



Product Specification Sheet

**Choline O-acetyltransferase antibody**

Cat # CHAT11-A	Rabbit anti-Human Choline O-acetyltransferase (CHAT) antibody	<b>SIZE:</b> 100 µg
Cat # CHAT31-A	Rabbit anti-Mouse Choline O-acetyltransferase (CHAT) antibody	<b>SIZE:</b> 100 µg

Catalyzes the reversible synthesis of acetylcholine (ACh) from acetyl CoA and choline at cholinergic synapses.

**Source of Antigen or Antibodies**

**Uniprot:** CHAT11-A P28329      CHAT31-A Q03059

**Host:** Rabbit

**Clonality:** Polyclonal

**Purification:** Ammonium sulfate followed by peptide affinity chromatography

**Immunogen:** Synthetic peptide derived from within amino acid 700-748 for CHAT11-A and 600-641 for CHAT31-A.

**Cross reactivity:** The peptide used as an immunogen (**CHAT11-A**) exhibits 100% homology with Pan Troglodytes, Pan paniscus,us, 100% Pongo abeii, 100% Horse. 94% Gorilla. 89% Macac mulatta, Papio anbus. 94% Dog. 88% Pig, Camel. 84% Bovine, Goat.

The peptide used as an immunogen (**CHAT31-A**) exhibits 91% homology with Rat.

**Subcellular Location:** Cytosol, Nucleus, Cytoplasm, Neuron projection, and Presynapse

**Alternative names:** CHOACTase, ChAT, Choline acetylase

**Recommended Secondary Antibody:** Goat anti-Rabbit IgG-HRP (**ADI cat#20320**)

**Form & Storage of Antibodies**

**Affinity pure IgG Solution**

Concentration: 0.5 mg/ml      Volume: 200 µl  
Supplied in PBS, pH 7.4 + 0.1% BSA  
The antibody can be made available carrier free or conjugated to HRP, Biotin, or FITC on request

**Lyophilized powder**

Reconstitute powder in 200 µl distilled water to 0.5 mg/ml

**Storage:**

**Short-term:** 4°C for 1 month

**Long-term:** at -20°C or below in suitable aliquots after reconstitution for 1 year. Do not expose to multiple freeze/thaw cycles or store working, diluted solutions. Glycerol may be added to a final concentration of 50% and antibodies can be stored un-aliquoted at -20°C.

**Recommended Usage**

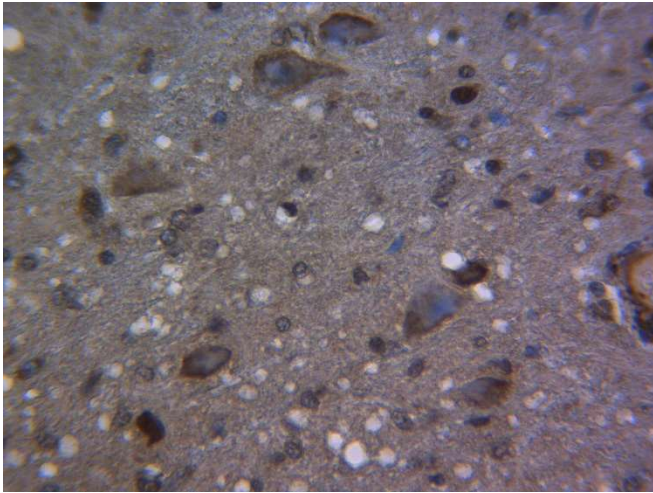
**Immunohistochemistry:** 1-10 µg/ml. QC tested using 10 mM sodium citrate pH 6, antigen retrieval buffer. The antibody may work better with no retrieval or different retrieval solutions.

The above concentrations are a *suggestion*, user's must optimize their assay based on their own conditions. The antibody may work in other applications such as Immunofluorescence. These methods have not been tested by ADI.

*\*This product is for In vitro research use only.*

**Related materials available from ADI**

Catalog#	Description
GFAP11-A	Rabbit Anti-Mouse phospho Glial fibrillary acidic protein (Ser266) antibody
GFAP21-A	Rabbit Anti-Mouse Glial fibrillary acidic protein (GFAP) antibody
CHAT1-A	190424IA



**Immunohistochemistry:** FFPE Rat Brain slide was heated for 20 minutes at 60°C then deparaffinized. Antigen retrieval was performed for 10 minutes at 95°C in a microwave using 10 mM pH 6, sodium citrate buffer. The slide was then cooled for 20 minutes at room temperature before being blocked for 30 minutes with 2.5% normal goat serum. **CHAT31-A** was diluted to 5 µg/ml in TBST+0.1% BSA and incubated overnight at 4°C. The slides were then washed twice and incubated with 3% hydrogen peroxide for 10 minutes to quench endogenous peroxidase. The slide was washed then incubated with Goat anti-Rabbit IgG HRP polymer detection reagent for 30 minutes at room temperature. The slide was washed twice, incubated with DAB for 3 minutes, washed with distilled water, then counterstained for 1 minute with Gil's II Hematoxylin before being cover-slipped.