

Human CellExp™ Acetylcholinesterase / AChE, Human Recombinant

CATALOG NO: P1475-10 10 µg
P1475-50 50 µg

ALTERNATE NAMES: Acetylcholinesterase (EC:3.1.1.7), AChE

MOL. WT. ~70 kDa (C terminal 6xHis tag)

SOURCE: HEK 293 cells

PURITY: >95%

FORM: Liquid

FORMULATION: 0.22 µm filtered PBS, pH 7.4 with 50% Glycerol

CONCENTRATION: 0.5 mg/mL

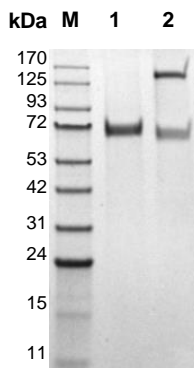
SPECIFIC ACTIVITY: The specific activity is > 500 U/mg. Specific activity was tested using BioVision's Acetylcholinesterase Inhibitor Screening Kit (Catalog# K197).

UNIT DEFINITION: One unit of Acetylcholinesterase is the amount of enzyme that will hydrolyze one µmol of acetylthiocholine to thiocholine and acetate per minute at pH 7.5 at 25°C.

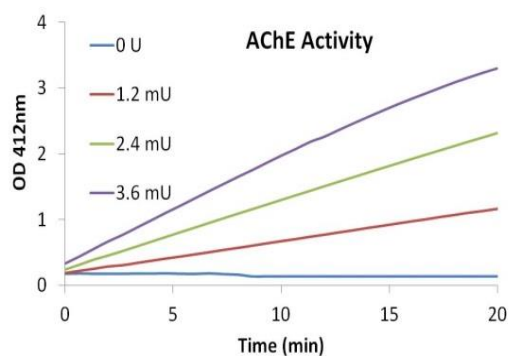
STORAGE CONDITIONS: Aliquot and store at -20°C. Avoid repeated freezing and thawing cycles.

DESCRIPTION: Acetylcholinesterase (AChE) is the major enzyme that hydrolyzes acetylcholine, a key neurotransmitter for synaptic transmission, into acetic acid and choline in both central and peripheral nervous systems. Mild inhibition of AChE has been shown to have therapeutic relevance in Alzheimer's disease (AD), myasthenia gravis, and glaucoma among others. In contrast, strong inhibition of AChE can lead to cholinergic poisoning. An irregular expression of AChE has also been found in different types of tumors, suggesting the involvement of AChE in the regulation of tumor development. Therefore AChE inhibitors could potentially be used in cancer treatment in the future.

AMINO ACID SEQUENCE: Glu 32 – Leu 614



SDS-PAGE (4-20%) of AChE monomer and dimer: 2 µg of the recombinant AChE is loaded under reducing and non-reducing conditions and stained with Coomassie Blue. Lane M: MW Marker, Lane 1: reducing (monomer), Lane 2: non-reducing conditions (monomer and dimer form) AChE



Acetylcholinesterase Enzyme activity: The specific activity of AChE is > 500 U/mg assayed with BioVision's Acetylcholinesterase Inhibitor Screening Kit (K197)

RELATED PRODUCTS:

- QuickDetect™ Acetylcholine (ACh) (Mouse) ELISA Kit (E4453)
- Acetylcholinesterase Inhibitor Screening Kit (Colorimetric) (K197)
- QuickDetect™ Acetylcholine (ACh) (Human) ELISA Kit (E4452)
- ACHE Antibody (NT) (6706)
- Cholinesterase Activity Assay Kit (Colorimetric) (K975)
- Acetylcholinesterase Activity Colorimetric Assay Kit (K764)
- ACHE Antibody (CT) (Clone 684CT8.3.4) (6707)

FOR RESEARCH USE ONLY! Not to be used on humans.