

Bioactive

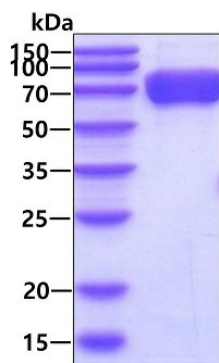
HuPro®

ACHE (Human) Recombinant Protein

Catalog # P7888

Size 500 ug

Applications



SDS-PAGE analysis of ACHE (Human) Recombinant Protein.

Specification

Product Description

Human ACHE (P22303, 32 a.a. - 614 a.a.) partial recombinant protein with His tag expressed in HE K293 cells.

Sequence

EGREDAELLVTVRGGRLRGIRLKTGPGPVSAFLGIPFAEPPMGPRRFLPPEPKQPWSGVVDATT
FQSVCYQYVDLTPGFEGTEMWNPNRESEDCLYLNWVTPYRPTSTPTVLVWIYGGGFYSGAS
SLDVYDGRFLVQAERTVLVSMNYRVGAFGLALPGSREAPGNVGLLDQRLALQWVQENVAAFG
GDPTSVTLFGESAGAASVGMHLLSPPSRGLFHRAVLQSGAPNGPWATVGMGEARRRATQLAHL
VGCPPGGTGGNDTELVACLRTRPAQVLVNHEWHVLPQESVFRFSFVPVVDGDFLSDTPEALINA
GDFHGLQVLVGCVKDEGSYFLVYGAPGFSKDNESLISRAEFLAGVRVGVQVSDLAEEAVVLHY
TDWLHPEDPARLREALSDVVDHNVCPVAQLAGRLAAQGARVYAYVFEHRASTLSWPLWMG
VPHGYEIEFIFGIPLDPSRNYTAEKIFAQRLMRYWANFARTGDPNEPRDPKAPQWPPYTAGAQQY
VSLDLRPLEVRRGLRAQACAFWNRFLPKLLSATDTLDEAERQWKAEFHRWSSYMVHWKNQFD
HYSKQDRCSDL

Host

Human

Theoretical MW (kDa)

65.59999999999998

Form

Liquid

Preparation Method

Mammalian cell (HEK 293) expression system

Purity	> 95% as analyzed by SDS-PAGE.
Endotoxin Level	< 1 EU/ug of protein by the LAL method.
Activity	Specific activity is > 6000 nmol/min/mg, and is defined as the amount of enzyme that cleaves 1.0 nmol of acetylthiocholine per minute at pH7.5 at 25°C.
Quality Control Testing	SDS-PAGE Stained with Coomassie Blue. SDS-PAGE analysis of ACHE (Human) Recombinant Protein.
Recommend Usage	Biological Activity SDS-PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (10% glycerol)
Storage Instruction	Store at 4°C for 1 week. For long term storage store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Functional Study
- SDS-PAGE

Gene Info — ACHE

Entrez GeneID	43
Protein Accession#	P22303
Gene Name	ACHE
Gene Alias	ARACHE, N-ACHE, YT
Gene Description	acetylcholinesterase (Yt blood group)
Omim ID	100740 112100
Gene Ontology	Hyperlink

Gene Summary

Acetylcholinesterase hydrolyzes the neurotransmitter, acetylcholine at neuromuscular junctions 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. [provided by RefSeq]

Other Designations

acetylcholinesterase|apoptosis-related acetylcholinesterase

Pathway

- [Glycerophospholipid metabolism](#)

Disease

- [Abortion](#)
- [Alzheimer disease](#)
- [Cardiovascular Diseases](#)
- [Cognition](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Hypercholesterolemia](#)
- [Mental Disorders](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Thyroid Neoplasms](#)
- [Weight Gain](#)