

Datasheet for ABIN7660020

anti-GLUT1 antibody (AA 203-305) (CF®405S)[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	GLUT1 (SLC2A1)
Binding Specificity:	AA 203-305
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This GLUT1 antibody is conjugated to CF®405S
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Flow Cytometry (FACS), Immunohistochemistry (Formalin-fixed Paraffin-embedded Sections) (IHC (fp))

Product Details

Purpose:	GLUT-1 (Tumor Progression and Mesothelioma Marker) (GLUT1/2475), CF405S conjugate
Immunogen:	Recombinant fragment of human GLUT1 protein (around aa 203-305)
Clone:	GLUT1-2475
Isotype:	IgG2b, kappa
Characteristics:	This antibody recognizes a protein of 55 kDa, 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.

Product Details

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). Primary antibodies are available purified, or with a selection of fluorescent CF® Dyes and other labels. CF® Dyes offer exceptional brightness and photostability. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Target Details

Target:	GLUT1 (SLC2A1)
Alternative Name:	GLUT-1
Background:	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) Gene Symbol: SLC2A1
Molecular Weight:	55 kDa
Gene ID:	6513
UniProt:	P11166
Pathways:	Sensory Perception of Sound , Dicarboxylic Acid Transport , Warburg Effect

Application Details

Application Notes:	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. ELISA: 1-2 µg/mL, for coating order Ab without BSA. Immunohistology (formalin): 0.5-1 µg/mL for 30 minutes at RT. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 minutes followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined by user
Comment:	Positive Control: MDA-MB-231 cells or erythrocytes. Mesothelioma or breast, colon and ovarian carcinoma.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.1 mg/mL
Buffer:	PBS, 0.1 % BSA, 0.05 % azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Protect from light
Storage:	4 °C
Storage Comment:	Stable at room temperature or 37°C for 7 days. Protect from light Store at 2 to 8°C. Protect fluorescent conjugates from light
Expiry Date:	24 months