abcam

ab202908

Anti-GLUT12 antibody

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.4 Preservative: 0.02% Proclin 300 Constituents: 50% Glycerol (glycerin, glycerine), 48.98% TBS, 1X, 1% BSA
Form	Liquid
Clonality	Polyclonal
Immunogen	Synthetic Peptide within Human SLC2A12 aa 250-350 conjugated to Keyhole Limpet Haemocyanin. The exact immunogen used to generate this antibody is proprietary information. Database link Q8TD20
Purification technique	Affinity purification Protein A
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/20 - 1/100
Notes	ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/50 - 1/500
Notes	Use at 1/50 - 1/200 with fluorescent detection methods. Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information SLC2A12

Function	Insulin-independent facilitative glucose transporter.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot

Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	GLUT12 also known as Glucose Transporter type 12 is a member of the solute carrier family 2 encoded by the SLC2A12 gene. This protein facilitates glucose transport across the cell membrane. GLUT12 is expressed in insulin-sensitive tissues like skeletal muscle adipose tissue and the small intestine. It has a molecular mass of approximately 65 kDa. This protein plays an important role in cellular energy balance by helping to regulate glucose uptake in response to metabolic needs.
Biological function summary	GLUT12 contributes to glucose homeostasis by modulating intracellular glucose levels. It is not known to be a part of a larger protein complex which distinguishes it among glucose transporters. GLUT12 expression can be influenced by insulin highlighting its role in insulin-mediated glucose uptake which is pivotal for maintaining normal cellular function in insulin-responsive tissues.
Pathways	GLUT12 is integral to the glucose transport pathway and the insulin signaling pathway. Within these pathways GLUT12 interacts with other glucose transporters like GLUT4 which further highlights its role in insulin-dependent glucose uptake in tissues such as muscle and fat. The regulation of GLUT12 activity could potentially impact the efficiency of glucose utilization in these metabolic pathways.
Associated diseases and disorders	GLUT12 has been implicated in conditions like type 2 diabetes and certain cancers. In type 2 diabetes altered GLUT12 expression or function may contribute to impaired insulin signaling similar to disturbances seen with GLUT4. Furthermore GLUT12 expression levels can be modified in some cancer types where it may play a role in the metabolic adaptations that cancer cells undergo. Understanding how GLUT12 functions and interacts with other proteins within these contexts could offer insights into therapeutic strategies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

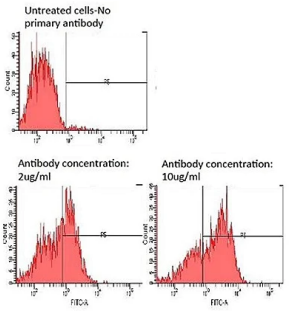
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

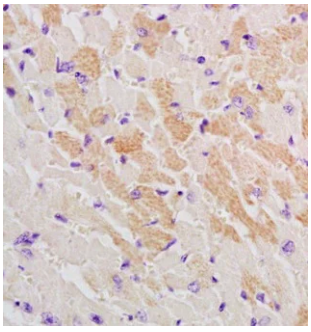
2 product images



Flow Cytometry (Intracellular) - Anti-GLUT12 antibody (ab202908)

GLUT12 Flow Cytometry (Intracellular) staining using rabbit Anti-GLUT12 antibody

Human LNCaP prostate cancer cells stained with ab202908 for 30 minutes at 4°C, followed by secondary antibody Alexa-Fluor 488 incubation for 30 minutes at 4°C in the dark.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GLUT12 antibody (ab202908)

GLUT12 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-GLUT12 antibody

Immunohistochemical analysis of formalin/PFA-fixed paraffin-embedded mouse heart tissue sections labeling GLUT12 with ab202908 at a 1/200 dilution, followed by conjugation to the secondary antibody and DAB staining.

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