Datasheet for ABIN7043736

anti-SLC5A2 antibody (Extracellular)

1 Image

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Overview

Quantity:	25 µL
Target:	SLC5A2
Binding Specificity:	AA 242-257, Extracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SLC5A2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to SGLT2 Transporter
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)KDPAVGNISST(S)YQPR, corresponding to amino acid residues 242-257 of rat SGLT2
Isotype:	IgG
Specificity:	3rd extracellular loop
Cross-Reactivity:	Mouse, Rat
Predicted Reactivity:	Rat - 15,16 amino acid residues identical, human - 12, mouse - 14
Characteristics:	Anti-SGLT2 (extracellular) Antibody (ABIN7043736, ABIN7044493 and ABIN7044494) is a highly specific antibody directed against an epitope of the rat sodium/glucose cotransporter 2. The

Product Details

	antibody can be used in western blot analysis. It has been designed to recognize SGLT2 from human, mouse, and rat samples.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	SLC5A2
Alternative Name:	SLC5A2 (SLC5A2 Products)
Background:	Na+/glucose cotransporter 2, Low affinity sodium-glucose cotransporter, SLC5A2,The Na+/glucose symporter 2 (SGLT2) belongs to a family of solute sodium symporters (SSS). SSS proteins cotransport Na+ with sugars, amino acids, inorganic ions and vitamins. Members of this family are important in human physiology and disease.SGLT2 is composed of a central group of seven helices (TM2, TM3, TM4, TM7, TM8, TM9, and TM11) that contribute side-chain interactions for ligand selectivity, along with seven supporting helices that stabilize these central helices. A striking feature is two discontinuous TM helices, TM2 and the symmetrically related TM7, in the center of the protomer1. The NH2 and COOH termini of the transporter are both extracellular.Expression of SGLT2 mRNA occurs exclusively in the kidney and primarily in the first two segments of the proximal tubular system. SGLT2 is capable of reabsorbing about 90 % of glucose from the primary urine produced in the kidneys.SGLT2 symports a single Na+ molecule together with a glucose molecule. SGLT2 is selective for Na+ as the energizing cation. Apart from H+ and Li+, no other monovalent cation can replace Na+ to drive glucose transport2.Renal SGLT2 inhibitors are new antidiabetic drugs with an insulin-independent mechanism of action. They pose one remarkable advantage compared with already established antidiabetics by increasing urinary glucose excretion without inducing hypoglycemia and thereby promoting bodyweight reduction3. Alternative names: SGLT2, Na+/glucose cotransporter 2, Low affinity sodium-glucose cotransporter, SLC5A2
Gene ID:	64522
NCBI Accession:	NM_003041
UniProt:	P53792

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody

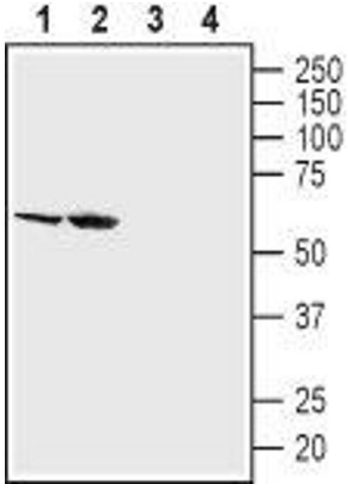
Application Details

	Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: 1:200
Comment:	Negative Control: (ABIN7237138) Blocking Peptide: (ABIN7237138)
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).

Images



Western Blotting

Image 1. Western blot analysis of mouse kidney lysates (lanes 1 and 3) and rat kidney membranes (lanes 2 and 4): -1,2. Anti-SGLT2 (extracellular) Antibody (ABIN7043736, ABIN7044493 and ABIN7044494), (1:200).3,4. Anti-SGLT2 (extracellular) Antibody, preincubated with SGLT2 (extracellular) Blocking Peptide (#BLP-GT032).