

Code No. 18905

**Anti-Human
GLUT-5 Rabbit IgG Affinity Purify**Volume : 100 µg

Introduction : Mammalian cells transport glucose through a family of membrane proteins known as glucose transporters (GLUTs or SLC2A family). Mammalian tissues are known to express different glucose transporter isoforms (existing at least GLUTs 1-13) in different tissues. The molecular weight are 40-60 kDa, respectively.

GLUT-5 transports fructose in intestine and testis. Especially, our GLUT-5 antibody detects microglia selectively in immunostaining, and doesn't react with monocytes and monocyte-derived macrophages. Immunostaining by this antibody excels in the form observation compared with staining by other antibodies reported as microglia markers, and it makes it easy to distinguish between a static type and an active type in the form observation.

Antigen : Synthetic peptide of the C terminal part of Human GLUT-5
(SEVYPEKEELKELPPVTSEQ)

Purification : Purified with antigen peptide

Form : Lyophilized product from PBS containing 1 % BSA and 0.05 % NaN₃

How to use : 1.0 mL deionized water will be added to the product (the conc. comes up 100 µg /mL)

Stability : Lyophilized product, 5 years at 2 – 8 °C
: Solution, 2 years at –20 °C

Application : This antibody can be used for immunohistochemistry with formalin fixed paraffin embedded tissues by several techniques after microwave treatment (for 10 min, 10 mM citrate buffer, pH 6.0). The optimal concentration is 2 - 5 µg/mL, however, the concentration should be optimized by each laboratory.

: This antibody can be used for western blotting in concentration of 1 - 5 µg /mL.

Specificity : Confirmed by western blotting using transfectant cells.

Reference : 1. Maher F, Vannucci SJ, Simpson IA. Glucose transporter proteins in brain. *FASEB J.* 1994 Oct;8(13):1003-11. Review.
2. Horikoshi Y, Sasaki A, Taguchi N, Maeda M, Tsukagoshi H, Sato K, Yamaguchi H. Human GLUT5 immunolabeling is useful for evaluating microglial status in neuropathological study using paraffin sections. *Acta Neuropathol.* 2003 Feb;105(2):157-62.
3. Sasaki A, Horikoshi Y, Yokoo H, Nakazato Y, Yamaguchi H. Antiserum against human glucose transporter 5 is highly specific for microglia among cells of the mononuclear phagocyte system. *Neurosci Lett.* 2003 Feb 20;338(1):17-20.

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