

## Recombinant GLUT3+GLUT14 Monoclonal Antibody

catalog number: **AN301929L**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Description

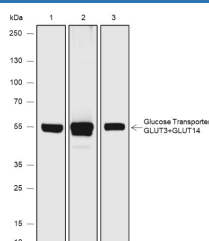
|                     |                                                                 |
|---------------------|-----------------------------------------------------------------|
| <b>Reactivity</b>   | Human;Rat;                                                      |
| <b>Immunogen</b>    | Recombinant human GLUT3+GLUT14 fragment                         |
| <b>Host</b>         | Rabbit                                                          |
| <b>Isotype</b>      | IgG, κ                                                          |
| <b>Clone</b>        | A645                                                            |
| <b>Purification</b> | Protein A purified                                              |
| <b>Buffer</b>       | PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant. |

### Applications

### Recommended Dilution

|           |        |
|-----------|--------|
| <b>WB</b> | 1:1000 |
|-----------|--------|

### Data



Western Blot with GLUT3+GLUT14 Monoclonal Antibody at dilution of 1:1000. Lane 1: U-87 MG, Lane 2: HepG2, Lane 3: C6

**Observed-MW:54 kDa**

**Calculated-MW:54 kDa**

### Preparation & Storage

|                 |                                                                 |
|-----------------|-----------------------------------------------------------------|
| <b>Storage</b>  | Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles. |
| <b>Shipping</b> | Ice bag                                                         |

### Background

A group of related glucose transporters (Glut1-5 and 7) mediate the facilitated diffusion of glucose in nonepithelial mammalian tissues. Glucose transporter 3 (Glut3), also known as SLC2A3, has a higher affinity for glucose than the ubiquitous glucose transporter Glut1. In the normal brain, Glut3 expression is limited to neurons, whereas Glut1 is expressed in both neurons and glia. Glioblastoma-derived brain tumor initiating cells (BTICs) express increased levels of Glut3, enabling their survival in the microenvironment deficient in glucose. In addition, Glut3 expression levels correlate with poor survival in brain tumors. Glucose transporter 4 (Glut4) is a 12-transmembrane domain protein that facilitates glucose transport in the direction of the glucose gradient. This transporter localizes to intracellular organelles (endosomes) in unstimulated cells and translocates to the cell surface following insulin stimulation. Translocation of Glut4 is dependent on Akt, which may act by phosphorylating AS160, a RabGAP protein involved in membrane trafficking. The antibody can detect both GLUT3 and GLUT4.

### For Research Use Only

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