



# Recombinant Rat Choline O-acetyltransferase (Chat)

<b>Product Code</b>	CSB-MP005314RA
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P32738
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	<p>PILEKAPQK MPVKASSWEE LDLPKLPVPP LQQTALATYLQ CMQHLVPEEQ  FRKSQAIVKR FGAPGGLGET LQEKLLERQE KTANWVSEYW LNDMYLNNRL  ALPVNSSPAV IFARQHFQDT NDQLRFAACL ISGVLSYKTL LDSHSLPTDW  AKGQLSGQPL CMKQYYRLFV SYRLPGHTQD 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 LQLAYRRLYQ RLVPTYESAS  IRRFQEGRVD NIRSATPEAL AFVQAMTDHK AAMPASEKLQ LLQTAMQAHK  QYTVMAITGM AIDNHLLALR ELARDLCKEP PEMFMDETYL MSNRFVLSTS  QVPTTMMEMFC CYGPVVPNGN GACYNPQPEA ITFCISSFHS CKETSSVEFA  EAVGASLVDM RDLCSSRQPA DSKPPAPKEK ARGPSQAKQS</p>
<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>	2-640
<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 of Mature 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.
<b>Reconstitution</b>	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.