

## Recombinant Human CHAT protein, His-tagged

Cat. No. CHAT-172H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human CHAT(Asp517~Pro732) fused with His tag at N-terminal was expressed in E. coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	Asp517~Pro732
<b>Description</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's disease. Polymorphisms in this gene have been associated with Alzheimer's disease and mild cognitive impairment. 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>Form</b>	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300
<b>Molecular Mass</b>	28.0kDa
<b>Endotoxin</b>	<1.0EU per 1g (determined by the LAL method)
<b>Purity</b>	> 95%

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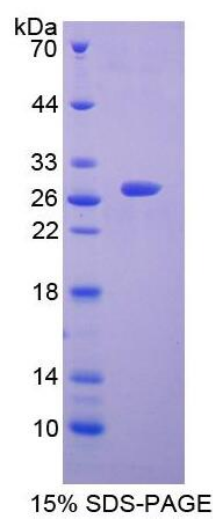
 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Applications</b>	Positive Control; Immunogen; SDS-PAGE; WB. If bio-activity of the protein is needed, please check active protein
<b>Stability</b>	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
<b>Storage</b>	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
<b>Reconstitution</b>	Reconstitute in PBS or others.
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	CHAT choline O-acetyltransferase [ Homo sapiens ]
<b>Official Symbol</b>	CHAT
<b>Synonyms</b>	CHAT; choline O-acetyltransferase; choline acetyltransferase; choline acetylase; acetyl CoA:choline O-acetyltransferase; CMS1A; CMS1A2; CHOACTASE;
<b>Gene ID</b>	1103
<b>mRNA Refseq</b>	NM_001142929
<b>Protein Refseq</b>	NP_001136401
<b>MIM</b>	118490
<b>UniProt ID</b>	P28329

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<b>Chromosome Location</b>	10q11.2
<b>Pathway</b>	Acetylcholine Neurotransmitter Release Cycle, organism-specific biosystem; Acetylcholine Synthesis, organism-specific biosystem; Biogenic Amine Synthesis, organism-specific biosystem; Cholinergic synapse, organism-specific biosystem; Glycerophospholipid metabolism, organism-specific biosystem; Glycerophospholipid metabolism, conserved biosystem; Neuronal System, organism-specific biosystem;
<b>Function</b>	choline O-acetyltransferase activity; choline binding; transferase activity, transferring acyl groups;
 <p>15% SDS-PAGE</p>	

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