

Human Intermediate conductance calcium-activated potassium channel protein 4 (KCNN4) ELISA Kit

Catalog No: #EK11541

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Package Size: #EK11541-1 48T #EK11541-2 96T

Description

Product Name	Human Intermediate conductance calcium-activated potassium channel protein 4 (KCNN4) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	IK1; IKCA1; KCA4; KCa3.1; SK4; hKCa1; hKCa4; hSK4; intermediate conductance calcium-activated potassium channel protein 1 putative erythrocyte intermediate conductance calcium-activated potassium G
Accession No.	O15554
Uniprot	O15554
GeneID	3783;
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:62.5-4000 pg/mL

Sensitivity:38 pg/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 KCNN4 in samples. An antibody specific for KCNN4 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any KCNN4 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for KCNN4 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 KCNN4 bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview:KCNN4 belongs to a family of IK and SK channels. The predicted 427-amino acid sequence of KCNN4 was approximately 40% identical to that of the rat and human SK channel proteins rSK1, rSK2, rSK3 and hSK1. Sequence analysis revealed that, like the SK channel proteins, KCNN4 contained 6 putative transmembrane domains, a conserved pore region, and a leucine zipper-like motif near the C terminus. By Northern analysis, the authors found that KCNN4 was expressed as 2.6-kb and 3.8-kb transcripts in placenta and at lower levels in lung and pancreas. KCNN4 was expressed predominantly as a 2.2-kb mRNA in a variety of tissues, with minor larger transcripts in some tissues. KCNN4 generated a conductance of approximately 12 pS and had a very high affinity for calcium when expressed in Chinese hamster ovary cells.

Note: This product is for in vitro research use only