



Polyclonal Anti-Glut1 (Sephacrose Bead Conjugate)

Catalogue No. PA1120-S

Lot No. 08J01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Human, mouse, rat,. No cross reactivity with other proteins.

Recommended application

(Immunoprecipitation(IP))

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminal of human Glut1, different from the related mouse sequence by a single amino acid.

Purification

Immunogen affinity purified.

Formulation

50% slurry in PBS pH 7.2 with 0.01mg NaN₃a₃ preservative.

Storage

Store at 4°C for frequent use.

Description:

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

BACKGROUND

GLUT1, also known as SLC2A1, is a major glucose transporter in the mammalian blood-brain barrier whose gene is mapped to 1p35-p31.3 and contains 10 exons. It is present at high levels in primate erythrocytes and brain endothelial cells. Not only can transport dehydroascorbic acid (the oxidized form of vitamin C) into the brain¹, GLUT1 is also likely to contribute to HTLV-associated disorders through interacting with HTLV envelope glycoproteins². Functionally, GLUT1 deficiency causes a decrease in embryonic glucose uptake and apoptosis, which may be involved in diabetic embryopathy³, by contrast, an increased expression of GLUT1 in some malignant tumors may suggest a role for glucose-derivative tracers to detect in vivo thyroid cancer metastases by positron-emission tomography scanning⁴.

REFERENCE

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3. Heilig, C. W.; Saunders, T.; Brosius, F. C., III; Moley, K.; Heilig, K.; Baggs, R.; Guo, L.; Conner, D. : Glucose transporter-1-deficient mice exhibit impaired development and deformities that are similar to diabetic embryopathy. Proc. Nat. Acad. Sci. 100: 15613-15618, 2003.
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