abcam

Product datasheet

Anti-PABP antibody [10E10] ab6125

★★★★★ 2 Abreviews 35 References 4 图像

概述

产品名称 Anti-PABP抗体[10E10]

宿主 Mouse

经测试应用 适用于: IP, ICC/IF, WB, Flow Cyt

种属反应性 与反应: Human

不与反应: Mouse, Drosophila melanogaster

免疫原 Recombinant PABP (Human) expressed from its 1.85 kbp cDNA, Ncol to Sspl.

常规说明

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.

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&As

性能

形式 Liquid

存放说明 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.

存储溶液 Preservative: 0.1% Sodium azide

Constituent: PBS

纯度 Protein A purified

纯**化**说明 Purified from supernatant.

克隆 单克隆

克隆编号 10E10

骨髓瘤 Sp2/0

同种型 lqG2b

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The Abpromise guarantee

Abpromise™承诺保证使用ab6125于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度:实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
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 1µg for 10 ⁶ cells. ab170192 - Mouse monoclonal lgG2b, is suitable for use as an isotype control with this antibody.

靶标

功能

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).

组织特异性

Ubiquitous.

序列相似性

Belongs to the polyadenylate-binding protein type-1 family.

Contains 1 PABC domain.

Contains 4 RRM (RNA recognition motif) domains.

结构域

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.

翻译后修饰

Phosphorylated by MAPKAPK2.

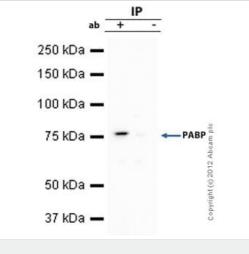
 $\label{lem:methylated} \mbox{Methylated by CARM1. Arg-493 is dimethylated, probably to asymmetric dimethylarginine.}$

细胞定位

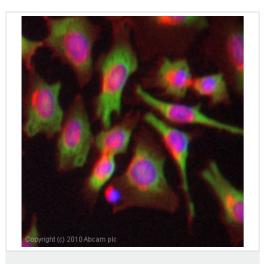
 $\label{lem:cytoplasm.} \textbf{Cytoplasm. Nucleus. Localized in cytoplasmic mRNP granules containing untranslated mRNAs.}$

Shuttles between the cytoplasm and the nucleus.

图片



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



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

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

PABP - DyLight® 488

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.

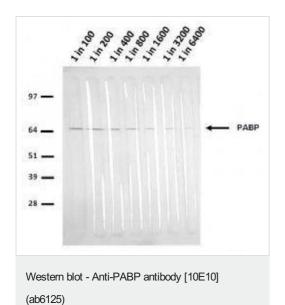
Secondary: Goat polyclonal to mouse IgG light chain specific (HRP) at 1/5000 dilution.

Band: 76kDa: PABP; 25kDa.

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, 1 μ g/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 1.43 μ M.

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/1x10⁶ 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/1x10⁶ 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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