

Human Voltage-dependent L-type calcium channel subunit alpha-1C (CACNA1C) ELISA Kit



Catalog No: #EK11317

Orders: order@signalwayantibody.com

Package Size: #EK11317-1 48T #EK11317-2 96T

Support: tech@signalwayantibody.com

Description

Product Name	Human Voltage-dependent L-type calcium channel subunit alpha-1C (CACNA1C) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	CACH2; CACN2; CACNL1A1; CCHL1A1; CaV1.2; MGC120730; TS; DHPR; alpha-1 subunit OTTHUMP00000196730 OTTHUMP00000196731 OTTHUMP00000196732 OTTHUMP00000196733 OTTHUMP00000196734 OTTHUMP00000196735 OTTHUM
Accession No.	Q13936
Uniprot	Q13936
GeneID	775;
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:0.78-50 ng/mL

Sensitivity:0.4 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 CACNA1C in samples. An antibody specific for CACNA1C has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyCACNA1C present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for CACNA1C 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 CACNA1C bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**Activation of voltage-sensitive calcium channels by membrane depolarization triggers key cellular responses such as contraction, secretion, excitation, and electrical signaling. The L-type currents produced by voltage-sensitive calcium channels are blocked by 1,4-dihydropyridine (DHP) derivatives; thus, the channels responsible for these currents are referred to as DHP-sensitive. The skeletal muscle DHP-sensitive calcium channel is a complex of 5 subunits: alpha-1, alpha-2, beta, gamma, and delta. The DHP-sensitive calcium channels from cardiac muscle and the brain have pharmacologic and electrophysiologic properties that differ from

those of the skeletal muscle channel. Powers et al. (1991) isolated a clone for the human CCHL1A1 gene and partially sequenced it.

Note: This product is for in vitro research use only