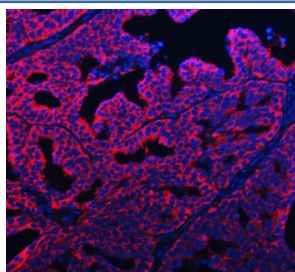


## APP-1 Antibody / PABPC4 / Polyadenylate-binding protein 4 (RQ7240)

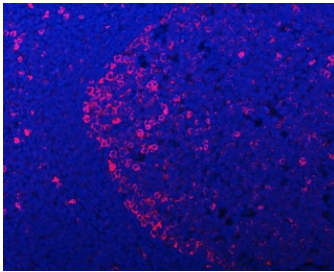
Catalog No.	Formulation	Size
RQ7240	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

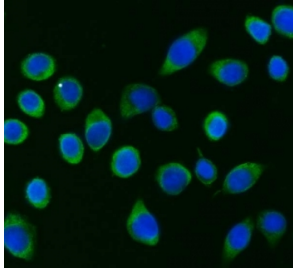
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Format</b>	Antigen affinity purified
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity purified
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose
<b>UniProt</b>	Q13310
<b>Localization</b>	Cytoplasmic
<b>Applications</b>	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells
<b>Limitations</b>	This APP-1 antibody is available for research use only.



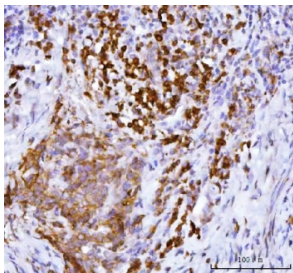
Immunofluorescent staining of FFPE human ovarian cancer tissue with APP-1 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



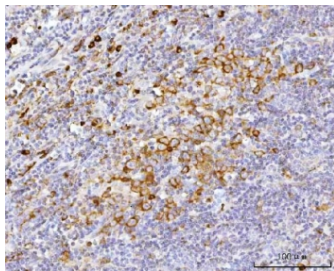
Immunofluorescent staining of FFPE human chronic tonsillitis tissue with APP-1 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



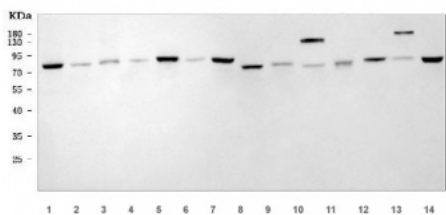
Immunofluorescent staining of FFPE human SiHa cells with APP-1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



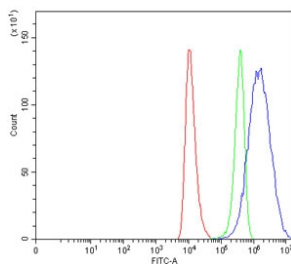
IHC staining of FFPE human cervical cancer tissue with APP-1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



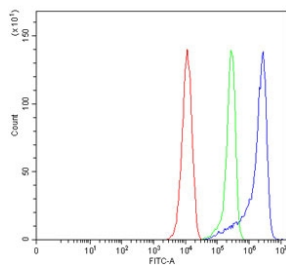
IHC staining of FFPE human tonsil tissue with APP-1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human HeLa, 2) human 293T, 3) human PC-3, 4) human ThP-1, 5) human RT4, 6) human A431, 7) human Daudi, 8) rat testis, 9) rat heart, 10) rat brain, 11) rat L6, 12) mouse heart, 13) mouse brain and 14) mouse NIH 3T3 cell lysate with APP-1 antibody. Predicted molecular weight: 69-72 kDa (multiple isoforms).



Flow cytometry testing of human HEL cells with APP-1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= APP-1 antibody.



Flow cytometry testing of mouse RAW264.7 cells with APP-1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= APP-1 antibody.

## Description

Polyadenylate-binding protein 4 (PABPC4), also called Activated-platelet protein 1 (APP-1) is a protein that in humans is encoded by the PABPC4 gene. 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. This protein has also been found to interact with coronavirus nucleocapsid proteins and is thought to inhibit coronavirus replication.

## Application Notes

Optimal dilution of the APP-1 antibody should be determined by the researcher.

## Immunogen

Amino acids RPPYYTPNQLAQMRPNPRWQQ were used as the immunogen for the APP-1 antibody.

## Storage

After reconstitution, the APP-1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.