

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 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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.

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