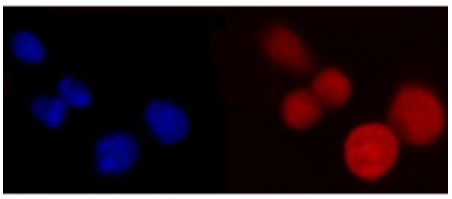
Poly(rC)-binding protein 2 Antibody / PCBP2 / hnRNP E2 [clone 4B9C7] (RQ7038)

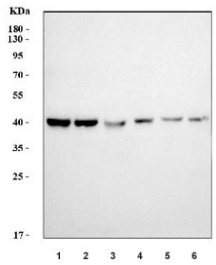
Catalog No.	Formulation	Size
RQ7038	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

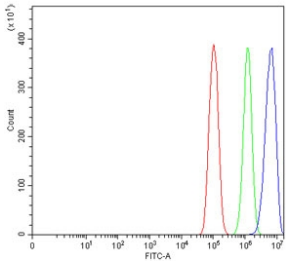
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a
Clone Name	4B9C7
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q15366
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 0.5-1 ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This Poly(rC)-binding protein 2 antibody is available for research use only.



Immunofluorescent staining of FFPE human Caco-2 cells with Poly(rC)-binding protein 2 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) human T-47D, 2) HL60, 3) A549, 4) HepG2, 5) rat brain and 6) mouse brain tissue lysate with Poly(rC)-binding protein 2 antibody. Predicted molecular weight ~39 kDa.



Flow cytometry testing of human PC-3 cells with Poly(rC)-binding protein 2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Poly(rC)-binding protein 2 antibody.

Description

Poly(rC)-binding protein 2, also called Heterogeneous nuclear ribonucleoprotein E2 (hnRNP E2), is a protein that in humans is encoded by the PCBP2 gene. The protein encoded by this gene appears to be multifunctional. Along with PCBP-1 and hnRNPK, it is one of the major cellular poly(rC)-binding proteins. The encoded protein contains three K-homologous (KH) domains which may be involved in RNA binding. Together with PCBP-1, this protein also functions as a translational coactivator of poliovirus RNA via a sequence-specific interaction with stem-loop IV of the IRES, promoting poliovirus RNA replication by binding to its 5'-terminal cloverleaf structure. It has also been implicated in translational control of the 15-lipoxygenase mRNA, human papillomavirus type 16 L2 mRNA, and hepatitis A virus RNA. The encoded protein is also suggested to play a part in formation of a sequence-specific alpha-globin mRNP complex which is associated with alpha-globin mRNA stability. This multiexon structural mRNA is thought to be retrotransposed to generate PCBP-1, an intronless gene with functions similar to that of PCBP2. This gene and PCBP-1 have paralogous genes (PCBP3 and PCBP4) which are thought to have arisen as a result of duplication events of entire genes. This gene also has two processed pseudogenes (PCBP2P1 and PCBP2P2). Multiple transcript variants encoding different isoforms have been found for this gene.

Application Notes

Optimal dilution of the Poly(rC)-binding protein 2 antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids Q197-K276) was used as the immunogen for the Poly(rC)-binding protein 2 antibody.

Storage

After reconstitution, the Poly(rC)-binding protein 2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.