

Rat Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 3 (HCN3) ELISA Kit

Catalog No: #EK11574

Package Size: #EK11574-1 48T #EK11574-2 96T

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Description

Product Name	Rat Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 3 (HCN3) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (<i>Rattus norvegicus</i>)
Other Names	KIAA1535; MGC131493; potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 3
Accession No.	Q9JKA8
Uniprot	Q9JKA8
GeneID	114245;
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:123.5-10000 pg/mL

Sensitivity:49.4 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:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate HCN3 in samples. An antibody specific for HCN3 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyHCN3 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for HCN3 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 HCN3 bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview:HCN3 conducted both potassium and sodium ions with a 3:1 preference for potassium ions. HCN3 bound cAMP, but unlike other HCNs, its activity was not modulated by intracellular cAMP.The cDNA contains a repetitive element in its 3-prime proximal region, and the deduced protein contains 703 amino acids. RT-PCR ELISA detected high HCN3 expression in adult liver and kidney and fetal liver and brain, intermediate expression in adult whole brain, lung, pancreas, spleen, testis, ovary, and all specific brain regions examined, and little to no expression in heart and skeletal muscle.Expression was high in fetal brain and adult cerebellum and intermediate in nucleus accumbens, thalamus, and pituitary gland, with little to no expression in other brain regions examined.

Note: This product is for in vitro research use only