

Datasheet for ABIN5596790
anti-SLC2A2 antibody (C-Term)

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Overview

Quantity:	100 µg
Target:	SLC2A2
Binding Specificity:	C-Term
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SLC2A2 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), FLISA

Product Details

Immunogen:	<p>Immunogen: This affinity-purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the C-terminal domain of mouse Glut2 protein.</p> <p>Immunogen Type: Peptide</p>
Isotype:	IgG
Cross-Reactivity (Details):	A BLAST analysis was used to suggest cross-reactivity with Glut2 from mouse and rat based on a 100% homology with the immunizing sequence. Reactivity against homologues from other sources is not known.
Purification:	This affinity-purified Glut-2 antibody is directed against Glut2 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification.

Target Details

Target:	SLC2A2
Alternative Name:	Glut2 (SLC2A2 Products)
Background:	<p>Synonyms: Solute carrier family 2, facilitated glucose transporter member 2, Glucose transporter type 2, liver-GLUT-2, Slc2a2, Glut2 Antibody</p> <p>Background: The Anti-Glut2 antibody was designed, produced, and validated as part of the Joy Cappel Young Investigator Award (JCYIA). The glucose transporter GLUT2 is a transmembrane carrier protein that allows protein facilitated glucose movement across cell membranes. GLUT2 is expressed in the plasma membranes of the liver, intestine, renal tubular cells, pancreatic islet beta cells, as well as in the portal and hypothalamic areas. Due to its low affinity and high capacity, GLUT2 transports dietary sugars, glucose, galactose and fructose in high concentrations, displaying large bidirectional fluxes in and out of cells. In pancreatic beta cells, GLUT2 is essential for glucose-stimulated insulin secretion. GLUT2 expression is necessary for the physiological control of glucose-sensitive genes, and its inactivation in the liver leads to impaired glucose-stimulated insulin secretion. In the nervous system, GLUT2-dependent glucose sensing regulates feeding, thermoregulation and pancreatic islet cell mass and function, as well as sympathetic and parasympathetic activities. In humans, inactivating mutations in GLUT2 cause Fanconi-Bickel syndrome, which is characterized by hepatomegaly and kidney disease. Anti-Glut2 is ideal for researchers interested in studying glucose transport mediated by Glut2 protein in the fields of diabetes, obesity, metabolism, and neuroscience research.</p> <p>Gene Name: Slc2a2</p>
Gene ID:	20526
UniProt:	P14246
Pathways:	Warburg Effect

Application Details

Application Notes:	<p>Immunohistochemistry Dilution: 4 µg/mL</p> <p>Application Note: Anti-Glut-2 antibody has been tested for use in ELISA, immunohistochemistry, and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 57.1 kDa in size corresponding to Glut2 protein by western blotting in the appropriate stimulated tissue or cell lysate or extract.</p> <p>Western Blot Dilution: 1:500-1:1000</p> <p>FLISA Dilution: 1</p>
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Application Details

ELISA Dilution: 1:30,000-1:90:000

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1.0 mg/mL

Buffer: Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer: None

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

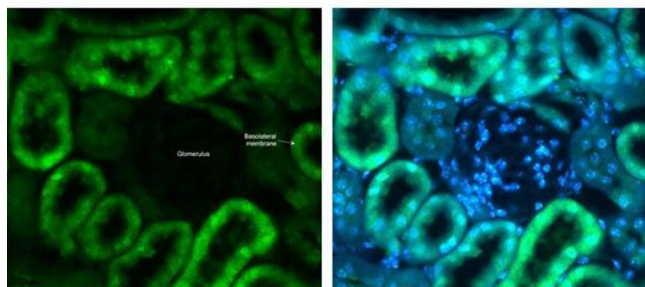
Storage: 4 °C, -20 °C

Storage Comment: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiry Date: 12 months

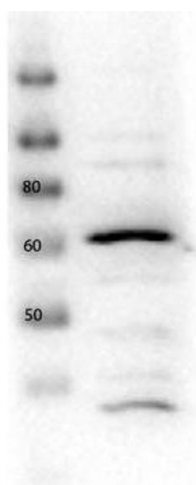
Publications

Product cited in: Zhang, Maric, DiPrima, Khan, Orentas, Kaplan, Mackall: "Fibrocytes represent a novel MDSC subset circulating in patients with metastatic cancer." in: **Blood**, Vol. 122, Issue 7, pp. 1105-13, (2013) ([PubMed](#)).



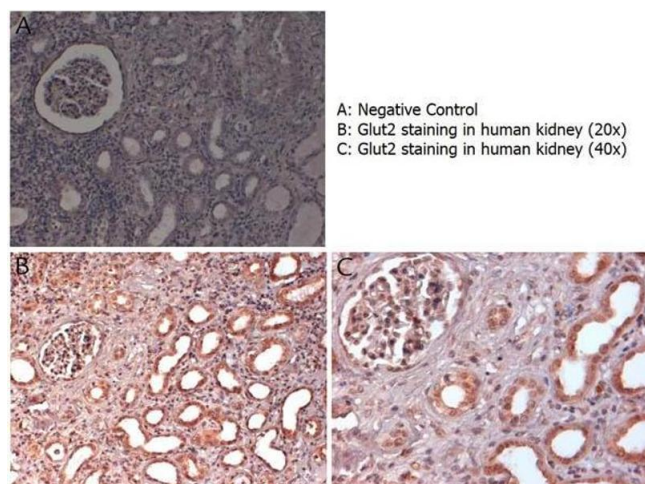
Immunofluorescence

Image 1. Immunohistochemistry of Anti-Glut2 Antibody. Tissue: mouse kidney. Antigen retrieval: Heat Induced, slides incubated in sodium citrate buffer for 1hr at 90°C. Primary: Rabbit Anti-Glut2 Antibody at 5µg/mL overnight. Blocking: 2% goat serum in TBST. Secondary: Alexa 488 at 1µg/mL for 2hrs at room temperature.



Western Blotting

Image 2. Western Blot of Rabbit anti-Glut2 antibody. Lane 1: HEK293 lysate. Load: 10µg per lane. Primary antibody: Glut2 antibody at 1:1000 for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:40,000 for 30 min at RT. Block: ABIN925618 overnight at 4°C. Predicted/Observed size: ~60 kDa.



Immunohistochemistry

Image 3. Immunohistochemistry with anti-Glut2 antibody showing Glut2 staining in nucleus and cytoplasm of ductal epithelium and of renal glomeruli in human kidney at 20x and 40x (B & C). Formalin fixed/paraffin embedded sections were subjected to heat induced epitope retrieval (HIER) at pH 6.2 and then incubated with rabbit anti-mouse Glut2 antibody at 4.0 µg/ml for 60 minutes. The reaction was developed using MACH 1 universal HRP polymer detection system and visualized with 3'3-diamino-benzidine substrate (DAB).