

SGLT2 Rabbit pAb

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Catalog # AP57761

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	P31639
Predicted	Human, Mouse, Rat, Pig, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	72897
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SGLT2
Epitope Specificity	351-450/672
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane.
SIMILARITY	Belongs to the sodium:solute symporter (SSF) (TC 2.A.21) family.
DISEASE	Defects in SLC5A2 are the cause of renal glucosuria (GLYS1) [MIM:233100]. GLYS1 is an autosomal recessive disorder characterized by a normal fasting serum glucose concentration and persistent isolated glucosuria, with a normal glucose tolerance test.
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 member of the sodium glucose cotransporter family which are sodium-dependent glucose transport proteins. The encoded protein is the major cotransporter involved in glucose reabsorption in the kidney. Mutations in this gene are associated with renal glucosuria. [provided by RefSeq, Sep 2009]

Additional Information

Gene ID	6524
Other Names	Sodium/glucose cotransporter 2, Na(+)/glucose cotransporter 2, Low affinity sodium-glucose cotransporter, Solute carrier family 5 member 2, SLC5A2 {ECO:0000303 PubMed:14614622}
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:500 0-10000
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	SLC5A2 {ECO:0000303 PubMed:14614622}
Function	Electrogenic Na(+)-coupled sugar symporter that actively transports D-glucose at the plasma membrane, with a Na(+) to sugar coupling ratio of 1:1 (PubMed: 20980548 , PubMed: 28592437 , PubMed: 34880493 , PubMed: 37217492 , PubMed: 38057552). Transporter activity is driven by a transmembrane Na(+) electrochemical gradient set by the Na(+)/K(+) pump (PubMed: 20980548 , PubMed: 28592437 , PubMed: 34880493). Unlike SLC5A1/SGLT1, requires the auxiliary protein PDZK1IP1/MAP17 for full transporter activity (PubMed: 37217492). Has a primary role in D-glucose reabsorption from glomerular filtrate across the brush border of the early proximal tubules of the kidney (By similarity).
Cellular Location	Apical cell membrane; Multi-pass membrane protein

Background

This gene encodes a member of the sodium glucose cotransporter family which are sodium-dependent glucose transport proteins. The encoded protein is the major cotransporter involved in glucose reabsorption in the kidney. Mutations in this gene are associated with renal glucosuria. [provided by RefSeq, Sep 2009]

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