

## Human Glucose transporter 1 (GLUT1) ELISA Kit

Catalog No: #EK7269



Package Size: #EK7269-1 48T #EK7269-2 96T

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

## Description

Product Name	Human Glucose transporter 1 (GLUT1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	RP1-127L4.1; D22S675; NAGT; SGLT1; Human Na <sup>+</sup> /glucose cotransporter 1 mRNA; complete cds sodium/glucose cotransporter 1 solute carrier family 5 (sodium/glucose transporter); member 1 solute carrier f
Accession No.	P13866
Uniprot	P13866
GeneID	6523;
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

## Application Details

Detect Range:0.312-20 ng/mL

Sensitivity:0.116 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

## Product Description

**Detection Method:**Sandwich Test principle:This assay employs a two-site sandwich ELISA to quantitate SLC5A1 in samples. An antibody specific for SLC5A1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any SLC5A1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SLC5A1 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 SLC5A1 bound in the initial step. The color development is stopped and the intensity of the color is measured.

**Product Overview:**GLUT1 facilitates the transport of glucose across the plasma membranes of mammalian cells.GLUT1 is responsible for the low-level of basal glucose uptake required to sustain respiration in all cells. Expression levels of GLUT1 in cell membranes are increased by reduced glucose levels and decreased by increased glucose levels. GLUT1 is also a major receptor for take-up of Vitamin C as well as glucose, especially in non vitamin C producing mammals as part of an adaptation to compensate by participating in a Vitamin C recycling process. In mammals that do produce Vitamin C, GLUT4 is often expressed instead of GLUT1.GLUT1 behaves as a Michaelis-Menten enzyme and contains 12 membrane-spanning alpha helices, each containing 20 amino acid residues.

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Note: This product is for in vitro research use only