ARG52400
anti-KCC2 / Potassium Chloride Cotransporter phospho (Ser940) antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes KCC2 / Potassium Chloride Cotransporter phospho (Ser940)
Tested Reactivity	Rat
Predict Reactivity	Hu, Ms, Bov, Dog, NHuPrm
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	KCC2 / Potassium Chloride Cotransporter
Species	Rat
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser940 conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	K-Cl cotransporter 2; Electroneutral potassium-chloride cotransporter 2; Solute carrier family 12 member 5; hKCC2; KCC2; Neuronal K-Cl cotransporter

Application Instructions

Application table

Application	Dilution
WB	1:1000

Application Note: Specific for the ~135k KCC2 protein phosphorylated at Ser940. Immunolabeling of the KCC2 protein band is blocked by the phospho-peptide used as antigen but not by the corresponding dephosphopeptide.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

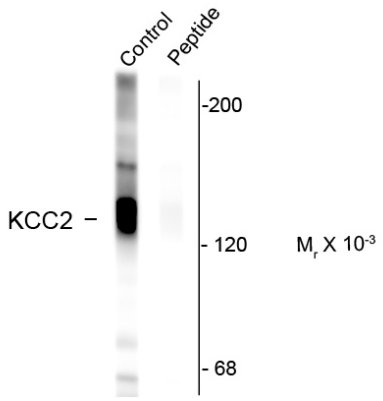
Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 171373 Rat Swiss-port # Q63633 Rat
Gene Symbol	KCC2
Gene Full Name	solute carrier family 12 (potassium-chloride transporter), member 5
Background	KCC2 is widely thought to be expressed exclusively in neurons where it is responsible for maintaining low intracellular chloride concentration to drive hyperpolarizing post-synaptic responses to the inhibitory neurotransmitters GABA and glycine. Serine 940 on KCC2 has been shown to be phosphorylated by PKC and has further been demonstrated to be the major site for PKC-dependent phosphorylation for full length KCC2 molecules when expressed in HEK-293 cells as phosphorylation of Ser940 increased the cell surface stability of KCC2 in this system by decreasing it's rate of internalization from the plasma membrane (Lee et al., 2007).
Research Area	Neuroscience antibody
Calculated Mw	126 kDa

Images



ARG52400 anti-KCC2 / Potassium Chloride Cotransporter phospho (Ser940) antibody WB image

Western blot: Rat hippocampal homogenate showing specific labeling of the ~ 135k KCC2 protein (Control) stained with ARG52400 anti-KCC2 / Potassium Chloride Cotransporter phospho (Ser940) antibody.
Immunolabeling is blocked by preadsorption with the phospho-peptide used as antigen (Peptide).
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