), (31, 36537), (35, 36573), (37, 36597), (39, 36639), (40, 36675), (42, 36741), (43, 36753), (45, 36789),

Gene: Rando14\_48 Start: 35246, Stop: 35872, Start Num: 10

Candidate Starts for Rando14\_48:

(5, 35150), (7, 35207), (Start: 10 @35246 has 1 MA's), (Start: 12 @35297 has 3 MA's), (Start: 16 @35375 has 1 MA's), (17, 35378), (19, 35450), (20, 35468), (23, 35492), (25, 35504), (27, 35522), (32, 35555), (37, 35597), (40, 35669), (42, 35735),

Gene: SoSeph\_46 Start: 36269, Stop: 36925, Start Num: 12

Candidate Starts for SoSeph\_46:

(1, 35981), (2, 36077), (Start: 12 @36269 has 3 MA's), (13, 36287), (14, 36293), (Start: 16 @36347 has 1 MA's), (21, 36446), (26, 36503), (29, 36521), (30, 36527), (33, 36551), (36, 36605), (41, 36752), (42, 36779), (44, 36803),

Gene: Thyatira\_49 Start: 38470, Stop: 39090, Start Num: 11

Candidate Starts for Thyatira\_49:

(3, 38293), (Start: 11 @38470 has 18 MA's), (13, 38485), (15, 38509), (Start: 16 @38545 has 1 MA's), (17, 38548), (19, 38620), (21, 38644), (26, 38701), (29, 38719), (30, 38725), (36, 38776), (41, 38923), (42, 38950), (44, 38974),

Gene: ViviJ\_47 Start: 36184, Stop: 36789, Start Num: 11

Candidate Starts for ViviJ\_47:

(Start: 11 @36184 has 18 MA's), (13, 36199), (Start: 16 @36259 has 1 MA's), (17, 36262), (18, 36304), (19, 36337), (20, 36355), (22, 36361), (31, 36445), (35, 36481), (37, 36505), (38, 36532), (40, 36583), (42, 36649), (46, 36760),

Gene: Waterfoul\_47 Start: 36361, Stop: 36987, Start Num: 11

Candidate Starts for Waterfoul\_47:

(3, 36184), (6, 36211), (Start: 11 @36361 has 18 MA's), (13, 36376), (15, 36400), (Start: 16 @36436 has 1 MA's), (17, 36439), (19, 36511), (21, 36535), (26, 36592), (29, 36610), (30, 36616), (36, 36667), (41, 36814), (42, 36841), (44, 36865),