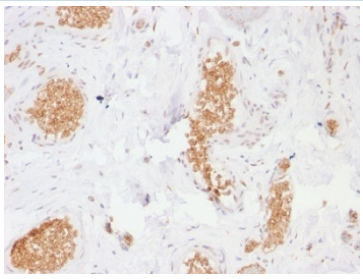
GLUT1 Antibody [clone GLUT1/2476] (V3920)

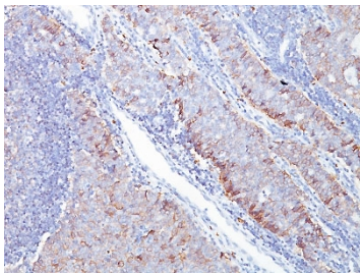
Catalog No.	Formulation	Size
V3920-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3920-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3920SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

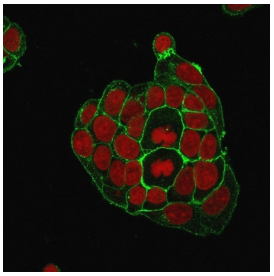
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	GLUT1/2476
Purity	Protein G affinity chromatography
UniProt	P11166
Localization	Cell surface, cytoplasm
Applications	ELISA : 1-2ug/ml for coating (order BSA/sodium azide-free format) Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-2ug/ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This GLUT1 antibody is available for research use only.



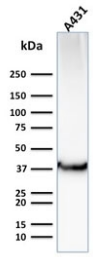
IHC testing of human bladder with GLUT1 antibody (clone GLUT1/2476). Required HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



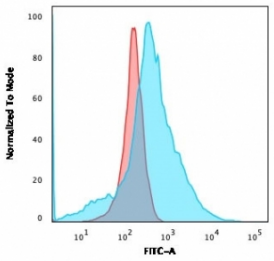
IHC testing of human breast carcinoma with GLUT1 antibody (clone GLUT1/2476). Required HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



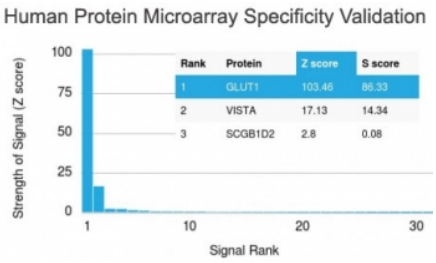
Immunofluorescent staining of human K562 cells with GUT1 antibody (green, clone GLUT1/2476) and Reddot nuclear stain (red).



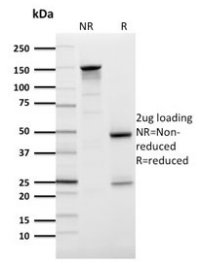
Western blot testing of human A431 cells with GLUT1 antibody (clone GLUT1/2476). Expected molecular weight: 45-55 kDa.



Flow cytometry testing of human K562 cells with GLUT1 antibody (clone GLUT1/2476); Red=isotype control, Blue= GLUT1 antibody.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using GLUT1 antibody (clone GLUT1/2476). These results demonstrate the foremost specificity of the GLUT1/2476 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free GLUT1 antibody (clone GLUT1/2476) as confirmation of integrity and purity.

Description

Recognizes a protein of 45-55kDa, which is identified as GLUT1. Glucose transporters are integral membrane glycoproteins involved in transporting glucose into most cells. There are many types of glucose transport carrier proteins, designated as Glut1 to Glut12. Glut1 is a major glucose transporter in the mammalian blood-brain barrier. It is expressed in high density on the membranes of human erythrocytes and the brain capillaries that comprise the blood-brain barrier. Glut1 is expressed at variable levels in many human tissues. Overexpression has been linked to tumor progression or poor survival of patients with carcinomas of the colon, breast, cervical, lung, bladder and mesothelioma. Glut1 is a sensitive and specific marker for the differentiation of malignant mesothelioma (positive) from reactive mesothelium (negative).

Application Notes

Optimal dilution of the GLUT1 antibody should be determined by the researcher.

Immunogen

A portion of amino acids 203-305 from the human protein was used as the immunogen for this GLUT1 antibody.

Storage

Store the GLUT1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).