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KCC2 Rabbit pAb

Catalog # AP98715

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9H2X9
Other Accession	Q9H2X9
Reactivity	Rat
Predicted	Pig, Human, Mouse, Chicken, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	126184
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human KCC2
Epitope Specificity	851-950/1139
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the SLC12A transporter family.
SUBUNIT	Homomultimer and heteromultimer with other K-Cl cotransporters. Interacts with AP2A1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	K-Cl cotransporters are proteins that lower intracellular chloride concentrations below the electrochemical equilibrium potential. The protein encoded by this gene is an integral membrane K-Cl cotransporter that can function in either a net efflux or influx pathway, depending on the chemical concentration gradients of potassium and chloride. The encoded protein can act as a homomultimer, or as a heteromultimer with other K-Cl cotransporters, to maintain chloride homeostasis in neurons. Alternative splicing results in two transcript variants encoding different isoforms. [provided by RefSeq, Sep 2008]

Additional Information

Gene ID	57468
Other Names	DEE34; EIEE34; EIG14; KCC2; hKCC2; mKIAA1176; S12A5_HUMAN; SLC12A5; Electroneutral potassium-chloride cotransporter 2; K-Cl cotransporter 2 (hKCC2); Neuronal K-Cl cotransporter; KIAA1176; S12A5_MOUSE; K-Cl cotransporter 2 (mKCC2); S12A5_RAT; Furosemide-sensitive K-Cl cotransporter; K-Cl cotransporter 2 (rKCC2); solute carrier family 12 member 5; solute carrier family 12 (potassium/chloride transporter), member 5; K-Cl cotransporter 2
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	SLC12A5 (HGNC:13818)
Function	Mediates electroneutral potassium-chloride cotransport in mature neurons and is required for neuronal Cl(-) homeostasis (PubMed:12106695). As major extruder of intracellular chloride, it establishes the low neuronal Cl(-) levels required for chloride influx after binding of GABA-A and glycine to their receptors, with subsequent hyperpolarization and neuronal inhibition (By similarity). Involved in the regulation of dendritic spine formation and maturation (PubMed:24668262).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:Q91V14}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q91V14}. Cell projection, dendrite {ECO:0000250|UniProtKB:Q91V14}. Note=Detected on dendrites, but not on axons of spinal cord neurons and at GPHN-positive inhibitory synapses. {ECO:0000250|UniProtKB:Q91V14}
Tissue Location	Brain specific. Detected in neuronal cells.

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