Rat Sodium/glucose cotransporter 2 (SLC5A2) ELISA Kit

Catalog No: #EK7266

Package Size: #EK7266-1 48T #EK7266-2 96T

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Description

Product Name	Rat Sodium/glucose cotransporter 2 (SLC5A2) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (Rattus norvegicus)
Other Names	SGLT2; Na(+)/glucose cotransporter 2|low affinity sodium-glucose cotransporter|solute carrier family 5 (sodium/glucose transporter); member 2
Accession No.	P26430
Uniprot	P26430
GeneID	100009386;
Storage	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. 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).

Application Details

Detect Range:0.781-50 ng/mL

Sensitivity:0.28 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:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate SLC5A2 in samples. An antibody specific for SLC5A2 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySLC5A2 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SLC5A2 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 SLC5A2 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:The major reabsorptive mechanism for D-glucose in the kidney is known to involve a lower affinity, high capacity Na(+)/glucose cotransporter, which is located in the early proximal convoluted tubule segment S1 and has a Na(+)-to-glucose coupling ratio of 1:1.Uptake experiments using cRNA-injected Xenopus oocytes showed specific uptake of glucose and alpha-methyl glucopyranoside at up to three times background. This uptake was saturable, suggesting that the cDNA corresponds to a low-affinity kidney sodium-glucose transporter. It was therefore referred to as sodium-glucose cotransporter 2, or SGLT2. SGLT2 mediates saturable Na(+)-dependent and phlorizin-sensitive transport with K(m) values consistent with low affinity Na(+)/glucose cotransport.

Note: This product is for in vitro research use only