

KCNAB3 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18488C**Specification**

KCNAB3 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	O43448
Other Accession	NP_004723.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	43670
Antigen Region	176-204

KCNAB3 Antibody (Center) - Additional Information**Gene ID** 9196**Other Names**

Voltage-gated potassium channel subunit beta-3, K(+) channel subunit beta-3, Kv-beta-3, KCNAB3, KCNA3B

Target/Specificity

This KCNAB3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 176-204 amino acids from the Central region of human KCNAB3.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

KCNAB3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

KCNAB3 Antibody (Center) - Protein Information**Name** KCNAB3 ([HGNC:6230](#))

Synonyms KCNA3B

Function Regulatory subunit of the voltage-gated potassium (Kv) channels composed of pore-forming and potassium-conducting alpha subunits and of regulatory beta subunit (PubMed:[9857044](#)). The beta- 3/KCNAB3 subunit may mediate closure of potassium channels (By similarity). Increases inactivation of Kv1.5/KCNA5 alpha subunit- containing channels (PubMed:[9857044](#)). May display nicotinamide adenine dinucleotide phosphate (NADPH)-dependent aldo-ketoreductase activity (By similarity). The binding of oxidized and reduced NADP(H) cofactors may be required for the regulation of potassium channel activity (By similarity).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q14722}.

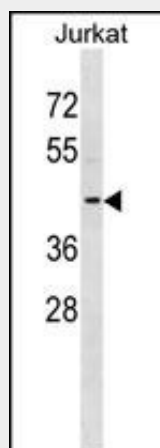
Tissue Location

Brain specific. Most prominent expression in cerebellum. Weaker signals detected in cortex, occipital lobe, frontal lobe and temporal lobe. Not detected in spinal cord, heart, lung, liver, kidney, pancreas, placenta and skeletal muscle

KCNAB3 Antibody (Center) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KCNAB3 Antibody (Center) - Images

KCNAB3 Antibody (Center) (Cat. #AP18488c) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the KCNAB3 antibody detected the KCNAB3 protein (arrow).

KCNAB3 Antibody (Center) - Background

Voltage-gated potassium (Kv) 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 is one of the beta subunits, which are auxiliary proteins associating with functional Kv-alpha subunits. This member and the KCNA5 gene product assemble into a heteromultimeric A-type channel that inactivates completely and is significantly faster than other A-type Kv channels.

KCNAB3 Antibody (Center) - References

Olsen, J.V., et al. Cell 127(3):635-648(2006)
Olsen, J.V., et al. Cell 127(3):635-648(2006)
Leicher, T., et al. J. Biol. Chem. 273(52):35095-35101(1998)
McCormack, K., et al. FEBS Lett. 370 (1-2), 32-36 (1995) :