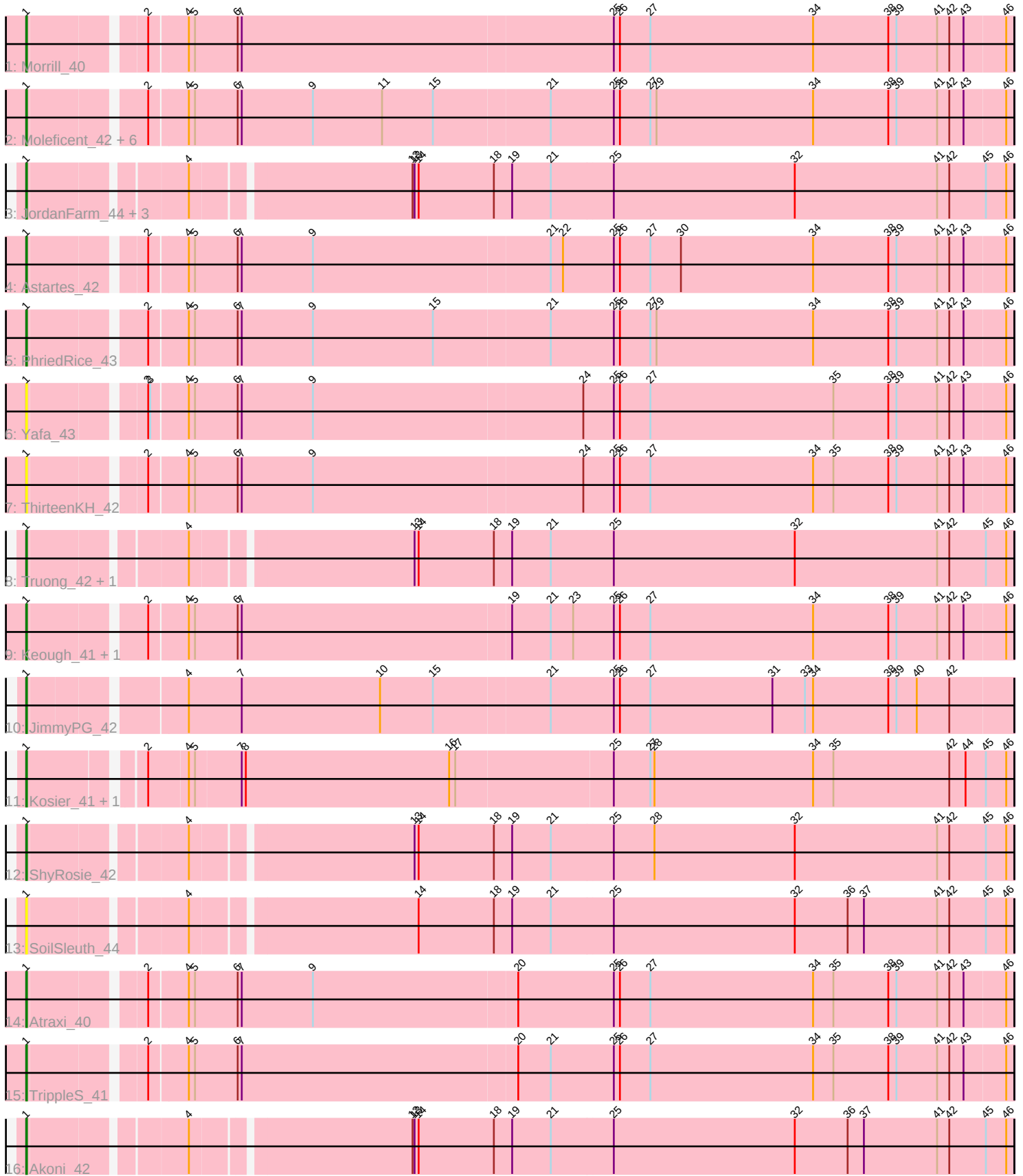


# Pham 278477



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 278477 Report

This analysis was run 02/07/26 on database version 634.

Pham number 278477 has 28 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Morrill\_40
- Track 2 : Moleficent\_42, RicoCaldo\_42, Phracted\_42, Fullmetal\_42, Pharky\_42, Phedro\_42, StagePhright\_42
- Track 3 : JordanFarm\_44, Ashton\_43, AloeVera\_43, Waterlily\_45
- Track 4 : Astartes\_42
- Track 5 : PhriedRice\_43
- Track 6 : Yafa\_43
- Track 7 : ThirteenKH\_42
- Track 8 : Truong\_42, Barroma\_41
- Track 9 : Keough\_41, Mazun\_43
- Track 10 : JimmyPG\_42
- Track 11 : Kosier\_41, Fede\_41
- Track 12 : ShyRosie\_42
- Track 13 : SoilSleuth\_44
- Track 14 : Atraxi\_40
- Track 15 : TrippleS\_41
- Track 16 : Akoni\_42

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

The start number called the most often in the published annotations is 1, it was called in 23 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akoni\_42, AloeVera\_43, Ashton\_43, Astartes\_42, Atraxi\_40, Barroma\_41, Fede\_41, Fullmetal\_42, JimmyPG\_42, JordanFarm\_44, Keough\_41, Kosier\_41, Mazun\_43, Moleficent\_42, Morrill\_40, Pharky\_42, Phedro\_42, Phracted\_42, PhriedRice\_43, RicoCaldo\_42, ShyRosie\_42, SoilSleuth\_44, StagePhright\_42, ThirteenKH\_42, TrippleS\_41, Truong\_42, Waterlily\_45, Yafa\_43,

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

- 

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

- 

### Summary by start number:

Start 1:

- Found in 28 of 28 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 23 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Akoni\_42 (EK2), AloeVera\_43 (EK2), Ashton\_43 (EK2), Astartes\_42 (EK2), Atraxi\_40 (EK2), Barroma\_41 (EK2), Fede\_41 (EK2), Fullmetal\_42 (EK2), JimmyPG\_42 (EK2), JordanFarm\_44 (EK2), Keough\_41 (EK2), Kosier\_41 (EK2), Mazun\_43 (EK2), Moleficent\_42 (EK2), Morrill\_40 (EK2), Pharky\_42 (EK2), Phedro\_42 (EK2), Phracted\_42 (EK2), PhriedRice\_43 (EK2), RicoCaldo\_42 (EK2), ShyRosie\_42 (EK2), SoilSleuth\_44 (EK2), StagePhright\_42 (EK2), ThirteenKH\_42 (EK2), TrippleS\_41 (EK2), Truong\_42 (EK2), Waterlily\_45 (EK2), Yafa\_43 (EK2),

### Summary by clusters:

There is one cluster represented in this pham: EK2

Info for manual annotations of cluster EK2:

- Start number 1 was manually annotated 23 times for cluster EK2.

### Gene Information:

Gene: Akoni\_42 Start: 42047, Stop: 43444, Start Num: 1

Candidate Starts for Akoni\_42:

(Start: 1 @42047 has 23 MA's), (4, 42257), (12, 42560), (13, 42563), (14, 42569), (18, 42680), (19, 42707), (21, 42764), (25, 42854), (32, 43121), (36, 43199), (37, 43223), (41, 43331), (42, 43349), (45, 43403), (46, 43433),

Gene: AloeVera\_43 Start: 42260, Stop: 43657, Start Num: 1

Candidate Starts for AloeVera\_43:

(Start: 1 @42260 has 23 MA's), (4, 42470), (12, 42773), (13, 42776), (14, 42782), (18, 42893), (19, 42920), (21, 42977), (25, 43067), (32, 43334), (41, 43544), (42, 43562), (45, 43616), (46, 43646),

Gene: Ashton\_43 Start: 42259, Stop: 43656, Start Num: 1

Candidate Starts for Ashton\_43:

(Start: 1 @42259 has 23 MA's), (4, 42469), (12, 42772), (13, 42775), (14, 42781), (18, 42892), (19, 42919), (21, 42976), (25, 43066), (32, 43333), (41, 43543), (42, 43561), (45, 43615), (46, 43645),

Gene: Astartes\_42 Start: 41791, Stop: 43206, Start Num: 1

Candidate Starts for Astartes\_42:

(Start: 1 @41791 has 23 MA's), (2, 41944), (4, 41998), (5, 42007), (6, 42070), (7, 42076), (9, 42181), (21, 42526), (22, 42544), (25, 42619), (26, 42628), (27, 42673), (30, 42718), (34, 42913), (38, 43024), (39, 43036), (41, 43096), (42, 43114), (43, 43135), (46, 43195),

Gene: Atraxi\_40 Start: 41583, Stop: 42998, Start Num: 1

Candidate Starts for Atraxi\_40:

(Start: 1 @41583 has 23 MA's), (2, 41736), (4, 41790), (5, 41799), (6, 41862), (7, 41868), (9, 41973), (20, 42270), (25, 42411), (26, 42420), (27, 42465), (34, 42705), (35, 42735), (38, 42816), (39, 42828), (41, 42888), (42, 42906), (43, 42927), (46, 42987),

Gene: Barroma\_41 Start: 42049, Stop: 43446, Start Num: 1

Candidate Starts for Barroma\_41:

(Start: 1 @42049 has 23 MA's), (4, 42259), (13, 42565), (14, 42571), (18, 42682), (19, 42709), (21, 42766), (25, 42856), (32, 43123), (41, 43333), (42, 43351), (45, 43405), (46, 43435),

Gene: Fede\_41 Start: 40796, Stop: 42214, Start Num: 1

Candidate Starts for Fede\_41:

(Start: 1 @40796 has 23 MA's), (2, 40946), (4, 41006), (5, 41015), (7, 41081), (8, 41087), (16, 41387), (17, 41396), (25, 41624), (27, 41678), (28, 41684), (34, 41918), (35, 41948), (42, 42119), (44, 42143), (45, 42173), (46, 42203),

Gene: Fullmetal\_42 Start: 42165, Stop: 43583, Start Num: 1

Candidate Starts for Fullmetal\_42:

(Start: 1 @42165 has 23 MA's), (2, 42321), (4, 42375), (5, 42384), (6, 42447), (7, 42453), (9, 42558), (11, 42660), (15, 42735), (21, 42903), (25, 42996), (26, 43005), (27, 43050), (29, 43059), (34, 43290), (38, 43401), (39, 43413), (41, 43473), (42, 43491), (43, 43512), (46, 43572),

Gene: JimmyPG\_42 Start: 42481, Stop: 43896, Start Num: 1

Candidate Starts for JimmyPG\_42:

(Start: 1 @42481 has 23 MA's), (4, 42688), (7, 42766), (10, 42970), (15, 43048), (21, 43216), (25, 43309), (26, 43318), (27, 43363), (31, 43543), (33, 43591), (34, 43603), (38, 43714), (39, 43726), (40, 43756), (42, 43804),

Gene: JordanFarm\_44 Start: 42260, Stop: 43657, Start Num: 1

Candidate Starts for JordanFarm\_44:

(Start: 1 @42260 has 23 MA's), (4, 42470), (12, 42773), (13, 42776), (14, 42782), (18, 42893), (19, 42920), (21, 42977), (25, 43067), (32, 43334), (41, 43544), (42, 43562), (45, 43616), (46, 43646),

Gene: Keough\_41 Start: 41919, Stop: 43337, Start Num: 1

Candidate Starts for Keough\_41:

(Start: 1 @41919 has 23 MA's), (2, 42075), (4, 42129), (5, 42138), (6, 42201), (7, 42207), (19, 42600), (21, 42657), (23, 42690), (25, 42750), (26, 42759), (27, 42804), (34, 43044), (38, 43155), (39, 43167), (41, 43227), (42, 43245), (43, 43266), (46, 43326),

Gene: Kosier\_41 Start: 40743, Stop: 42158, Start Num: 1

Candidate Starts for Kosier\_41:

(Start: 1 @40743 has 23 MA's), (2, 40893), (4, 40950), (5, 40959), (7, 41025), (8, 41031), (16, 41331), (17, 41340), (25, 41568), (27, 41622), (28, 41628), (34, 41862), (35, 41892), (42, 42063), (44, 42087), (45, 42117), (46, 42147),

Gene: Mazun\_43 Start: 42508, Stop: 43944, Start Num: 1

Candidate Starts for Mazun\_43:

(Start: 1 @42508 has 23 MA's), (2, 42682), (4, 42736), (5, 42745), (6, 42808), (7, 42814), (19, 43207), (21, 43264), (23, 43297), (25, 43357), (26, 43366), (27, 43411), (34, 43651), (38, 43762), (39, 43774), (41, 43834), (42, 43852), (43, 43873), (46, 43933),

Gene: Moleficent\_42 Start: 42172, Stop: 43590, Start Num: 1

Candidate Starts for Moleficent\_42:

(Start: 1 @42172 has 23 MA's), (2, 42328), (4, 42382), (5, 42391), (6, 42454), (7, 42460), (9, 42565), (11, 42667), (15, 42742), (21, 42910), (25, 43003), (26, 43012), (27, 43057), (29, 43066), (34, 43297), (38, 43408), (39, 43420), (41, 43480), (42, 43498), (43, 43519), (46, 43579),

Gene: Morrill\_40 Start: 41563, Stop: 42978, Start Num: 1

Candidate Starts for Morrill\_40:

(Start: 1 @41563 has 23 MA's), (2, 41716), (4, 41770), (5, 41779), (6, 41842), (7, 41848), (25, 42391), (26, 42400), (27, 42445), (34, 42685), (38, 42796), (39, 42808), (41, 42868), (42, 42886), (43, 42907), (46, 42967),

Gene: Pharky\_42 Start: 42168, Stop: 43586, Start Num: 1

Candidate Starts for Pharky\_42:

(Start: 1 @42168 has 23 MA's), (2, 42324), (4, 42378), (5, 42387), (6, 42450), (7, 42456), (9, 42561), (11, 42663), (15, 42738), (21, 42906), (25, 42999), (26, 43008), (27, 43053), (29, 43062), (34, 43293), (38, 43404), (39, 43416), (41, 43476), (42, 43494), (43, 43515), (46, 43575),

Gene: Phedro\_42 Start: 42168, Stop: 43586, Start Num: 1

Candidate Starts for Phedro\_42:

(Start: 1 @42168 has 23 MA's), (2, 42324), (4, 42378), (5, 42387), (6, 42450), (7, 42456), (9, 42561), (11, 42663), (15, 42738), (21, 42906), (25, 42999), (26, 43008), (27, 43053), (29, 43062), (34, 43293), (38, 43404), (39, 43416), (41, 43476), (42, 43494), (43, 43515), (46, 43575),

Gene: Phracted\_42 Start: 42168, Stop: 43586, Start Num: 1

Candidate Starts for Phracted\_42:

(Start: 1 @42168 has 23 MA's), (2, 42324), (4, 42378), (5, 42387), (6, 42450), (7, 42456), (9, 42561), (11, 42663), (15, 42738), (21, 42906), (25, 42999), (26, 43008), (27, 43053), (29, 43062), (34, 43293), (38, 43404), (39, 43416), (41, 43476), (42, 43494), (43, 43515), (46, 43575),

Gene: PhriedRice\_43 Start: 42272, Stop: 43690, Start Num: 1

Candidate Starts for PhriedRice\_43:

(Start: 1 @42272 has 23 MA's), (2, 42428), (4, 42482), (5, 42491), (6, 42554), (7, 42560), (9, 42665), (15, 42842), (21, 43010), (25, 43103), (26, 43112), (27, 43157), (29, 43166), (34, 43397), (38, 43508), (39, 43520), (41, 43580), (42, 43598), (43, 43619), (46, 43679),

Gene: RicoCaldo\_42 Start: 42250, Stop: 43668, Start Num: 1

Candidate Starts for RicoCaldo\_42:

(Start: 1 @42250 has 23 MA's), (2, 42406), (4, 42460), (5, 42469), (6, 42532), (7, 42538), (9, 42643), (11, 42745), (15, 42820), (21, 42988), (25, 43081), (26, 43090), (27, 43135), (29, 43144), (34, 43375), (38, 43486), (39, 43498), (41, 43558), (42, 43576), (43, 43597), (46, 43657),

Gene: ShyRosie\_42 Start: 42269, Stop: 43666, Start Num: 1

Candidate Starts for ShyRosie\_42:

(Start: 1 @42269 has 23 MA's), (4, 42479), (13, 42785), (14, 42791), (18, 42902), (19, 42929), (21, 42986), (25, 43076), (28, 43136), (32, 43343), (41, 43553), (42, 43571), (45, 43625), (46, 43655),

Gene: SoilSleuth\_44 Start: 42091, Stop: 43488, Start Num: 1

Candidate Starts for SoilSleuth\_44:

(Start: 1 @42091 has 23 MA's), (4, 42301), (14, 42613), (18, 42724), (19, 42751), (21, 42808), (25, 42898), (32, 43165), (36, 43243), (37, 43267), (41, 43375), (42, 43393), (45, 43447), (46, 43477),

Gene: StagePhright\_42 Start: 42168, Stop: 43586, Start Num: 1

Candidate Starts for StagePhright\_42:

(Start: 1 @42168 has 23 MA's), (2, 42324), (4, 42378), (5, 42387), (6, 42450), (7, 42456), (9, 42561), (11, 42663), (15, 42738), (21, 42906), (25, 42999), (26, 43008), (27, 43053), (29, 43062), (34, 43293), (38, 43404), (39, 43416), (41, 43476), (42, 43494), (43, 43515), (46, 43575),

Gene: ThirteenKH\_42 Start: 41573, Stop: 42988, Start Num: 1

Candidate Starts for ThirteenKH\_42:

(Start: 1 @41573 has 23 MA's), (2, 41726), (4, 41780), (5, 41789), (6, 41852), (7, 41858), (9, 41963), (24, 42356), (25, 42401), (26, 42410), (27, 42455), (34, 42695), (35, 42725), (38, 42806), (39, 42818), (41, 42878), (42, 42896), (43, 42917), (46, 42977),

Gene: TrippleS\_41 Start: 41722, Stop: 43137, Start Num: 1

Candidate Starts for TrippleS\_41:

(Start: 1 @41722 has 23 MA's), (2, 41875), (4, 41929), (5, 41938), (6, 42001), (7, 42007), (20, 42409), (21, 42457), (25, 42550), (26, 42559), (27, 42604), (34, 42844), (35, 42874), (38, 42955), (39, 42967), (41, 43027), (42, 43045), (43, 43066), (46, 43126),

Gene: Truong\_42 Start: 42049, Stop: 43446, Start Num: 1

Candidate Starts for Truong\_42:

(Start: 1 @42049 has 23 MA's), (4, 42259), (13, 42565), (14, 42571), (18, 42682), (19, 42709), (21, 42766), (25, 42856), (32, 43123), (41, 43333), (42, 43351), (45, 43405), (46, 43435),

Gene: Waterlily\_45 Start: 42303, Stop: 43700, Start Num: 1

Candidate Starts for Waterlily\_45:

(Start: 1 @42303 has 23 MA's), (4, 42513), (12, 42816), (13, 42819), (14, 42825), (18, 42936), (19, 42963), (21, 43020), (25, 43110), (32, 43377), (41, 43587), (42, 43605), (45, 43659), (46, 43689),

Gene: Yafa\_43 Start: 41477, Stop: 42892, Start Num: 1

Candidate Starts for Yafa\_43:

(Start: 1 @41477 has 23 MA's), (2, 41630), (3, 41633), (4, 41684), (5, 41693), (6, 41756), (7, 41762), (9, 41867), (24, 42260), (25, 42305), (26, 42314), (27, 42359), (35, 42629), (38, 42710), (39, 42722), (41, 42782), (42, 42800), (43, 42821), (46, 42881),