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Product datasheet for TA328867

Slc12a4 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:200-1:2000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)HAPDNFRELVHIK, corresponding to amino acid residues 998- 1010 of rat KCC1. Intracellular, C-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN3.
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	solute carrier family 12 member 4
Database Link:	NP_062102 Entrez Gene 6560 HumanEntrez Gene 20498 MouseEntrez Gene 29501 Rat Q63632

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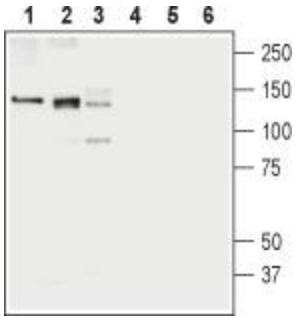
Background: Potassium chloride cotransporters (KCCs) are members of cation chloride cotransporter gene superfamily (Slc12 family). This family consists of sodium potassium two chloride cotransporter 1 (NKCC1) and 2 (NKCC2), sodium chloride cotransporte (NCC) and KCCs. All of these transporters mediate electroneutral transport of cations coupled with one or two Cl and contribute to regulation of cell volume and homeostasis of intracellular Cl concentration. KCCs extrude one K+ with one Cl from intracellular space to the extracellular space by using the chemical gradient of K+ as the driving force of Cl extrusion. Four KCC isofroms (KCC1, KCC2, KCC3 and KCC4) have been identified in mammalian species . K-Cl cotransporters regulate neuronal and glial electrochemical equilibrium potential for Cl, and so can determine the excitatory or inhibitory influences of GABA- and glycine-gated Cl channels. KCC1 is a member of the cation-chloride cotransporter (CCC) superfamily of proteins, as with all CCC proteins, KCC1 is an integral membrane protein with 12 transmembrane domains and both N- and C-terminal cytoplasmic domains. KCC1 is ubiquitously expressed. K-Cl cotransport activity is elevated in red blood cells of individuals with sickle cell disease, thalassemia, and diseases associated with other mutant Hb. Human erythrocytes from individuals with the reticulocytotic anemic states of sickle cell disease, Hb SC disease, and β-thalassemia intermedia exhibit uniformly elevated KCC1-like immunoreactivity compared with normal AA erythrocytes .

Synonyms: FLJ17069; FLJ40489; hKCC1; KCC1

Product images:



Western blot analysis of rat brain membranes (lanes 1 and 4), mouse brain membranes (lanes 2 and 5) and human K562 erythroleukemia cell lysates (lanes 3 and 6): 1-3. Anti-KCC1 antibody, (1:200). 4-6. Anti-KCC1 antibody, preincubated with the control peptide antigen.