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Anti-SGLT2 Antibody

Catalog # AP53701

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P31639
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	72897

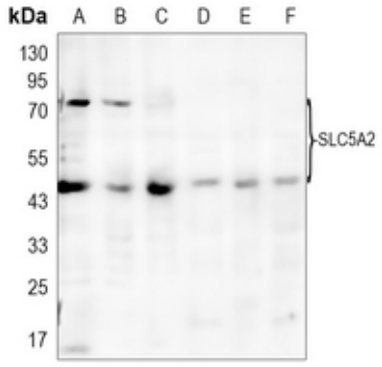
Additional Information

Gene ID	6524
Other Names	SGLT2; Sodium/glucose cotransporter 2; Na(+)/glucose cotransporter 2; Low affinity sodium-glucose cotransporter; Solute carrier family 5 member 2
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SGLT2. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

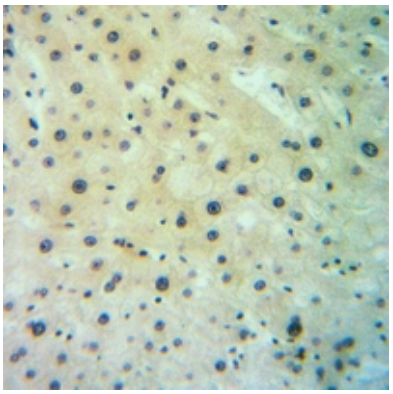
Protein Information

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

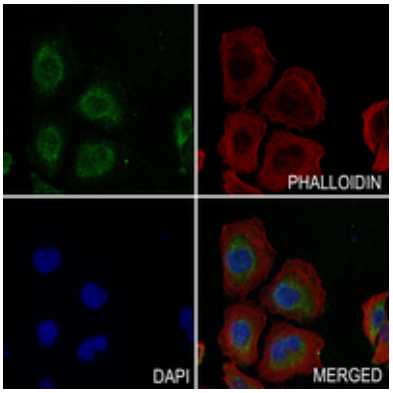
Images



Western blot analysis of SGLT2 expression in THP1 (A), H1792 (B), A2780 (C), mouse kidney (D), mouse brain (E), rat kidney (F) whole cell lysates. (Predicted band size: 72; 49 kD; Observed band size: 72; 49 kD)



Immunohistochemical analysis of SGLT2 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of SGLT2 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.