

### Anti-PABP antibody ab21060

★★★★★ [12 Abreviews](#) [120 References](#) [画像数 7](#)

#### 製品の概要

製品名	Anti-PABP antibody
製品の詳細	Rabbit polyclonal to PABP
由来種	Rabbit
特異性	From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch, please contact our Scientific Support who will be happy to help. You may also be interested in our alternative recombinant antibody, <a href="#">ab312314</a> .
アプリケーション	<b>適用あり:</b> WB, ICC/IF
種交差性	<b>交差種:</b> Mouse, Rat, Human <b>交差が予測される動物種:</b> Cow, Pig 
免疫原	Synthetic peptide conjugated to KLH derived from within residues 600 to the C-terminus of Human PABP. Immunogen <a href="#">の所有権に関して</a> (Peptide available as <a href="#">ab23710</a> .)
ポジティブ・コントロール	ICC/IF: HeLa cells. WB: HeLa, NIH/3T3, MEF1 and PC12 whole cell lysate. Mouse brain, testis, spinal cord, ovary and pancreas tissue lysate. Brain (Rat) Tissue Lysate - normal tissue.
特記事項	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
バッファー	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

**精製度** Immunogen affinity purified  
**ポリ/モノ** ポリクローナル  
**アイソタイプ** IgG

## アプリケーション

**The Abpromise guarantee** **Abpromise保証は、次のテスト済みアプリケーションにおけるab21060の使用に適用されます**  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	★★★★★ (4)	Use a concentration of 1 µg/ml. Detects a band of approximately 75 kDa.
ICC/IF	★★★★★ (4)	Use a concentration of 1 - 5 µg/ml.

## ターゲット情報

**機能** Binds the poly(A) tail of mRNA, including that of its own transcript. May be involved in cytoplasmic regulatory processes of mRNA metabolism such as pre-mRNA splicing. Its function in translational initiation regulation can either be enhanced by PAIP1 or repressed by PAIP2. Can probably bind to cytoplasmic RNA sequences other than poly(A) in vivo. Involved in translationally coupled mRNA turnover. Implicated with other RNA-binding proteins in the cytoplasmic deadenylation/translational and decay interplay of the FOS mRNA mediated by the major coding-region determinant of instability (mCRD) domain. Involved in regulation of nonsense-mediated decay (NMD) of mRNAs containing premature stop codons; for the recognition of premature termination codons (PTC) and initiation of NMD a competitive interaction between UPF1 and PABPC1 with the ribosome-bound release factors is proposed. By binding to long poly(A) tails, may protect them from uridylation by ZCCHC6/ZCCHC11 and hence contribute to mRNA stability (PubMed:25480299). Positively regulates the replication of dengue virus (DENV) (PubMed:26735137).

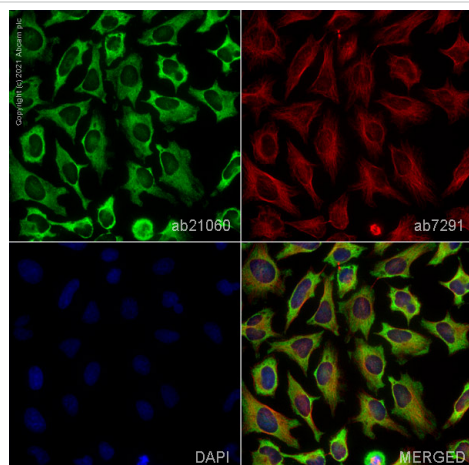
**組織特異性** Ubiquitous.

**配列類似性** Belongs to the polyadenylate-binding protein type-1 family.  
Contains 1 PABC domain.  
Contains 4 RRM (RNA recognition motif) domains.

**ドメイン** The RNA-binding domains RRM1 and RRM2 and the C-terminus (last 138 amino acids) regions interact with the PABPC1-interacting motif-1 (PAM1) and -2 (PAM2) of PAIP1, respectively. The RNA-binding domains RRM2 and RRM3 and the C-terminus (last 138 amino acids) regions interact with the PABPC1-interacting motif-1 (PAM1) and -2 (PAM2) of PAIP2, respectively.

**翻訳後修飾** Phosphorylated by MAPKAPK2.  
Methylated by CARM1. Arg-493 is dimethylated, probably to asymmetric dimethylarginine.

**細胞内局在** Cytoplasm. Nucleus. Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Shuttles between the cytoplasm and the nucleus.

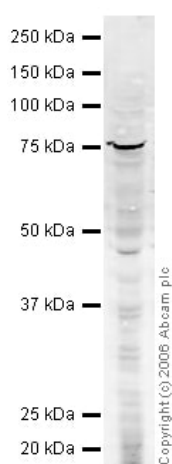


Immunocytochemistry/ Immunofluorescence - Anti-PABP antibody (ab21060)

ab21060 staining PABP in HeLa cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab21060 at 1 µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150120**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Also suitable in cells fixed with 4% paraformaldehyde (10 min).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Western blot - Anti-PABP antibody (ab21060)

Anti-PABP antibody (ab21060) at 1 µg/ml + HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 20 µg/ml

**Secondary**

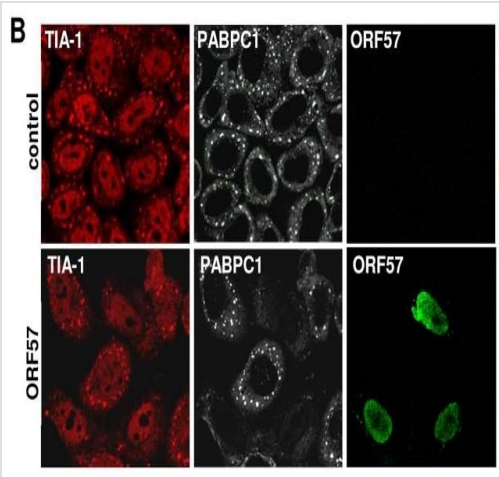
Goat polyclonal to Rabbit IgG (Alexa Fluor® 680) at 1/10000 dilution

Performed under reducing conditions.

**Predicted band size:** 69 kDa

**Observed band size:** 75 kDa

ab21060 detects a band of ~ 75 kDa in HeLa whole cell lysate. A 75 kDa band is also seen in Jurkat and A431 whole cell lysates (data not shown). PABP is reported to have run at an apparent molecular mass of 73 kDa on SDS-PAGE. We believe the band we see at 75 kDa represents PABP.

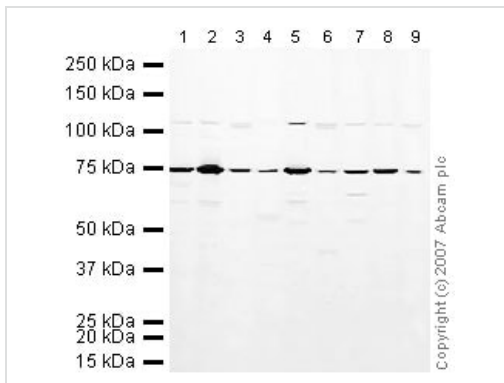


Immunocytochemistry/ Immunofluorescence - Anti-PABP antibody (ab21060)

Sharma et al PLoS Pathog. 2017 Oct 30;13(10):e1006677. doi: 10.1371/journal.ppat.1006677. eCollection 2017 Oct. Fig 2. Reproduced under the Creative Commons license <https://creativecommons.org/publicdomain/zero/1.0/>

### Viral ORF57 expression is required to suppress the formation of SG during KSHV lytic infection and under arsenite stress.

ORF57 alone is sufficient to inhibit SG formation. HeLa cells transfected with an ORF57-Flag (pVM7) expressing vector or an empty vector (control) for 24 h were induced with 0.5 mM arsenite for 30 min for SG formation. The cells were stained for ORF57 (green), SG-specific TIA-1 (red) and PABPC1 (white) (ab21060) by each corresponding antibody. The nuclei were counterstained with Hoechst stain. Scale bar = 10  $\mu$ m.



Western blot - Anti-PABP antibody (ab21060)

**All lanes :** Anti-PABP antibody (ab21060) at 1  $\mu$ g/ml

**Lane 1 :** NIH/3T3 whole cell lysate ([ab7179](#))

**Lane 2 :** MEF1 (Mouse embryonic fibroblast cell line) Whole Cell Lysate

**Lane 3 :** Brain (Mouse) Tissue Lysate

**Lane 4 :** Mouse pancreas tissue lysate - total protein ([ab29363](#))

**Lane 5 :** Testis (Mouse) Tissue Lysate - normal tissue

**Lane 6 :** Spinal Cord (Mouse) Tissue Lysate

**Lane 7 :** Ovary (Mouse) Tissue Lysate - normal tissue

**Lane 8 :** PC-12 (Rat adrenal pheochromocytoma cell line) Whole Cell Lysate

**Lane 9 :** Brain (Rat) Tissue Lysate - normal tissue

Lysates/proteins at 10  $\mu$ g per lane.

### Secondary

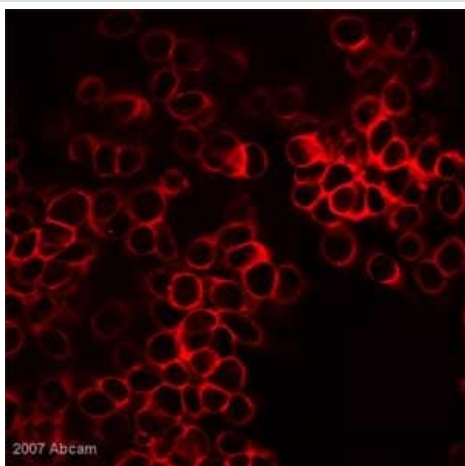
**All lanes :** IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Performed under reducing conditions.

**Predicted band size:** 69 kDa

**Observed band size:** 75 kDa

**Additional bands at:** 110 kDa. We are unsure as to the identity of these extra bands.

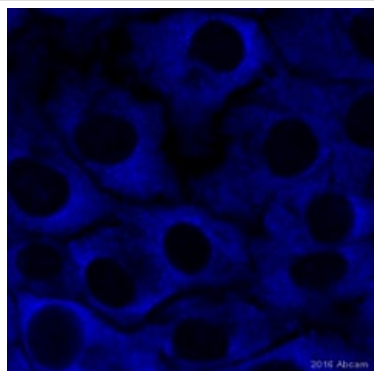


Immunocytochemistry/ Immunofluorescence - Anti-PABP antibody (ab21060)

This image is courtesy of an anonymous Abreview

ab21060 at 1/50 staining HeLa (Human epithelial cell line from cervix adenocarcinoma) cells by ICC/IF.

HeLa cells fixed for 10 minutes with 1.9 % formaldehyde in 2 % sucrose in PBS then permeabilized for 10 minutes with 0.5% NP40 in PBS-10% sucrose. The cells were then blocked in horse serum and incubated with the antibody for 1 hour. An Alexa Fluor® 555 conjugated donkey anti-rabbit antibody was used as the secondary.



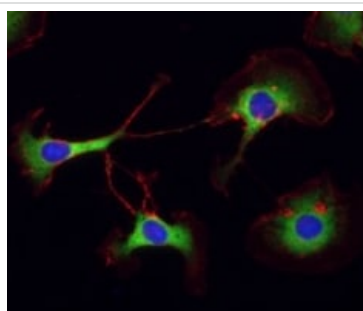
Immunocytochemistry/ Immunofluorescence - Anti-PABP antibody (ab21060)

This image is courtesy of an Abreview submitted by Sathya Thulasi Raman.

Immunocytochemical analysis of newborn porcine tracheal epithelial cells, labeling PABP with ab21060.

Cells were formaldehyde-fixed, permeabilized in cold methanol, and blocked with 5% horse serum in PBS for 40 minutes at 23°C.

Immunostaining with primary anti-PABP diluted 1/250 for 12 hours at 4°C.



Immunocytochemistry/ Immunofluorescence - Anti-PABP antibody (ab21060)

This image is courtesy of an anonymous Abreview.

Immunocytochemical analysis of rat OLN93 oligodendroglia cells, labeling PABP with ab21060.

Cells were paraformaldehyde-fixed, permeabilized with 0.1% Triton X-100, and blocked with 10% normal goat serum for 1 hour at 20°C.

Immunostaining with anti-PABP diluted 1/200 overnight at 4°C.

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