

Datasheet: 2080-0000

Description:	GOAT ANTI HUMAN CHOLINE ACETYLTRANSFERASE
Specificity:	CHOLINE ACETYLTRANSFERASE
Other names:	ChAT
Format:	Serum
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	50 µl

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen	▪			1/500 - 1/1000
Western Blotting	▪			1/1000 - 1/5000

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using the appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Reacts with: Rat, Guinea Pig, Mouse

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Serum - liquid

Preservative Stabilisers

0.2% Sodium Azide (NaN₃)

Immunogen

Human placental enzyme.

External Database Links

UniProt:

[P28329](https://www.uniprot.org/uniprot/P28329)

[Related reagents](#)

Entrez Gene:[1103](#) CHAT [Related reagents](#)

RRID AB_2079599

Specificity **Goat anti Human choline acetyl transferase antibody** recognizes Choline acetyl transferase, also known as ChAT. ChAT is a 748 amino acid ~70-80 kDa cytoplasmic protein present in cholinergic neurons in the brain and central nervous system, responsible for the reversible synthesis of acetylcholine from acetyl CoA and choline ([Kim et al. 2006](#)). Three isoforms have been described derived from alternative splicing and differing by alteration or deletion in the N-terminal region.

Mutations in the CHAT gene can lead to the development of Myasthenic syndrome, congenital, 6, presynaptic ([CMS6](#)), an autosomal recessive condition characterized by failure of neuromuscular transmission, not of autoimmune origin. Sufferers show variable widespread muscular fatigability worsening with physical effort ([Kraner et al. 2003](#)).

References 1. Ding, J. *et al.* (2017) Neuroprotection and CD131/GDNF/AKT Pathway of Carbamylated Erythropoietin in Hypoxic Neurons. [Mol Neurobiol. 54 \(7\): 5051-60.](#)

Storage -20°C only (ship +4°C)

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10239 available at: 10239: <https://www.bio-rad-antibodies.com/uploads/MSDS/10239.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Goat IgG (Fc) (STAR122...) [FITC](#), [HRP](#)**North & South** Tel: +1 800 265 7376**America** Fax: +1 919 878 3751Email: antibody_sales_us@bio-rad.com**Worldwide**

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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Printed on 07 Jan 2022

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