For Research Use Only

CoraLite® Plus 488-conjugated GLUT1 Monoclonal antibody



Catalog Number: CL488-66290

Featured Product

Basic Information

Catalog Number: CL488-66290 Concentration:

1000 ug/ml Source: Mouse Isotype: lgG1

Immunogen Catalog Number:

AG17108

Species Specificity: human, mouse

GenBank Accession Number:

BC121804 GeneID (NCBI): 6513 **UNIPROT ID:** P11166

Full Name: solute carrier family 2 (facilitated glucose transporter), member 1

Calculated MW: 492 aa. 54 kDa Observed MW: 45-55 kDa

Purification Method:

Protein G purification

CloneNo.: 2A5A2

Recommended Dilutions:

IF-P: 1:50-1:500

FC (Intra): 0.40 ug per 10^6 cells in a

100 µl suspension

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

Applications

Tested Applications: IF-P, FC (Intra)

Positive Controls:

IF-P: human lung cancer tissue, FC (Intra): Jurkat cells,

Background Information

GLUT1, also known as SLC2A1, is a ubiquitously expressed glucose transporter and is responsible for the basal level of glucose uptake in most cell types. Human erythrocytes express the highest level of the GLUT1. Defects in SLC2A1 are the cause of GLUT1 deficiency syndrome type 1 and type 2. High expression of GLUT1 has been reported to be a reliable immunohistochemical marker for juvenile hemangiomas. GLUT1 protein may appear as two or more distinct forms between 43 kDa to 55 kDa due to the different glycosylation states. The conversion of the highly glycosylated form of GLUT1 to a less glycosylated form has been reported to correlate to differentiation (PMID: 8263524, 23302780). 66290-1-Ig antibody can also detect the 130 kDa dimer protein in SDS-PAGE (PMID: 11681785).

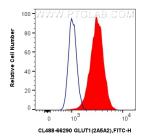
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

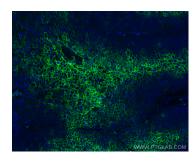
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



1X10^6 Jurkat cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human GLUT1 (CL488-66290, Clone:2A5A2) (red), or 0.4 ug CoraLite® Plus 488 Mouse [gG1 | sotype Control (MOPC-21) (CL488-65124, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human lung cancer tissue using CoraLite® Plus 488 GLUT1 antibody (CL488-66290, Clone: 2A5A2) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).