

## 32-13680: ACHE Human

**Format :** The ACHE solution (0.25mg/ml) contains 10% Glycerol and Phosphate-Buffered Saline (pH 7.4).  
**Alternative Name :** AChE, ACEE, ACES\_HUMAN, Acetylcholinesterase, ACHE, ARACHE, N-ACHE, VT, Acetylcholinesterase isoform E4-E6

### Description

Source: HEK293 Cells.

Physical Appearance: Sterile Filtered colorless solution.

Biological Activity: Specific activity is > 6,000 nmol/min/ug. Defined by the amount of enzyme that cleaves 1 nmole of acetylthiocholine per minute at pH 7.5 at 25°C.

Acetylcholinesterase (ACHE) belongs to the type-B carboxylesterase/lipase family. ACHE catalyzes the breakdown of acetylcholine and other choline esters that play a role as neurotransmitters. During neurotransmission, ACh is released from the presynaptic neuron into the synaptic cleft and binds ACh receptors on the post-synaptic membrane, transmitting the signal from the nerve. ACHE is located on the post-synaptic membrane, terminates the signal transmission by hydrolyzing ACh.

ACHE Human Recombinant produced in HEK cells is a single, glycosylated, polypeptide chain (32-614 a.a) containing a total of 592 amino acids, having a molecular mass of 65.6 kDa. ACHE is fused to a 6 amino acid His-tag at C-terminus, and is purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 10 µg / 2 µg  
**Purification :** Greater than 95.0% as determined by SDS-PAGE.  
**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.  
**Amino Acid :** DGSEGREDAE LLVTVRGGRL RGIRLKTPGG PVSAFLGIPF AEPPMGPRRF LPPEPKQPWS GVVDATTFQS VCYQYVDTRY PGFEGTEMWN PNRESEDCL YLNVWTPYPR PTSPTPLVW IYGGGFYSGA SSLDGYDGRF LVQAERTVLV SMNYRVGAFG FLALPGSREA PGNVGLLDQR LALQWVQENV AAFGGDPTSV TLFGESAGAA SVGMHLLSPP SRGLFHRAVL QSGAPNGPWA TVGMGEARRR ATQLAHLVGC PPGGTGGNDT ELVACLRTTP AQVLVNHWEH VLPQESVFRF SFVPVVDGDF LSDTPEALIN AGDFHGLQVL VGVVKDEGSY FLVYGAPGFS KDNESLISRA EFLAGVRVGV PQVSDLAEEA VVLHYTDWLH PEDPARLREA LSDVVGDNHV VCPVAQLAGR LAAQGARVYA YVFEHRASTL SWPLWMGVPH GYEIEFIFGI PLDPSRNYTA EEKIFAQRLM RYWANFARTG DPNEPRDPKA PQWPPYTAGA QQYVSLDLRP LEVRRGLRAQ ACAFWNRFLP KLLSATDTLD EAERQWKAEF HRWSSYMVHW KNQFDHYSKQ DRCSDLHHHH HH