abcam

Product datasheet

Anti-Glucose Transporter GLUT2 antibody [EPR22946-74] - BSA and Azide free ab260003

Recombinant RabMAb

6 Images

Overview

Product name	Anti-Glucose Transporter GLUT2 antibody [EPR22946-74] - BSA and Azide free
Description	Rabbit monoclonal [EPR22946-74] to Glucose Transporter GLUT2 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, mIHC, Flow Cyt **Unsuitable for:** ICC/IF,IP or WB
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human liver, Human hepatocellular carcinoma and Human kidney tissues. Flow Cyt: HepG2 cells.
General notes	ab260003 is the carrier-free version of **ab234440**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR22946-74
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab260003 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

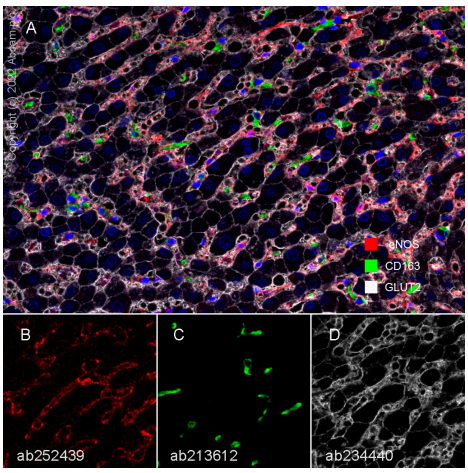
Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration.
mIHC		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration.

Application notes Is unsuitable for ICC/IF,IP or WB.

Target

Function	Facilitative glucose transporter. This isoform likely mediates the bidirectional transfer of glucose across the plasma membrane of hepatocytes and is responsible for uptake of glucose by the beta cells; may comprise part of the glucose-sensing mechanism of the beta cell. May also participate with the Na(+)/glucose cotransporter in the transcellular transport of glucose in the small intestine and kidney.
Tissue specificity	Liver, insulin-producing beta cell, small intestine and kidney.
Involvement in disease	Fanconi-Bickel syndrome
Sequence similarities	Belongs to the major facilitator superfamily. Sugar transporter (TC 2.A.1.1) family. Glucose transporter subfamily.
Post-translational modifications	N-glycosylated; required for stability and retention at the cell surface of pancreatic beta cells.
Cellular localization	Membrane.

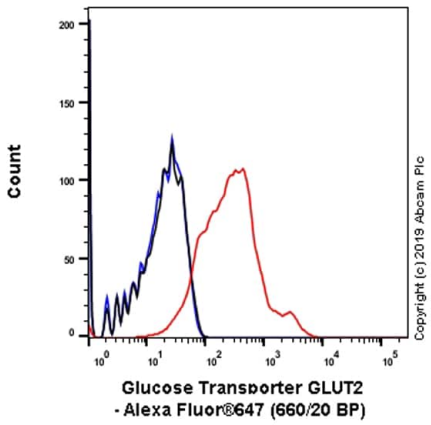
Images



Multiplex immunohistochemistry - Anti-Glucose Transporter GLUT2 antibody [EPR22946-74] - BSA and Azide free (ab260003)

Fluorescence multiplex immunohistochemical analysis of human liver (formalin-fixed paraffin-embedded section). Panel A shows merged staining of anti-eNOS stained on endothelial cells (**ab252439**; red; Opal™570) at 1:1000 (1.004 µg/ml) [Panel B], anti-CD163 stained on Kupffer cells (**ab213612**; green; Opal™520) at 1:8000 (0.13 µg/ml) [Panel B], and anti-Glucose Transporter GLUT2 stained on membrane of hepatocytes (**ab234440**; gray; Opal™690) at 1:200 (3.005 µg/ml) [Panel D] on human liver. DAPI was used as a nuclear counter stain. Followed by Opal Polymer HRP Ms + Rb secondary. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope. The section was incubated in three rounds of staining: in the order of **ab234440**, **ab213612**, and **ab252439** for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins was used.

This data was developed using **ab234440**, the same antibody clone in a different buffer formulation.

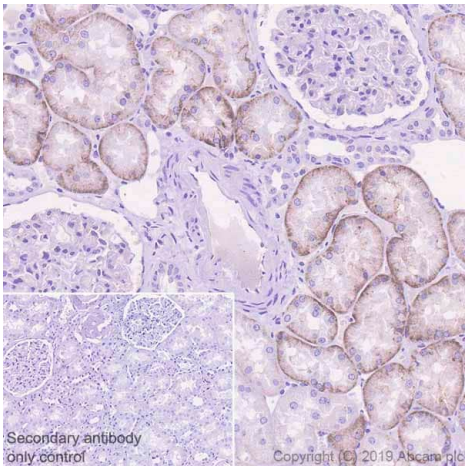


Flow Cytometry - Anti-Glucose Transporter GLUT2 antibody [EPR22946-74] - BSA and Azide free (ab260003)

Flow cytometric analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labelling Glucose Transporter GLUT2 with **ab234440** at 1/500 dilution (Red) as compared with a Rabbit monoclonal IgG (**ab172730**) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat anti rabbit IgG (Alexa Fluor® 647, **ab150079**) at 1/2000 dilution was used as the secondary antibody.

Gated on viable cells.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab234440**).



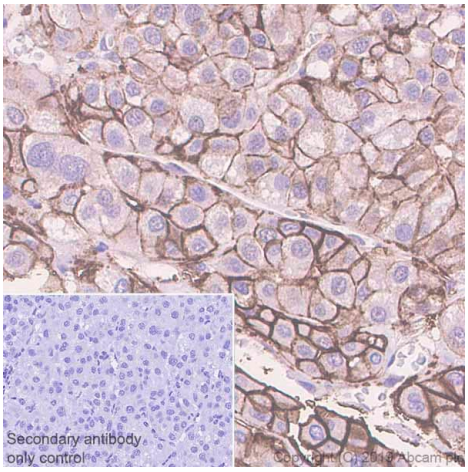
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glucose Transporter GLUT2 antibody [EPR22946-74] - BSA and Azide free (ab260003)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling Glucose Transporter GLUT2 with **ab234440** at 1/500 dilution (1.07 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on human renal tubules. The section was incubated with **ab234440** for 30 mins at RT. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control/ Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab234440**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glucose Transporter GLUT2 antibody [EPR22946-74] - BSA and Azide free (ab260003)

Immunohistochemical analysis of paraffin-embedded Human hepatocellular carcinoma tissue labeling Glucose Transporter GLUT2 with **ab234440** at 1/500 dilution (1.07 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Membranous staining on human hepatocellular carcinoma (PMID/ 30374065). The section was incubated with **ab234440** for 30 mins at RT. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

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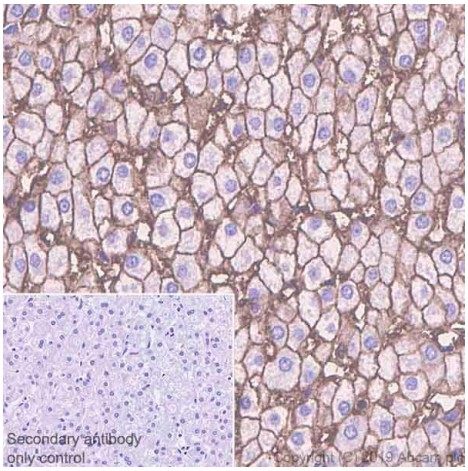

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glucose Transporter GLUT2 antibody [EPR22946-74] - BSA and Azide free (ab260003)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling Glucose Transporter GLUT2 with **ab234440** at 1/500 dilution (1.07 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Membranous staining on human liver (PMID/ 30374065). The section was incubated with **ab234440** for 30 mins at RT. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control/ Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

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Anti-Glucose Transporter GLUT2 antibody [EPR22946-74] - BSA and Azide free (ab260003)

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