

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);

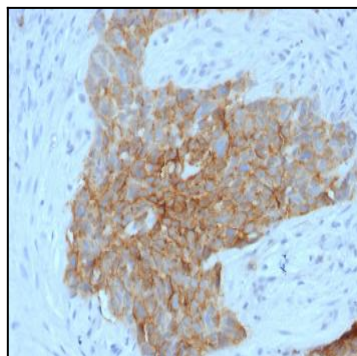


Fig. 1: Formalin-fixed, paraffin-embedded human Tongue stained with GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475).

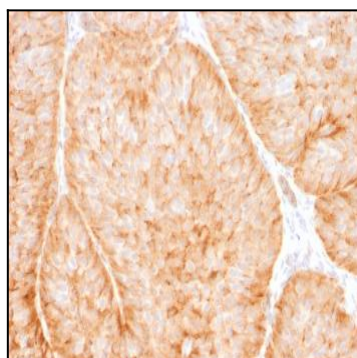


Fig. 2: Formalin-fixed, paraffin-embedded human Bladder carcinoma stained with GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475).

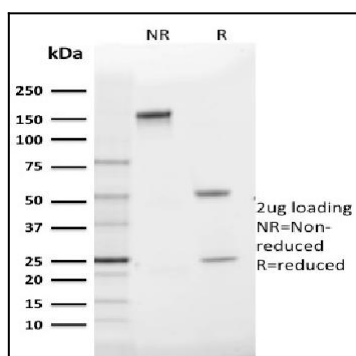


Fig. 3: SDS-PAGE Analysis Purified GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475). Confirmation of Purity and Integrity of Antibody.

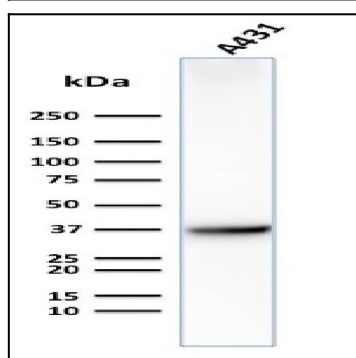


Fig. 4: Western Blot Analysis of Human A431 cell lysate using GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475).

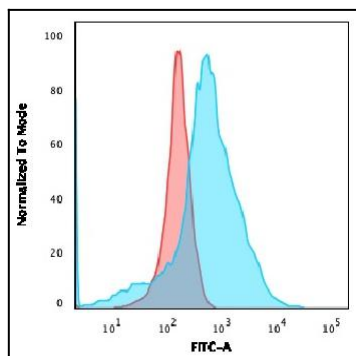


Fig. 5: Immunofluorescence staining of K562 cells using GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475) followed by goat anti-Mouse IgG conjugated to CF488 (green). Nuclei are stained with Reddot.

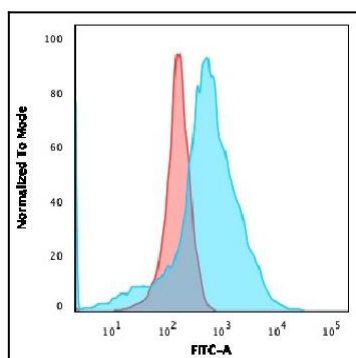


Fig. 6: Flow Cytometric Analysis of K562 cells using GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

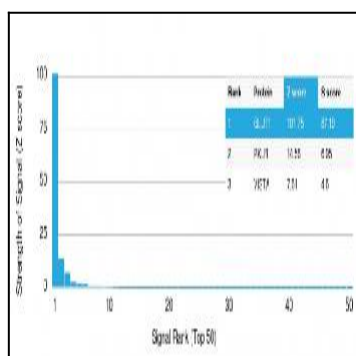


Fig. 7: Analysis of Protein Array containing more than 19,000 full-length human proteins using GLUT-1 Mouse Monoclonal Antibody (GLUT1/2475). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary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