

Rudolf-Wissell-Str. 28 37079 Göttingen, Germany Phone: +49 551-50556-0 Fax: +49 551-50556-384 E-mail: sales@sysy.com Web: www.sysy.com

GLUT 4

Cat.No. 235-0P; control peptide, 100 µg peptide (lyophilized)

Data Sheet

Reconstitution/ Storage	100 μg peptide, lyophilized. For reconstitution add 100 μl H₂O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. Control peptides should also be stored at -20°C when still lyophilized!
Immunogen	Synthetic peptide corresponding to AA 495 to 509 from human GLUT4 (UniProt Id: P14672)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	235 003
Remarks	This control peptide consists of the synthetic peptide (aa 495-509 of human GLUT 4) that has been used for immunization. It has been tested in preadsorption experiments and blocks efficiently and specifically the corresponding signal in Western blots. The amount of peptide needed for efficient blocking depends on the titer and on the affinity of the antibody to the antigen.

TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Insulin stimulates glucose transport into muscle and fat cells by the redistribution of the **glu**cose **t** ransporters 1 and **4** (GLUT 1 and **GLUT 4**) from intracellular membrane compartments to the cell surface via GLUT carrying vesicles.

Formation of soluble SNARE complexes mediate the docking and fusion of GLUT 4-containing vesicles with the plasma membrane.

Selected General References

DOC2B: a novel syntaxin-4 binding protein mediating insulin-regulated GLUT4 vesicle fusion in adipocytes. Fukuda N, Emoto M, Nakamori Y, Taguchi A, Miyamoto S, Uraki S, Oka Y, Tanizawa Y Diabetes (2009) 58(2): 377-84.

Regulation of insulin secretion and GLUT4 trafficking by the calcium sensor synaptotagmin VII. Li Y, Wang P, Xu J, Gorelick F, Yamazaki H, Andrews N, Desir GV Biochemical and biophysical research communications (2007) 362(3): 658-64.

Mechanism and regulation of GLUT-4 vesicle fusion in muscle and fat cells. Foster LJ, Klip A American journal of physiology. Cell physiology (2000) 279(4): C877-90.

Regulation of insulin-stimulated GLUT4 translocation by Munc18c in 3T3L1 adipocytes. Thurmond DC, Ceresa BP, Okada S, Elmendorf JS, Coker K, Pessin JE The Journal of biological chemistry (1998) 273(50): 33876-83.

Intracellular targeting of the insulin-regulatable glucose transporter (GLUT4) is isoform specific and independent of cell type. Haney PM, Slot JW, Piper RC, James DE, Mueckler M The Journal of cell biology (1991) 114(4): 689-99.