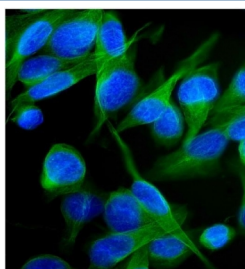


Kv1.2 Antibody / KCNA2 (R31982)

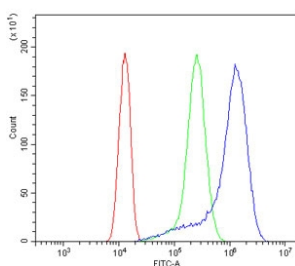
Catalog No.	Formulation	Size
R31982	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

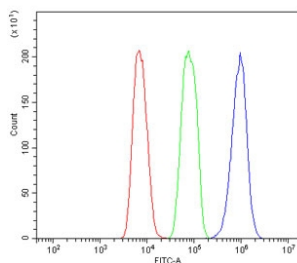
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P16389
Applications	Western Blot : 0.1-0.5ug/ml Immunofluorescence (FFPE) : 2-4ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This Kv1.2 antibody is available for research use only.



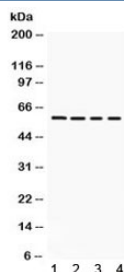
Immunofluorescent staining of FFPE human U-2 OS cells with Kv1.2 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Flow cytometry testing of human A431 cells with Kv1.2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Kv1.2 antibody.



Flow cytometry testing of rat C6 cells with Kv1.2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Kv1.2 antibody.



Western blot testing of 1) rat kidney, 2) rat brain, 3) mouse brain, 4) mouse kidney lysate with Kv1.2 antibody. Expected/observed molecular weight ~57 kDa.

Description

Potassium voltage-gated channel subfamily A member 2, also known as Kv1.2, is a protein that in humans is encoded by the KCNA2 gene. Potassium channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. Four sequence-related potassium channel genes - shaker, shaw, shab, and shal - have been identified in *Drosophila*, and each has been shown to have human homolog(s). This gene encodes a member of the potassium channel, voltage-gated, shaker-related subfamily. This member contains six membrane-spanning domains with a shaker-type repeat in the fourth segment. It belongs to the delayed rectifier class, members of which allow nerve cells to efficiently repolarize following an action potential. The coding region of this gene is intronless, and the gene is clustered with genes KCNA3 and KCNA10 on chromosome 1.

Application Notes

Optimal dilution of the Kv1.2 antibody should be determined by the researcher.

Immunogen

Amino acids NNSNEDFREENLKTANCTLANVNYVNITKMLTDV of human Kv1.2 were used as the immunogen for the Kv1.2 antibody.

Storage

After reconstitution, the Kv1.2 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.

