

Anti-KCNAB3 Antibody

Catalog # AP59772

Product Information

Application	WB, IHC, IF/IC
Primary Accession	O43448
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43670

Additional Information

Gene ID	9196
Other Names	KCNA3B; Voltage-gated potassium channel subunit beta-3; K(+) channel subunit beta-3; Kv-beta-3
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human KCNAB3. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

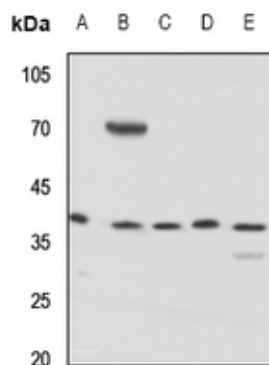
Protein Information

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}.

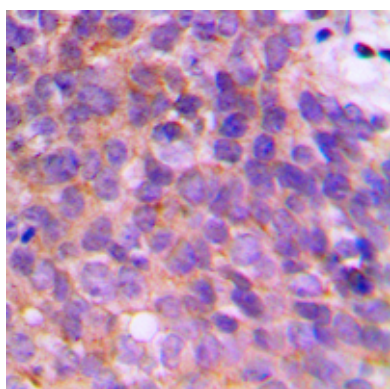
Tissue Location

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

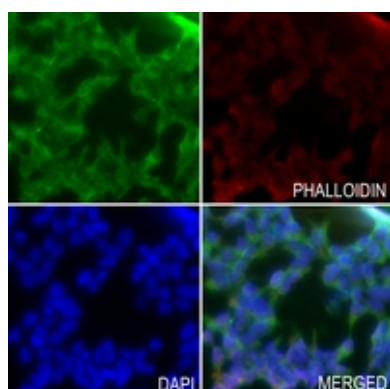
Images



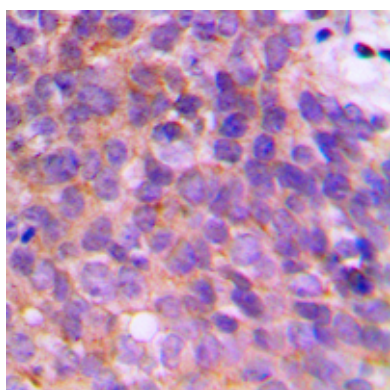
Western blot analysis of KCNAB3 expression in HEK293T (A), Hela (B), mouse kidney (C), mouse brain (D), rat kidney (E) whole cell lysates. (Predicted band size: 43 kD; Observed band size: 43 kD)



Immunohistochemical analysis of KCNAB3 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of KCNAB3 staining in HEK293T cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.