

Recombinant Human CHAT HEK293T cell lysate

Cat. No. CHAT-175HCL Lot. No. (See product label)

SPECIFICATION

Product Overview	Human CHAT derived in Human HEK293T cell line. The cell lysate is provided in RIPA buffer.
Species	Human
Source	HEK293
Description	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.
Molecular Mass	82.4 kDa
Components	1 vial of 100 g gene specific transient over-expression cell lysate in RIPA buffer; 1 vial of 100 g empty vector transfected control cell lysate in RIPA buffer; 1 vial of 250ul 2xSDS Sample Buffer (4% SDS, 125mM Tris-HCl pH6.8, 10% Glycerol, 0.002% Bromphenol blue, 100mM DTT).
Preparation method	HEK293T cells in 10-cm dishes were transiently transfected with MegaTran Transfection Reagent and 5ug TrueORF cDNA plasmid. Transfected cells were cultured for 48hrs before collection. The cells were lysed in modified RIPA buffer

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(25mM Tris-HCl pH7.6, 150mM NaCl, 1% NP-40, 1mM EDTA, 1xProteinase inhibitor cocktail mix, 1mM PMSF and 1mM Na3VO4), and then centrifuged to clarify the lysate. Protein concentration was measured by BCA kit. Cell lysates were aliquoted and stored at -20 centigrade before shipping.

GENE INFORMATION

Gene Name [CHAT choline O-acetyltransferase \[Homo sapiens \]](#)

Official Symbol CHAT

Synonyms CHAT; choline O-acetyltransferase; choline acetyltransferase; choline acetylase; acetyl CoA:choline O-acetyltransferase; CMS1A; CMS1A2; CHOACTASE;

Gene ID [1103](#)

mRNA Refseq [NM_020549](#)

Protein Refseq [NP_065574](#)

MIM [118490](#)

UniProt ID P28329

Chromosome Location 10q11.2

Pathway

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

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metabolism, conserved biosystem; Neuronal System, organism-specific biosystem;

Function

choline O-acetyltransferase activity; choline binding; transferase activity, transferring acyl groups;

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