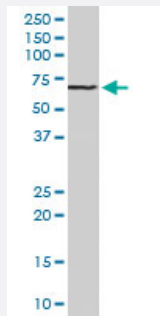


# CHAT polyclonal antibody

Catalog # PAB6736      Size 100 ug

## Applications



### Western Blot (Tissue lysate)

CHAT polyclonal antibody (Cat # PAB6736) (0.03 ug/mL) staining of human placenta lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

## Specification

|                                |                                                                                                                                                  |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Description</b>     | Goat polyclonal antibody raised against synthetic peptide of CHAT.                                                                               |
| <b>Immunogen</b>               | A synthetic peptide corresponding to human CHAT.                                                                                                 |
| <b>Sequence</b>                | CKEKATRPSQGHQP                                                                                                                                   |
| <b>Host</b>                    | Goat                                                                                                                                             |
| <b>Theoretical MW (kDa)</b>    | 70.4, 82.6, 74.4                                                                                                                                 |
| <b>Reactivity</b>              | Human                                                                                                                                            |
| <b>Specificity</b>             | This antibody is expected to recognize both reported isoforms. NP_066264, NP_066265 and NP_066266 are identical proteins representing isoform 1. |
| <b>Form</b>                    | Liquid                                                                                                                                           |
| <b>Purification</b>            | Antigen affinity purification                                                                                                                    |
| <b>Concentration</b>           | 0.5 mg/mL                                                                                                                                        |
| <b>Quality Control Testing</b> | Antibody Reactive Against Synthetic Peptide.                                                                                                     |

|                            |                                                                                                                        |
|----------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>Recommend Usage</b>     | ELISA (1:32000)<br>Western Blot (0.03-0.3 ug/mL)<br>The optimal working dilution should be determined by the end user. |
| <b>Storage Buffer</b>      | In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide)                                                                  |
| <b>Storage Instruction</b> | Store at -20°C.<br>Aliquot to avoid repeated freezing and thawing.                                                     |
| <b>Note</b>                | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |

## Applications

- Western Blot (Tissue lysate)

CHAT polyclonal antibody (Cat # PAB6736) (0.03 ug/mL) staining of human placenta lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

- Enzyme-linked Immunoabsorbent Assay

## Gene Info — CHAT

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Entrez GeneID</b>      | <a href="#">1103</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Protein Accession#</b> | <a href="#">NP_065574</a> ; <a href="#">NP_066264</a> ; <a href="#">NP_066265</a> ; <a href="#">NP_066266</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Gene Name</b>          | CHAT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Gene Alias</b>         | CMS1A, CMS1A2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Gene Description</b>   | choline acetyltransferase                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Omim ID</b>            | <a href="#">118490</a> <a href="#">254210</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Gene Ontology</b>      | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Gene Summary</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. [provided by RefSeq] |
| <b>Other Designations</b> | OTTHUMP00000019583 OTTHUMP00000019584 acetyl CoA:choline O-acetyltransferase                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## Publication Reference

- [Regulation of cholinergic gene expression by nerve growth factor depends on the phosphatidylinositol-3'-kinase pathway.](#)

Madziar B, Lopez-Coviella I, Zemelko V, Berse B.

Journal of Neurochemistry 2005 Feb; 92(4):767.

## Pathway

- [Glycerophospholipid metabolism](#)

## Disease

- [Alzheimer disease](#)
- [Amnesia](#)
- [Bipolar Disorder](#)
- [Cardiovascular Diseases](#)
- [Cognition](#)
- [Cognition Disorders](#)
- [Depressive Disorder](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Hypercholesterolemia](#)
- [Mental Disorders](#)
- [Metabolic Syndrome X](#)
- [Neoplasms](#)
- [Neuropsychological Tests](#)

- [Osteoporosis](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Tobacco Use Disorder](#)
- [Weight Gain](#)