

Anti-Glucose Transporter GLUT2/SLC2A2 Antibody Picoband™

Catalog Number: PB9436

About SLC2A2

SLC2A2, also known as Glucose transporter 2 (GLUT2), is a transmembrane carrier protein that enables protein facilitated glucose movement across cell membranes. This gene encodes an integral plasma membrane glycoprotein of the liver, islet beta cells, intestine, and kidney epithelium. The encoded protein mediates facilitated bidirectional glucose transport. Because of its low affinity for glucose, it has been suggested as a glucose sensor. Mutations in this gene are associated with susceptibility to diseases, including Fanconi-Bickel syndrome and noninsulin-dependent diabetes mellitus (NIDDM). Alternative splicing results in multiple transcript variants of this gene.

Overview

Product Name	Anti-Glucose Transporter GLUT2/SLC2A2 Antibody Picoband™
Reactive Species	Human
Description	Boster Bio Anti-Glucose Transporter GLUT2/SLC2A2 Antibody Picoband™ catalog # PB9436. Tested in IHC, WB applications. This antibody reacts with Human.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Na ₃ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P11168

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human SLC2A2, different from the related mouse sequence by five amino acids, and from the related rat sequence by seven amino acids.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, By Heat Western blot, 0.1-0.5ug/ml, Human

Anti-Glucose Transporter GLUT2/SLC2A2 Antibody Picoband™ (PB9436) Images

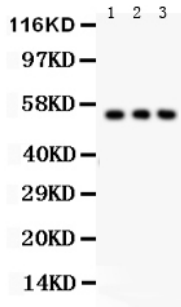


Figure 1. Western blot analysis of SLC2A2 using anti-SLC2A2 antibody (PB9436).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours.

Lane 1: PANC Whole Cell Lysate at 40ug,

Lane 2: A549 Whole Cell Lysate at 40ug,

Lane 3: HT1080 Whole Cell Lysate at 40ug.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SLC2A2 antigen affinity purified polyclonal antibody (Catalog # PB9436) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for SLC2A2 at approximately 50 kDa. The expected band size for SLC2A2 is at 57 kDa.

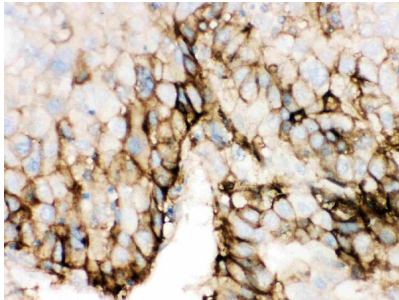


Figure 2. IHC analysis of SLC2A2 using anti-SLC2A2 antibody (PB9436).

SLC2A2 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-SLC2A2 Antibody (PB9436) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

2 Publications Citing This Product

1. PubMed ID: 10.1002/jbt.22488, Indomethacin decreases insulin secretion by reducing KCa3.1 as a biomarker of pancreatic tumor and causes apoptotic cell death

2. PubMed ID: 28078035, Impact of perinatal exposure to acetaminophen on hepatocellular metabolic function in offspring

Visit bosterbio.com/anti-slc2a2-picoband-trade-antibody-pb9436-boster.html to see all 2 publications.

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