

## Product datasheet

# Anti-PABP antibody [10E10] ab6125

★★★★☆ [2 Abreviews](#) [35 References](#) [4 Images](#)

### Overview

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<b>Product name</b>	Anti-PABP antibody [10E10]
<b>Description</b>	Mouse monoclonal [10E10] to PABP
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> IP, ICC/IF, WB, Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Does not react with:</b> Mouse, Drosophila melanogaster
<b>Immunogen</b>	Recombinant PABP (Human) expressed from its 1.85 kbp cDNA, NcoI to Sspl.
<b>General notes</b>	<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>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	Preservative: 0.1% Sodium azide Constituent: PBS
<b>Purity</b>	Protein A purified
<b>Purification notes</b>	Purified from supernatant.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	10E10
<b>Myeloma</b>	Sp2/0
<b>Isotype</b>	IgG2b

### Applications

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab6125 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
ICC/IF	★ ★ ★ ★ ★ (1)	Use at an assay dependent concentration.
WB	★ ★ ★ ★ ★ (1)	Use at an assay dependent concentration. Predicted molecular weight: 71 kDa.
Flow Cyt		Use 1 µg for 10 <sup>6</sup> cells. <b>ab170192</b> - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.

## Target

### Function

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).

### Tissue specificity

Ubiquitous.

### Sequence similarities

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

### Domain

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.

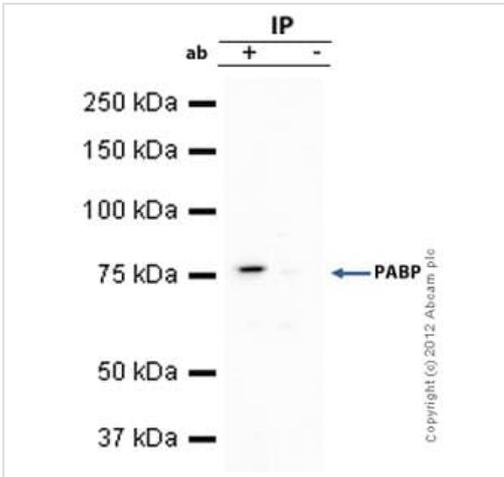
### Post-translational modifications

Phosphorylated by MAPKAPK2.  
Methylated by CARM1. Arg-493 is dimethylated, probably to asymmetric dimethylarginine.

### Cellular localization

Cytoplasm. Nucleus. Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Shuttles between the cytoplasm and the nucleus.

## Images



Immunoprecipitation - Anti-PABP antibody [10E10] (ab6125)

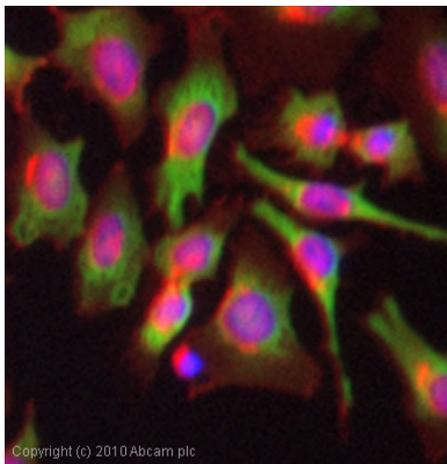
PABP was immunoprecipitated using 0.5mg HeLa whole cell extract, 5µg of Mouse monoclonal to PABP (ab6125) and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min, HeLa whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab6125.

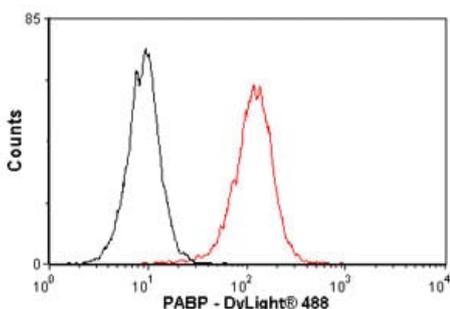
Secondary: Goat polyclonal to mouse IgG light chain specific (HRP) at 1/5000 dilution.

Band: 76kDa: PABP; 25kDa.



Immunocytochemistry/ Immunofluorescence - Anti-PABP antibody [10E10] (ab6125)

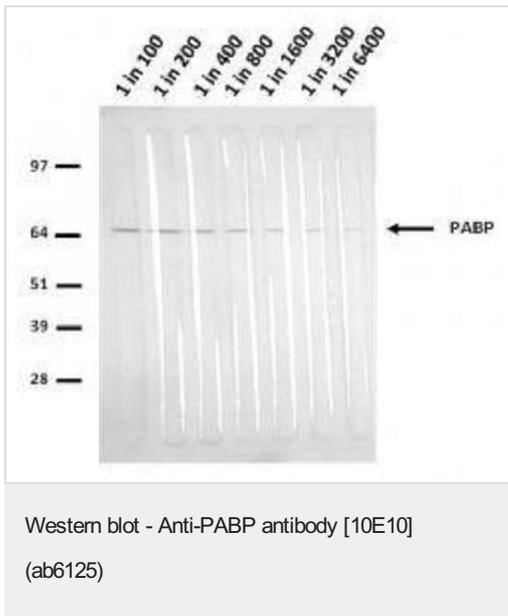
ICC/IF image of ab6125 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab6125, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Flow Cytometry - Anti-PABP antibody [10E10] (ab6125)

Overlay histogram showing HeLa cells stained with ab6125 (red line). The cells were fixed with 100% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab6125, 1µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2b [PLPV219] (**ab91366**, 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized in 0.1% PBS-Tween used under the same

conditions.



Western Blot analysis on HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate using ab6125 at 1/100 to 1/6400 dilution. Anti-mouse IgG (whole molecule)-AP conjugate was used at the secondary at a 1/2000 dilution. Detection with BCIP/NBT substrate.

4-12% Bis-Tris, 1X MOPS running buffer.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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