

## GLUT12 Peptide

Catalog Number: P-GLUT12

Lot Number: 814908

### General Information

<b>Product</b>	GLUT12 Peptide
<b>Description</b>	Solute carrier family 2 facilitated glucose transporter member 12 Antigenic Blocking Peptide
<b>Accession #</b>	Uniprot: D3ZNG4 GenBank: EDL87731.1
<b>Verified Applications</b>	Immunodepletion/Immunocompetition assays
<b>Immunogen</b>	Synthetic peptide corresponding to unique amino acid sequences from the C-terminus GLUT12 protein.
<b>Alternative Nomenclature</b>	Glucose transporter type 12 antibody, GLUT8 antibody, GTR12_HUMAN antibody, SLC2A12 antibody, Solute carrier family 2, facilitated glucose transporter member 12 antibody

### Physical Properties

<b>Quantity</b>	250 µg
<b>Volume</b>	100 µl
<b>Form</b>	Synthetic Antigenic Blocking Peptide
<b>Storage</b>	Store at -20°C for long term storage.

### Recommended Dilutions

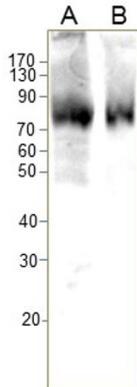
<b>DOT Blot</b>	1:4,500
<b>ELISA</b>	1:4,500
<b>Immunocytochemistry</b>	Use a concentration of 10 µg/ml
<b>Immunoprecipitation</b>	1:200
<b>Western Blot</b>	1:500

### Related Products

### Catalog #

<b>BIOTIN-Conjugated</b>	GLUT12-BIOTIN
<b>FITC-Conjugated</b>	GLUT12-FITC
<b>Antigenic Blocking Peptide</b>	P-GLUT12
<b>Western Blot Positive Control</b>	PC-GLUT12

## Application Verification:



WB of GLUT12-1201AP using PC-GLUT12 (A) and rat kidney cortex (B). 1:500 antibody, dilution in DiluObuffer.

Dilutions are for reference only. Applications not listed above are not necessarily precluded from working with this antibody. Investigators intending to use an application that has not been verified can request a complimentary sample.

## Overview:

To date, thirteen different types of glucose/fructose transport carrier proteins designated as Glut 1-13, facilitate glucose/fructose transport across the cell membrane. Molecular cloning of glucose transporters have identified a family of closely related genes that encode at least seven proteins exhibiting high degree of amino acid homology (45%-65%) all in the molecular weight range of 40-84kDa. Individual members of the Glut family have predicted secondary structure characteristic of 12 membrane spanning domains of other transport carriers. Majority of the differences in sequence homology in Glut proteins occur at four hydrophilic domains that may play a role in distinct tissue-specific pattern of expression and targeting. All Glut proteins are glycosylated at or near the C-terminus and are present on either cell surface or in intracellular sites. Some transporters exhibit dynamic trafficking between intracellular storage sites and plasma membranes in response to various stimuli. In some tissues Glut proteins are asymmetrically distributed between apical and basolateral membranes as in blood brain barrier and blood testis barriers.

The Glut family-selective antibodies were generated against unique C-terminal peptides characteristics of a particular Glut family. FabGennix has generated highly specific rabbit anti-Glut 12 polyclonal antibodies utilizing C-terminal sequences. The Glut 12 peptide was post-synthetically modified to achieve the desired antigenicity. The antibodies were isolated on an immobilized antigen based affinity matrix before stabilizing them in antibody stabilization buffer. These antibodies have been fully characterized for cross reactivity within the Glut family and with other cellular proteins. Antibodies can be conjugated to fluorescent probes or secondary enzymes upon request for an additional charge. Glut 12 Antigenic blocking peptide (P-GLUT12) are available in limited quantities for immunocompetition and immunodepletion assays. Glut 12 Western blot positive control (PC-GLUT12) is available in ready to use SDS-PAGE sample buffer. The Glut 12 positive control appears as a diffuse band of 80-82 kDa on a 10% SDS-PAGE. FabGennix carries antibodies to other members of solute carrier proteins—for a complete listing please view our catalog at [www.fabgennix.com](http://www.fabgennix.com).

### References:

1. Meuckler M. M., NIPS, 10, 22-29, 1995.
2. Farooqui S. M., Bagdadi A. F., Rhett S., and O'Donnell J. M., Biochem. Biophys. Res. Comm. 236, 407-412, 1997.

For users who may require large amounts of the products listed above, please inquire about bulk material discounts.  
This Product is for Research Use Only and is NOT intended for use in humans or clinical diagnosis.