Product Datasheet

Canine Solute carrier family 2, facilitated glucose transporter member 4 (SLC2A4) ELISA Kit

Catalog No: #EK7282

Package Size: #EK7282-1 48T #EK7282-2 96T

Kon	R R
F SA	В
Signalway Antib	ody

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Description	
Product Name	Canine Solute carrier family 2, facilitated glucose transporter member 4 (SLC2A4) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Canine (Canis familiaris; Dog)
Other Names	GLUT4; glucose transporter 4 insulin-responsive glucose transporter type 4
Accession No.	Q9XST2
Uniprot	Q9XST2
GeneID	403673;
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:0.312-20 ng/mL Sensitivity:0.117 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 SLC2A4 in samples. An antibody specific for SLC2A4 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySLC2A4 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.Product Overview: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.

Note: This product is for in vitro research use only