Rat Sphingomyelin phosphodiesterase 2 (SMPD2) ELISA Kit

Catalog No: #EK7221

Package Size: #EK7221-1 48T #EK7221-2 96T

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Description

Product Name	Rat Sphingomyelin phosphodiesterase 2 (SMPD2) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (Rattus norvegicus)
Other Names	RP5-919F19.2; ISC1; NSMASE; NSMASE1; sphingomyelin phosphodiesterase 2; neutral
Accession No.	Q9ET64
Uniprot	Q9ET64
GeneID	83537;
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:0.156-10 ng/mL

Sensitivity:0.068 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 SMPD2 in samples. An antibody specific for SMPD2 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySMPD2 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SMPD2 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 SMPD2 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:SMPD2 isa protein which was initially identified as a sphingomyelinase based on sequence similarity between bacterial sphingomyelinases and a yeast protein. Subsequent studies showed that its biological function is less likely to be as a sphingomyelinase and instead as a lysophospholipase.

Neutral sphingomyelinase (N-SMase) activity was first described in fibroblasts from patients with Niemann-Pick disease C a lysosomal storage disease characterized by deficiencies in acid SMase . Subsequent study found that this enzyme was the product of a distinct gene, had an optimum pH of 7.4, was dependent on Mg2+ ions for activity, and was particularly enriched in brain .

Note: This product is for in vitro research use only