

### PRODUCT DATA SHEET

Bioworld Technology,Inc.

# Glut 1 (G470) polyclonal antibody

Catalog: BS1149 Host: Rabbit Reactivity: Human, Mouse, Rat

### **BackGround:**

Glucose is fundamental to the metabolism of mammalian cells. Its passage across cell membranes is mediated by a family of transporters termed glucose transporters or Gluts. In adipose and muscle tissue, insulin stimulates a rapid and dramatic increase in glucose uptake, which is largely due to the redistribution of the insulin-inducible glucose transporter, Glut4. In response to insulin, Glut4 is quickly shuttled from an intracellular storage site to the plasma membrane where it binds glucose. In contrast, the ubiquitously expressed glucose transporter Glut1 is constitutively targeted to the plasma membrane, and shows a much less dramatic translocation in response to insulin. Glut1 and Glut4 are twelve pass transmembrane proteins (12TM) whose carboxytermini may dictate their cellular localization. Aberrant Glut4 expression has been suggested to contribute to such maladies as obesity and diabetes. Glut4 null mice have shown that while functional Glut4 protein is not required for maintaining normal glucose levels, it is necessary for sustained growth, normal cellular glucose, fat metabolism and prolonged longevity.

#### **Product:**

1 mg/ml in Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.2.

### **Molecular Weight:**

~ 54 kDa

#### **Swiss-Prot:**

P11166

### **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

## **Applications:**

WB: 1:500~1:1000 IHC: 1:50~1:200

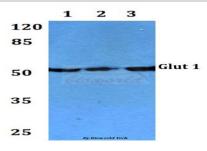
# **Storage&Stability:**

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at  $-20\,\mathrm{C}$  long term. Avoid freeze-thaw cycles.

### **Specificity:**

GLUT1(G470) polyclonal antibody detects endogenous levels of GLUT1 protein.

#### **DATA:**

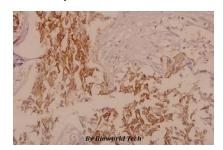


Western blot (WB) analysis of Glut 1 (G470) polyclonal antibody at 1:500 dilution

Lane1:HEK293T whole cell lysate

Lane2:NIH-3T3 whole cell lysate

Lane3:PC12 whole cell lysate



Immunohistochemistry (IHC) analyzes of Glut 1 (G470) pAb in paraffin-embedded human breast carcinoma tissue at 1:50.

#### Note:

For research use only, not for use in diagnostic procedure.

### Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <u>info@biogot.com</u>
Tel: 0086-025-68037686
Fax: 0086-025-68035151