

# Recombinant Full Length Human ACHE Protein, GST-tagged

Cat. No. ACHE-778HF Lot. No. (See product label)

## SPECIFICATION

**Product Overview** Human ACHE full-length ORF ( AAH94752.1, 1 a.a. - 640 a.a.) recombinant protein with GST-tag at N-terminal.

**Species** Human

**Source** In Vitro Cell Free System

**ProteinLength** 640 amino acids

### Description

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, Jul 2008]

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<b>Molecular Mass</b>	61.2 kDa
<b>AA Sequence</b>	<p>MGTEKESPEP DCQKQFQAAV SVIQNLPKNG SYRPSYEEML RFYSYYKQAT          MGPCLVPRPG FWDPIGRYKW DAWNSLGKMS REEAMSAYIT EMKLVAQKVI          DTVPLGEVAE DMFGYFEPLY QVIPDMRPP ETFLRRVTGW KEQVVNGDVG          AVSEPPCLPK EPAPSPESH SPRDL DSEVF CDSLEQLEPE LVWTEQRAAS          GGKRDPRNSP VPPTKKEGLR GSPPGPQELD VWLLGTVRAL QESMQEVQAR          VQSLESMPRP PEQRPQPRPS ARPWPLGLPG PALLFFLLWP FVVQWLFRRMF          RTQKR</p>
<b>Applications</b>	<p>Enzyme-linked Immunoabsorbent Assay          Western Blot (Recombinant protein)          Antibody Production          Protein Array</p>
<b>Storage</b>	Store at -80 centigrade. Aliquot to avoid repeated freezing and thawing.
<b>Storage Buffer</b>	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	<a href="#">ACHE acetylcholinesterase [ Homo sapiens ]</a>
<b>Official Symbol</b>	<a href="#">ACHE</a>
<b>Synonyms</b>	ACHE; acetylcholinesterase; acetylcholinesterase (YT blood group) , acetylcholinesterase (Yt blood group) , YT; Yt blood group; apoptosis-related acetylcholinesterase; YT; ACEE; ARACHE; N-ACHE
<b>Gene ID</b>	<a href="#">43</a>

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mRNA Refseq	NM_000665
Protein Refseq	NP_000656
MIM	100740
UniProt ID	P22303

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