

Datasheet for ABIN7660037

**anti-GLUT1 antibody (AA 203-305) (CF®740)**[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®740                                                                                                                                    |
| 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) (GLUT1/2476), CF740 conjugate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Immunogen:       | Recombinant fragment of human GLUT1 protein (around aa 203-305)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Clone:           | GLUT1-2476                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Isotype:         | IgG2b, kappa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Characteristics: | <p>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.</p> |

## 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)<br>Gene Symbol: SLC2A1 |
| Molecular Weight: | 55 kDa                                                                                                                                                                                                                                                                                      |
| Gene ID:          | 6513                                                                                                                                                                                                                                                                                        |
| UniProt:          | <a href="#">P11166</a>                                                                                                                                                                                                                                                                      |
| Pathways:         | <a href="#">Sensory Perception of Sound</a> , <a href="#">Dicarboxylic Acid Transport</a> , <a href="#">Warburg Effect</a>                                                                                                                                                                  |

## Application Details

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|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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): 1-2 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 % rBSA, 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.<br>Protect from light<br>Store at 2 to 8°C. Protect fluorescent conjugates from light |
| Expiry Date:       | 24 months                                                                                                                            |