

36-3159: Anti-GLUT-1 (Tumor Progression and Mesothelioma Marker) Monoclonal Antibody(Clone: GLUT1/2475)

Clonality :	Monoclonal
Clone Name :	GLUT1/2475
Application :	ELISA,FACS,IF,WB,IHC
Reactivity :	Human
Gene :	SLC2A1
Gene ID :	6513
Uniprot ID :	P11166
Alternative Name :	Erythrocyte/hepatoma glucose transporter; Glucose transporter type-1; GLUT1; GLUT1DS; GLUTB; GT1; GTG1; Gtg3; HepG2 glucose transporter; PED; RATGTG1; Solute carrier family 2; Solute carrier family 2, facilitated glucose transporter member 1 (SLC2A1)
Isotype :	Mouse IgG2b, kappa
Immunogen Information :	Recombinant fragment of human GLUT1 protein (around aa 203-305) (exact sequence is proprietary)

Description

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).

Product Info

Amount :	20 µg / 100 µg
Content :	200 µg/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 condition :	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.

Application Note

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);

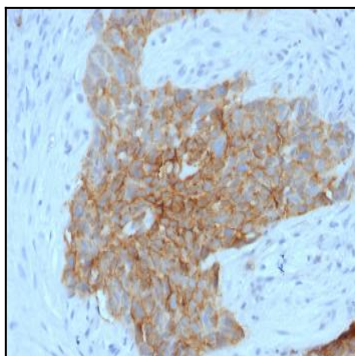


Fig. 1: Formalin-fixed, paraffin-embedded human Tongue stained with GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475).

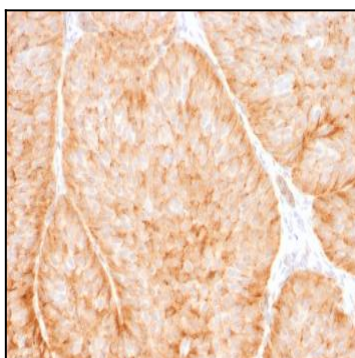


Fig. 2: Formalin-fixed, paraffin-embedded human Bladder carcinoma stained with GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475).

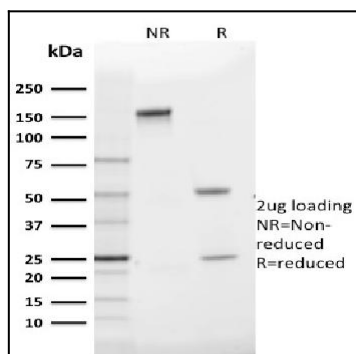


Fig. 3: SDS-PAGE Analysis Purified GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475). Confirmation of Purity and Integrity of Antibody.

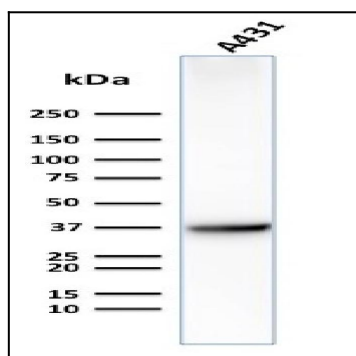


Fig. 4: Western Blot Analysis of Human A431 cell lysate using GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475).

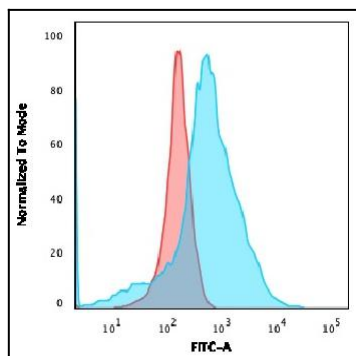


Fig. 5: Immunofluorescence staining of K562 cells using GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475) followed by goat anti-Mouse IgG conjugated to CF488 (green). Nuclei are stained with Reddot.

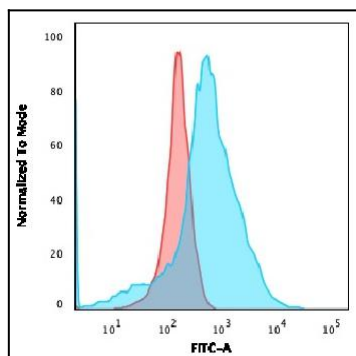


Fig. 6: Flow Cytometric Analysis of K562 cells using GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

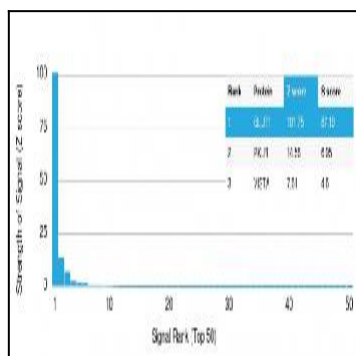


Fig. 7: Analysis of Protein Array containing more than 19,000 full-length human proteins using GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary 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 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.