

葡萄糖转运蛋白 1 抗体

产品货号： mlR4855

英文名称： GLUT1

中文名称： 葡萄糖转运蛋白 1 抗体

别 名： Glucose Transporter GLUT1; GT-1; GLUT-1; GLUT 1; Solute carrier family 2; facilitated glucose transporter member 1; Glucose transporter type 1; erythrocyte/brain; DYT17; DYT18; Erythrocyte/brain HepG2 glucose transporter; Erythrocyte/hepatoma glucose transporter; Glucose transporter 1; Glucose transporter type 1; Glucose transporter type 1 erythrocyte/brain; Glucose transporter type 1, erythrocyte/brain; GLUT; GLUT1; GLUT1DS; GLUTB; GT1; GTG1; Gtg3; GTR1_HUMAN; HepG2 glucose transporter; MGC141895; MGC141896; PED; RATGTG1; SLC2A 1; SLC2A1; Solute carrier family 2 (facilitated glucose transporter), member 1; Solute carrier family 2 facilitated glucose transporter member 1.

研究领域： 肿瘤 细胞生物 免疫学 生长因子和激素 转运蛋白

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Rabbit, Sheep, Guinea Pig,

产品应用： WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 ICC=1:100-500 IF=1:100-500
(石蜡切片需做抗原修复)

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分 子 量： 54kDa

细胞定位： 细胞膜 细胞外基质

性 状： Lyophilized or Liquid

浓 度 : 1mg/ml

免 疫 原 : KLH conjugated synthetic peptide derived from human GLUT1:251-320/492 human <Extracellular>

亚 型 : IgG

纯化方法 : affinity purified by Protein A

储 存 液 : 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件 : Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed : PubMed

产品介绍 : This gene encodes a major glucose transporter in the mammalian blood-brain barrier. Mutations in this gene have been found in a family with paroxysmal exertion-induced dyskinesia. [provided by RefSeq, Jul 2008].

Function:

Facilitative glucose transporter. This isoform may be responsible for constitutive or basal glucose uptake. Has a very broad substrate specificity; can transport a wide range of aldoses including both pentoses and hexoses. Subcellular location is at Cell membrane; multi-pass membrane protein. Facilitative glucose transporter. This isoform may be responsible for constitutive or basal glucose uptake. Has a very broad substrate specificity; can transport a wide range of aldoses including both pentoses and hexoses.

Subcellular Location:

Cell membrane; Multi-pass membrane protein. Melanosome. Note=Localizes primarily at the cell surface. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Tissue Specificity:

Expressed at variable levels in many human tissues.

Post-translational modifications:

Phosphorylated upon DNA damage, probably by ATM or ATR.

DISEASE:

Defects in SLC2A1 are the cause of GLUT1 deficiency syndrome type 1 (GLUT1DS1) [MIM:606777]; also known as blood-brain barrier glucose transport defect. A neurologic disorder showing wide phenotypic variability. The most severe 'classic' phenotype comprises infantile-onset epileptic encephalopathy associated with delayed development, acquired microcephaly, motor incoordination, and spasticity. Onset of seizures, usually characterized by apneic episodes, staring spells, and episodic eye movements, occurs within the first 4 months of life. Other paroxysmal findings include intermittent ataxia, confusion, lethargy, sleep disturbance, and headache. Varying degrees of cognitive impairment can occur, ranging from learning disabilities to severe mental retardation.

Defects in SLC2A1 are the cause of GLUT1 deficiency syndrome type 2 (GLUT1DS2) [MIM:612126]. A clinically variable disorder characterized primarily by onset in childhood of paroxysmal exercise-induced dyskinesia. The dyskinesia involves transient abnormal involuntary movements, such as dystonia and choreoathetosis, induced by exercise or exertion, and affecting the exercised limbs. Some patients may also have epilepsy, most commonly childhood absence epilepsy. Mild mental retardation may also occur. In some patients involuntary exertion-induced dystonic, choreoathetotic, and ballistic movements may be associated with macrocytic hemolytic anemia.

Similarity:

Belongs to the major facilitator superfamily. Sugar transporter (TC 2.A.1.1) family. Glucose transporter subfamily.

SWISS:

P11166

Gene ID:

6513

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

GLUT-1 属于溶质运载蛋白家族成员（solute carrier family），主要功能是转载葡萄糖进入上皮细胞。

目前主要用于糖尿病肾病和视网膜病变的研究，也是肾小球系膜细胞上的主要葡萄糖转运体。GLUT1 的功能状态直接影响系膜细胞的糖代谢及功能变化。

近期，研究人员也用来区别一些良、恶性肿瘤的鉴别。

产品图片

