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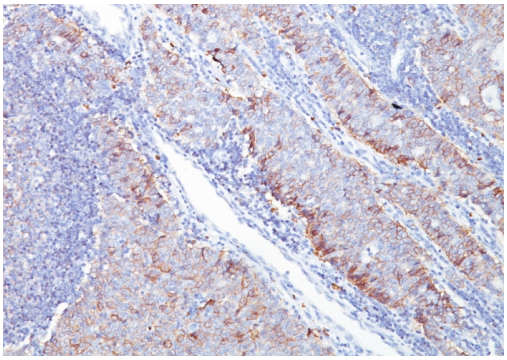
GLUT-1 (Tumor Progression and Mesothelioma Marker)

Mouse Monoclonal Antibody [Clone GLUT1/2476]

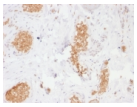
Catalog No	Format	Size	Price (USD)
6513-MSM5-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug	219.00
6513-MSM5-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug	499.00
6513-MSM5-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug	499.00

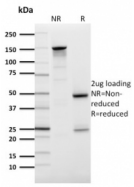
Human Entrez Gene ID	6513
Human SwissProt	P11166
Human Unigene	473721
Human Gene Symbol	SLC2A1
Human Chromosome Location	1p34.2
Synonyms	Erythrocyte/hepatoma glucose transporter; Glucose transporter type-1; GLUT1; GLUT1DS; GLUTB; GT1; GTG1; Gtg3; HepG2 glucose transporter; PED; RATGTG1; Solute carrier family 2; Solute carrier family 2, facilitated glucose transporter member 1 (SLC2A1)

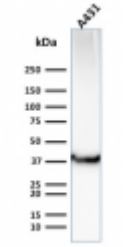
Immunogen	Recombinant fragment of human GLUT1 protein (around aa 203-305) (exact sequence is proprietary)
Host / Ig Isotype	Mouse / IgG2b, kappa
Mol. Weight of Antigen	55kDa
Cellular Localization	Cell Surface
Species Reactivity	Human.
Positive Control	K562, A431, MDA-MB-231 cells. Erythrocytes. Mesothelioma or breast, colon and ovarian carcinoma.

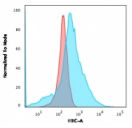


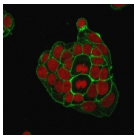
Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with GLUT-1 Mouse Monoclonal Antibody (GLUT1/2476).

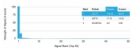












Specificity & Comments

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).

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&degC followed by cooling at RT for 20 minutes)
Optimal dilution for a specific application should be determined.

Key References

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.

Limitations

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

Warranty

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.