

Human Glucose Transporter 4 (GLUT4) ELISA Kit | GLUT4 elisa kit

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CATALOG #
AAA330817

REACTIVITY
Human

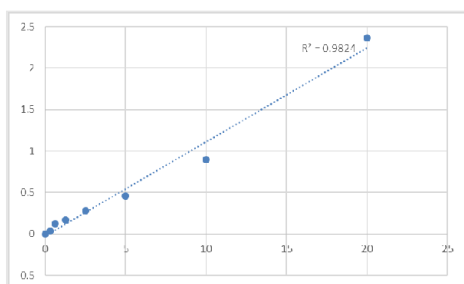
PRODUCT SYNONYMS

Glucose Transporter 4 (GLUT4); Human Glucose Transporter 4 (GLUT4) ELISA Kit; SLC2A4; GLUT4; glucose transporter 4; insulin-responsive glucose transporter type 4; GLUT4 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	Human Glucose transporter 4 (GLUT4) ELISA Kit has high sensitivity and excellent specificity for detection of Human SLC2A4. No significant cross-reactivity or interference between Human SLC2A4 and analogues was observed.
Sequence Length	509
Assay Type	Sandwich ELISA (Quantitative)
Samples	Cell Culture Supernatants, Serum, Plasma, Other Biological Fluids
Detection Method	Colorimetric
Usage Notes	* Do not mix components from different kit lots or use reagents beyond the kit expiration date. * Allow all reagents to warm to room temperature for at least 30 minutes before opening. * Pre-rinse the pipet tip with reagent, use fresh pipet tips for each sample, standard and reagent to avoid contamination. * Unused wells must be kept desiccated at 4 degree C in the sealed bag provided. * Mix Thoroughly is very important for the result. It is recommended using low frequency oscillator or slight hand shaking every 10 minutes. * It is recommended that all samples and standards be assayed in duplicate or triplicate.
Preparation and Storage	Store at 2-8 degree C.

IMAGES



Standard Curve (Sample)

Fig.1. Human Glucose transporter 4 (GLUT4) Standard Curve.

ADDITIONAL INFORMATION

Related Product Information for GLUT4 elisa kit	Description: This Human Glucose transporter 4 (GLUT4) ELISA Kit employs a two-site sandwich ELISA to quantitate SLC2A4 in samples. An antibody specific for SLC2A4 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any SLC2A4 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SLC2A4 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of SLC2A4 bound in the initial step. The color development is stopped and the intensity of the color is measured. Background: GLUT4 is the insulin-regulated glucose transporter found in adipose tissues and striated muscle (skeletal and cardiac) that is responsible for insulin-regulated glucose disposal. In the absence of insulin, GLUT4 is sequestered in the interior of muscle and fat cells within lipid bilayers of vesicles. Insulin induces the translocation of GLUT4 from intracellular storage sites to the plasma membrane. Insulin binds to the insulin receptor in its dimeric form. The receptor phosphorylates and subsequently activates IRS-1, which converts PIP2 to PIP3. PIP3 is bound to PKB (protein kinase B), signaling for PDK1 to phosphorylate PKB. Once phosphorylated, PKB is in its active form and phosphorylates other targets that stimulate GLUT4 to be expressed on the plasma membrane.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	121761
NCBI GeneID	6517
UniProt Accession #	P14672
NCBI Official Full Name	Solute carrier family 2, facilitated glucose transporter member 4
NCBI Official Synonym Full Names	solute carrier family 2 member 4
NCBI Official Symbol	SLC2A4
NCBI Official Synonym Symbols	GLUT4
NCBI Protein Information	solute carrier family 2, facilitated glucose transporter member 4
UniProt Protein Name	Solute carrier family 2, facilitated glucose transporter member 4
UniProt Gene Name	SLC2A4
UniProt Synonym Gene Names	GLUT4; GLUT-4
UniProt Entry Name	GTR4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.