

PABPC4 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) **Catalog # AP57747**

Specification

SIMILARITY

PABPC4 Polyclonal Antibody - Product Information

Application WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession 013310 Rat, Pig, Dog, Bovine Reactivity

Host Rabbit Clonality **Polyclonal** Calculated MW **71 KDa Physical State** Liquid

Immunogen KLH conjugated synthetic peptide derived

laG

from human PABPC4

221-320/644 **Epitope Specificity**

Isotype **Purity** affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cytoplasm. Localized in cytoplasmic mRNP

granules containing untranslated mRNAs. Belongs to the polyadenylate-binding protein type-1 family. Contains 1 PABC domain. Contains 4 RRM (RNA recognition

motif) domains.

SUBUNIT Identified in a IGF2BP1-dependent mRNP granule complex containing untranslated

mRNAs. Interacts with NFX1.

Post-translational modifications Arg-518 is dimethylated, probably to

asymmetric dimethylarginine.

Important Note This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

Background Descriptions

Poly(A)-binding proteins (PABPs) bind to the poly(A) tail present at the 3-prime ends of most eukaryotic mRNAs. PABPC4 or IPABP (inducible PABP) was isolated as an activation-induced T-cell mRNA encoding a protein. Activation of T cells increased PABPC4 mRNA levels in T cells approximately 5-fold. PABPC4 contains 4 RNA-binding domains and proline-rich C terminus. PABPC4 is localized primarily to the cytoplasm. It is suggested that PABPC4 might be necessary for regulation of stability of labile mRNA species in activated T cells. PABPC4 was also identified as an antigen, APP1 (activated-platelet protein-1), expressed on thrombin-activated rabbit platelets. PABPC4 may also be involved in the regulation of protein translation in platelets and megakaryocytes or may participate in the binding or stabilization of polyadenylates in platelet dense granules. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2008]

PABPC4 Polyclonal Antibody - Additional Information



Gene ID 8761

Other Names

Polyadenylate-binding protein 4, PABP-4, Poly(A)-binding protein 4, Activated-platelet protein 1, APP-1, Inducible poly(A)-binding protein, iPABP, PABPC4, APP1, PABP4

Target/Specificity

Expressed at low levels in resting normal T cells; following T-cell activation, however, mRNA levels are rapidly up-regulated.

Dilution

- WB~~1:1000<br \> <span class
 ="dilution_IHC-P">IHC-P~~N/A<br \> <span class
 "dilution_IHC-F">IHC-P~~N/A<br \> <span class</pre>
- ="dilution IHC-F">IHC-F~~N/A<br \><span class
- ="dilution_IF">IF \sim 1:50 \sim 200<br \>ICC \sim N/A<br \>E \sim N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 $^{\circ}$ C.

PABPC4 Polyclonal Antibody - Protein Information

Name PABPC4

Synonyms APP1, PABP4

Function

Binds the poly(A) tail of mRNA (PubMed:8524242). Binds to SMIM26 mRNA and plays a role in its post-transcriptional regulation (PubMed:37009826). May be involved in cytoplasmic regulatory processes of mRNA metabolism. Can probably bind to cytoplasmic RNA sequences other than poly(A) in vivo (By similarity).

Cellular Location

Cytoplasm. Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

Tissue Location

Expressed at low levels in resting normal T cells; following T-cell activation, however, mRNA levels are rapidly up- regulated

PABPC4 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot





• <u>Immunohistochemistry</u>

- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

PABPC4 Polyclonal Antibody - Images