



# Recombinant Human Choline O-acetyltransferase (CHAT)

<b>Product Code</b>	CSB-MP005314HU
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P28329
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	≥85% (SDS-PAGE)
<b>Sequence</b>	MGLRTAKKRG LGGGGKWKRE EGGGTRGRRE VRPACFLQSG GRGDPGDVGG PAGNPGCSPH PRAATRPPPL PAHTPAHTPE WCGAASAEAA EPRRAGPHLC IPAPGLTKTP ILEKVPRKMA AKTPSSEESG LPKLPVPLQ QTLATYLQCM RHLVSEEQFR KSQAIVQQFG APGGLGETLQ QKLLERQEK ANWVSEYWLN DMYLNNRLAL PVNSSPAVIF ARQHFPGTDD QLRFAASLIS GVLSYKALLD SHSIPTDCAK GQLSGQPLCM KQYYGLFSSY RLPGHTQDTL VAQNSSIMPE PEHVIVACCN QFFVLDVVIN FRRLSEGDLF TQLRKIVKMA SNEDERLPPI GLLTSDGRSE WAEARTVLVK DSTNRDSLDM IERCICLVCL DAPGGVELSD THRALQLLHG GGYSKNGANR WYDKSLQFVV GRDGTGCVVC EHSPFDGIVL VQCTEHLKHT VTQSSRKLIR ADSVSELPAP RRLRWKCSPE IQGHLASSAE KLQRIVKNLD FIVYKFDNYG KTFIKKQKCS PDAFIQVALQ LAFYRLHRRL VPTYESASIR RFQEGRVDNI RSATPEALAF VRAVTDHCAA VPASEKLLLL KDAIRAQTAY TVMAITGMAI DNHLLALREL ARAMCKELPE MFMDETYLMS NRFVLSTSQV PTTTEMFCCY GPVVPNGYGA CYNPQPETIL FCISSFHSC ETSSSKFAKA VEESLIDMRD LCSLLPPTES KPLATKEKAT RPSQGHQP
<b>Source</b>	Mammalian cell
<b>Target Names</b>	CHAT
<b>Protein Names</b>	Recommended name: Choline O-acetyltransferase Short name= CHOACTase Short name= ChAT Short name= Choline acetylase EC= 2.3.1.6
<b>Expression Region</b>	1-748
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full length protein
<b>Target Details</b>	This gene encodes an enzyme which catalyzes the biosynthesis of the neurotransmitter acetylcholine. This gene product is a characteristic feature of cholinergic neurons, and changes in these neurons may explain some of the symptoms of Alzheimer disease. Mutations in this gene are associated with congenital myasthenic syndrome associated with episodic apnea. Multiple transcript variants encoding different isoforms have been found for this gene,



and some of these variants have been shown to encode more than one isoform.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.