

GLUT-1 (Tumor Progression and Mesothelioma Marker) Antibody

Mouse Monoclonal Antibody [Clone GLUT1/2475]

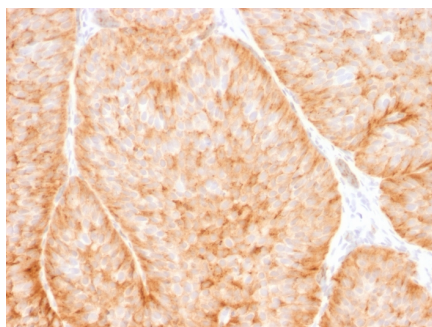
Catalog No	Format	Size
6513-MSM4-P0	Purified Ab with BSA and Azide	200ug/ml
6513-MSM4-P1	Purified Ab with BSA and Azide	200ug/ml
6513-MSM4-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

Applications	Tested Dillution
Flow Cytometry (Flow)	1-2ug/million cells
Immunofluorescence (IF)	1-3ug/ml
Immunohistochemistry (IHC)	1-2ug/ml
Western Blot (WB)	2-4ug/ml

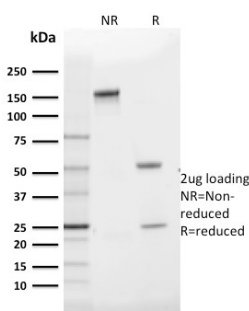
Product Details	
Clone	GLUT1/2475
Gene Name	SLC2A1
Immunogen	Recombinant fragment of human GLUT1 protein (around aa 203-305) (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b / Kappa
Mol. Weight of Antigen	55kDa
Cellular Localization	Cell membrane, Melanosome, Photoreceptor inner segment
Species Reactivity	Human
Positive Control	A431, colon and ovarian carcinoma., K562, MDA-MB-231 cells. Erythrocytes. Mesothelioma or breast

**Optimal dilution for a specific application should be determined.*

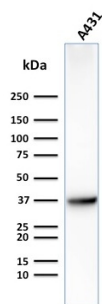
Product Images for GLUT-1 (Tumor Progression and Mesothelioma Marker) Antibody



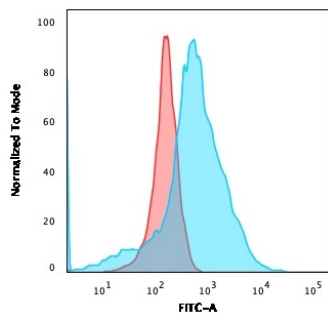
Formalin-fixed, paraffin-embedded human Bladder carcinoma stained with GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475).



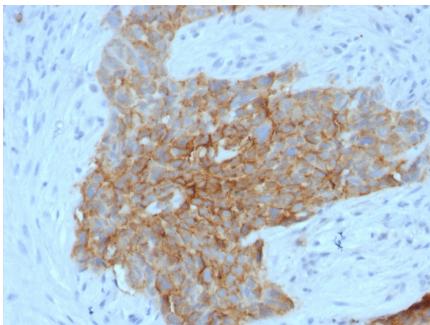
SDS-PAGE Analysis Purified GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475). Confirmation of Purity and Integrity of Antibody.



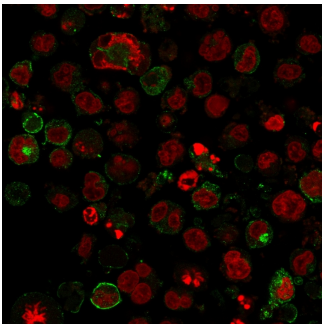
Western Blot Analysis of Human A431 cell lysate using GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475).



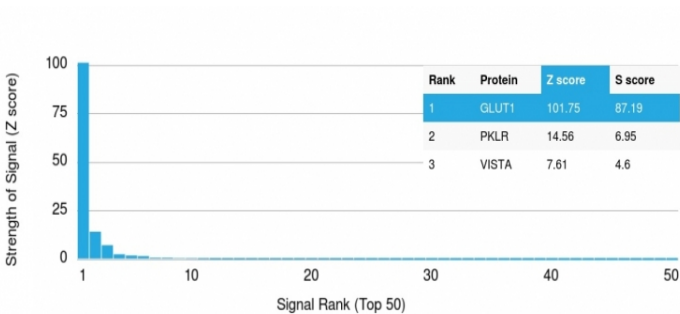
Flow Cytometric Analysis of K562 cells using GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).



Immunofluorescence staining of K562 cells using GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475) followed by goat anti-Mouse IgG conjugated to CF488 (green). Nuclei are stained with Reddot.



Immunofluorescence staining of K562 cells using GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475) followed by goat anti-Mouse IgG conjugated to CF488 (green). Nuclei are stained with Reddot.



Analysis of Protein Array containing more than 19,000 full-length human proteins using GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

Specificity & Comments

Recognizes a protein of 55kDa, which is identified as GLUT-1. Glucose transporters are integral membrane glycoproteins involved in transporting glucose into most cells. There are many types of glucose transport carrier proteins, designated as Glut-1 to Glut-12. Glut-1 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. Glut-1 is expressed at variable levels in many human tissues. Overexpression of Glut-1 has been linked to tumor progression or poor survival of patients with carcinomas of the colon, breast, cervical, lung, bladder and mesothelioma. Glut-1 is a sensitive and specific marker for the differentiation of malignant mesothelioma (positive) from reactive mesothelium (negative).

Research Areas

Cardiovascular, Hypoxia, Metabolism, Colon Cancer, Endothelial Cell Marker, Infectious Disease, Neural Stem Cells, Neuroinflammation

Known Applications & Suggested Dilutions

ELISA (For coating use Ab at 1-2ug/ml order Ab without BSA) | Flow Cytometry (1-2ug/million cells) | ,Immunofluorescence (1-2ug/ml) | Western Blot (1-2ug/ml) | ,Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes) | Optimal dilution for a specific application should be determined.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.