

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Choline Acetyltransferase/ChAT in direct ELISAs and Western blots. Recognizes both ChAT isoform 1 (ChAT-69) and isoform 2 (ChAT-82).
Source	Monoclonal Mouse IgG ₁ Clone # 334008
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Choline Acetyltransferase/ChAT isoform 1 Ala2-Pro630 Accession # NP_066266
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

ChAT catalyzes the production of the neurotransmitter acetylcholine (ACh), which is required for cholinergic neuron communication. It serves as a marker for functional cholinergic neurons in the central and peripheral nervous systems. At least six ChAT mRNAs encoding 69 kDa, 82 kDa and 74 kDa ChAT proteins have been identified. Compared to the 82 kDa form, 69 kDa ChAT lacks the N-terminal 118 amino acid extension containing a nuclear localization signal. As a result the 69 kDa ChAT is primarily localized to the cytoplasm. Human 69 kDa ChAT shares 86% amino acid sequence identity with the mouse or rat ChAT.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.