



Recombinant Rat Choline O-acetyltransferase (Chat)

Product Code	CSB-EP005314RA
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P32738
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	>85% (SDS-PAGE)
Sequence	<p>PILEKAPQK MPVKASSWEE LDLPKLPVPP LQQTLATYLQ CMQHLVPEEQ FRKSQAIVKR FGAPGGLGET LQEKLLERQE KTANWVSEYW LNDMYLNNRL ALPVNSSPAV IFARQHFQDT NDQLRFAACL ISGVLSYKTL LDSHSLPTDW AKGQLSGQPL CMKQYYRLF S YRLPGHTQD TLVAQKSSIM PEPEHVIVAC CNQFFVLV DVV INFRRLSEGD LFTQLRKIVK MASNEDERLP PIGLLTSDGR SEWAKARTVL LKDSTNRDSL DMIERCICLV CLDGPGTGEL SDTHRALQLL HGGGCSLNGA NRWYDKSLQF VVGRDGTGCV VCEHSPFDGI VLVQCTEHLL KHMMTSNKKL VRADSVSELP APRRLRLKCS PETQGHCLASS AEKLQRIVKN LDFIVYKFDN YGKTFIKKQK YSPDGFIQVA LQLAYYRLYQ RLVPTYESAS IRRFQEGRVD NIRSATPEAL AFVQAMTDHK AAMPASEKLQ LLQTAMQAHK QYTVMAITGM AIDNHLLALR ELARDLCKEP PEMFMDETYL MSNRFVLSTS QVPTTMMEMFC CYGPVVPNGN GACYNPQPEA ITFCISSFHS CKETSSVEFA EAVGASLVDM RDLCSSRQPA DSKPPAPKEK ARGPSQAKQS</p>
Source	E.coli
Target Names	Chat
Protein Names	Recommended name: Choline O-acetyltransferase Short name= CHOACTase Short name= ChAT Short name= Choline acetylase EC= 2.3.1.6
Expression Region	2-640
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	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.
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.

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.