Datasheet for ABIN7491383

Acetylcholinesterase Protein (AChE) (AA 32-614) (His tag)

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Overview

Quantity:	100 µg
Target:	Acetylcholinesterase (AChE)
Protein Characteristics:	AA 32-614
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Acetylcholinesterase protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human ACHE Protein with C-terminal 6xHis tag
Specificity:	ACHE (Glu32-Leu614) 6xHis tag
Characteristics:	Extracellular Domain Protein
Purification:	Purified from cell culture supernatant by affinity chromatography
Purity:	The purity of the protein is greater than 85 % as determined by SDS-PAGE and Coomassie blue staining.

Target Details

Target:	Acetylcholinesterase (AChE)
Alternative Name:	ACHE (AChE Products)
Background:	Acetylcholinesterase hydrolyzes the neurotransmitter, acetylcholine at neuromuscular junctions

Target Details

	and brain cholinergic synapses, and thus terminates signal transmission. It is also found on the red blood cell membranes, where it constitutes the Yt blood group antigen. Acetylcholinesterase exists in multiple molecular forms which possess similar catalytic properties, but differ in their oligomeric assembly and mode of cell attachment to the cell surface. It is encoded by the single ACHE gene, and the structural diversity in the gene products arises from alternative mRNA splicing, and post-translational associations of catalytic and structural subunits. The major form of acetylcholinesterase found in brain, muscle and other tissues is the hydrophilic species, which forms disulfide-linked oligomers with collagenous, or lipid-containing structural subunits. The other, alternatively spliced form, expressed primarily in the erythroid tissues, differs at the C-terminal end, and contains a cleavable hydrophobic peptide with a GPI-anchor site. It associates with the membranes through the phosphoinositide (PI) moieties added post-translationally. AChE activity may constitute a sensitive biomarker of RBC ageing in vivo, and thus, may be of aid in understanding the effects of transfusion[provided by RefSeq, Sep 2019]
Molecular Weight:	predicted molecular mass of 65.4 kDa after removal of the signal peptide. The apparent molecular mass of ACHE-His is 55-70 kDa due to glycosylation.
UniProt:	P22303
Pathways:	Skeletal Muscle Fiber Development

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose is added as protectants before lyophilization.
Storage:	-20 °C,-80 °C
Storage Comment:	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
Expiry Date:	12 months