10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SLC16A12 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57921

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q6ZSM3
Reactivity	Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56498
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SLC16A12
Epitope Specificity	401-486/486
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.
SUBCELLULAR LOCATION	Cell membrane.
SIMILARITY	Belongs to the major facilitator superfamily. Monocarboxylate porter (TC 2.A.1.13) family.
DISEASE	Defects in SLC16A12 are a cause of cataract juvenile with microcornea and glucosuria (CJMG) [MIM:612018]. Renal glucosuria is defined by elevated glucose level in the urine without hyperglycemia and without evidence of morphological renal anomalies.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a transmembrane transporter that likely plays a role in monocarboxylic acid transport. A mutation in this gene has been associated with juvenile cataracts with microcornea and renal glucosuria. [provided by RefSeq, Mar 2010]

Additional Information

Gene ID	387700
Other Names	Monocarboxylate transporter 12, MCT 12, Creatine transporter 2, CRT2, Solute carrier family 16 member 12 {ECO:0000312|HGNC:HGNC:23094}, SLC16A12 (HGNC:23094)
Target/Specificity	Most highly expressed in kidney, followed by retina, lung, and testis. Very weakly expressed in brain and liver. Also detected in lens.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

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	SLC16A12 (HGNC:23094)
Function	Functions as a transporter for creatine and as well for its precursor guanidinoacetate. Transport of creatine and GAA is independent of resting membrane potential and extracellular Na(+), Cl(-), or pH. Contributes to the process of creatine biosynthesis and distribution.
Cellular Location	Cell membrane; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:Q8BGC3}; Multi-pass membrane protein. Note=Interaction with isoform 2 of BSG is required for its localization to the plasma membrane.
Tissue Location	Most highly expressed in kidney, followed by retina, lung, heart and testis. Very weakly expressed in brain and liver. Also detected in lens.