

Anti-Glucose Transporter 5 GLUT5/SLC2A5 Antibody Picoband®

Catalog Number: PA1737

About Slc2a5

GLUT5 (Glucose transporter 5), also known as SLC2A5, is a fructose transporter expressed on the apical border of enterocytes in the small intestine. The GLUT5 gene is located on chromosome 1. GLUT5 allows for fructose to be transported from the intestinal lumen into the enterocyte by facilitated diffusion due to fructose's high concentration in the intestinal lumen. GLUT5 is also expressed in skeletal muscle, testis, kidney, fat tissue, and brain. Fructose malabsorption or Dietary Fructose Intolerance is a dietary disability of the small intestine, where the amount of fructose carrier in enterocytes is deficient. In humans the GLUT5 protein is encoded by the SLC2A5 gene.

Overview

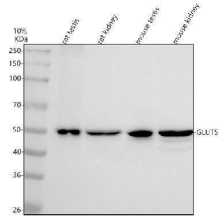
Product Name	Anti-Glucose Transporter 5 GLUT5/SLC2A5 Antibody Picoband®
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-Glucose Transporter 5 GLUT5/SLC2A5 Antibody catalog # PA1737. Tested in IHC, IHC-F, WB applications. This antibody reacts with Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IHC, IHC-F, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
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	Q9WV38

Technical Details

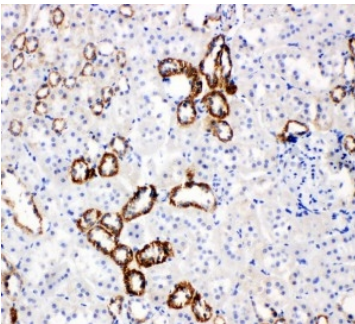
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of mouse SLC2A5, different from the related rat sequence by two amino acids.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and IHC(F).
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	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Mouse, Rat Immunohistochemistry (Frozen Section), 0.5-1ug/ml, Rat, Mouse Western blot, 0.1-0.5ug/ml, Mouse, Rat

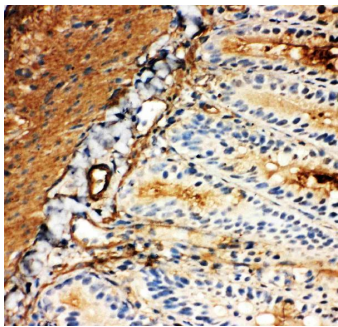
Anti-Glucose Transporter 5 GLUT5/SLC2A5 Antibody Picoband® (PA1737) Images



Western blot analysis of GLUT5/SLC2A5 using anti-GLUT5/SLC2A5 antibody (PA1737). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: rat testis tissue lysates, Lane 2: rat kidney tissue lysates, Lane 3: mouse testis tissue lysates, Lane 4: mouse kidney tissue lysates. 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-GLUT5/SLC2A5 antigen affinity purified polyclonal antibody (Catalog # PA1737) 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 GLUT5/SLC2A5 at approximately 50 kDa. The expected band size for GLUT5/SLC2A5 is at 55 kDa.

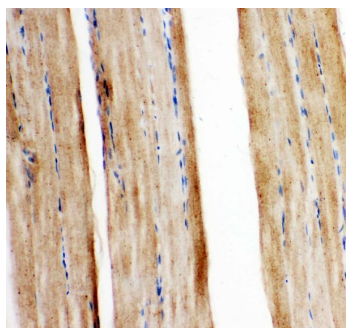


Anti-SLC2A5 antibody, PA1737, IHC(P)IHC(P): Rat Kidney Tissue



Anti-SLC2A5 antibody, PA1737, IHC(F)IHC(F): Rat Intestine Tissue

IHC analysis of GLUT5 using anti-GLUT5 antibody (PA1737). GLUT5 was detected in paraffin-embedded section of mouse ggj3249 tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-GLUT5 Antibody (PA1737) 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.

1 Publications Citing This Product

1. PubMed ID: 27923977, Sex differences in renal and metabolic responses to a high-fructose diet in mice

Visit bosterbio.com/anti-slc2a5-antibody-pa1737-boster.html to see all 1 publications.

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