SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-SLC12A6 antibody

SL11952R

Product Name:	SLC12A6
Chinese Name:	钾氯离子Transporter3抗体
Alias:	ACCPN; Furosemide sensitive KCl cotransporter 3; Gaxp; KCC 3; KCC 3A; KCC 3B; KCC3 A; KCC3; KCC3 B; KCC3A; KCC3B; Potassium chloride cotransporter 3; Potassium chloride cotransporter KCC3a S3; SLC12 A6; SLC12A 6; Solute carrier family 12 (potassium/chloride transporters), member 6; Solute carrier family 12, member 6; S12A6_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Rabbit,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	128kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SLC12A6/KCC3:401-500/1150
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	The four isoforms of potassium/chloride co-transport channels (KCC) belong to a superfamily of cation-chloride co-transporters involved in cell volume maintenance. Nitric oxide (NO) donors activate KCCs, while inhibitors of the cGMP pathway prevent

	NO donor activation. The ubiquitously expressed KCC1 contains 12 transmembrane domains with both cytoplasmic N and C terminal domains. KCC2 expression is limited to neuronal tissues by a restrictive element similar to the neuronal-restrictive silencing factor. In neurons, KCC2 expression is correlated with an inhibitory response to GABA, while the absence of KCC2 is necessary for an unusual excitatory response to GABA. Alterations of KCC2 expression in the inferior colliculus of rat brain may be related to seizure susceptibility. Conversely, KCC3 is not suspected to play a major role in epilepsy. The two splice variants of KCC3, KCC3a and KCC3b, are predominantly expressed in brain and kidney, respectively, while KCC4 is expressed in muscle, brain, lung, heart and kidney. **Function:** K-Cl cotransporters are integral membrane proteins that lower intracellular chloride concentrations below the electrochemical equilibrium potential. The SLC12A6 protein is activated by cell swelling induced by hypotonic conditions. Mutations in this gene are associated with agenesis of the corpus callosum with peripheral neuropathy (ACCPN). ACCPN is characterised by severe progressive sensorimotor neuropathy, mental retardation, dysmorphic features, and partial or complete agenesis of the corpus callosum. The SLC12Ag gene is a candidate gene for schizophrenia and has also been associated with bipolar disease. **Subunit:** Homomultimer and heteromultimer with other K-Cl cotransporters **Subcellular Location:** Membrane; Multi-pass membrane protein. **Tissue Specificity:** Highly expressed in heart, brain and kidney. Detected at lower levels in skeletal muscle, placenta, lung and pancreas. Detected in umbilical vein endothelial cells. Isoform 2 is more abundant in kidney. Isoform 5 is testis specific. Expressed in the proximal tubule of the kidney (at protein level). **Post-translational modifications:** N-glycosylated. **DISEASE:** Defects in SLC12A6 are a cause of agenesis of the corpus callosum with peripheral neuropathy (ACCPN) [MIM:218000]. ACCPN is characterized by severe progressive sensorimotor neuropathy, mental retardation, dysmorphic features and complete or partial agenesis of the corpus callosum. **Similarity:** Belongs to the SLC12A transporter family. **SWISS:**

	Q9UHW9 **Gene ID:** 9990 **Database links:** Entrez Gene: 9990 Human Omim: 604878 Human SwissProt: Q9UHW9 Human Unigene: 510939 Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.