Product Datasheet

Human Beta-site APP-Cleaving Enzyme 1 (BACE1) ELISA Kit

Catalog No: #EK11330

Package Size: #EK11330-1 48T #EK11330-2 96T



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Product Name	Human Beta-site APP-Cleaving Enzyme 1 (BACE1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	ASP2; BACE; FLJ90568; HSPC104; KIAA1149; APP beta-secretase aspartyl protease
	2 beta-secretase beta-site amyloid beta A4 precursor protein-cleaving enzyme beta-site amyloid precursor
	protein cleavin
Accession No.	P56817
Uniprot	P56817
GeneID	23621;
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:0.250-16 ng/mL	
Sensitivity:0.11 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 BACE1 in samples. An antibody specific for BACE1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyBACE1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for BACE1 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 BACE1 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:β-Secretaseis an aspartic-acid protease important in the pathogenesis of Alzheimer's disease, and in the formation of myelin sheaths in peripheral nerve cells. The transmembrane protein, contains two active site aspartate residues in its extracellular protein domain and may function as a dimer.Generation of the 40 or 42 amino acid-long amyloid-β peptides that aggregate in the brain of Alzheimer's patients requires two sequential cleavages of the amyloid precursor protein (APP). Extracellular cleavage of APP by BACE releases a soluble extracellular fragment and is followed by APP cleavage within its transmembrane domain by γ-secretase. The second cleavage

releases the intracellular domain of APP and amyloid- β . Since alpha-secretase cleaves APP closer to the cell membrane than BACE does.

Note: This product is for in vitro research use only