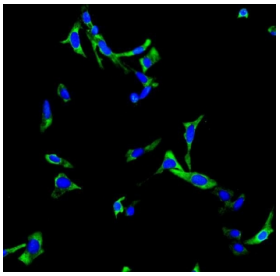
ChAT Antibody / Choline Acetyltransferase (RQ6043)

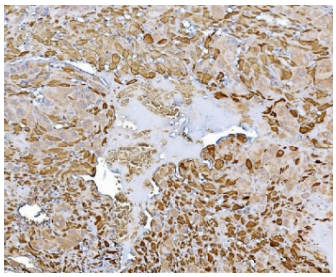
Catalog No.	Formulation	Size
RQ6043	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

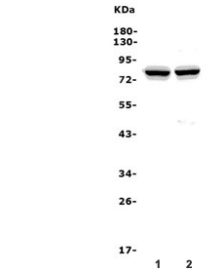
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P28329
Localization	Nuclear, cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry : 1-2ug/ml Flow Cytometry : 1-3ug/million cells Immunofluorescence : 2-4ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This ChAT antibody is available for research use only.



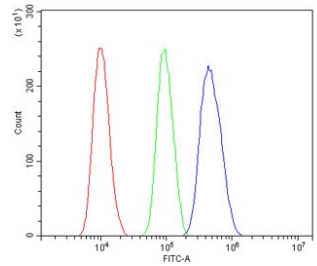
Immunofluorescent staining of FFPE human U-2 OS cells with ChAT antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



IHC staining of FFPE human placenta with ChAT antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human 1) placenta and 2) U-87 MG lysate. Predicted molecular weight ~83/74/70 kDa (isoforms M/S/R).



Flow cytometry testing of human SiHa cells with ChAT antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ChAT antibody.

Description

Choline acetyltransferase (commonly abbreviated as ChAT or CAT) is a transferase enzyme responsible for the synthesis of the neurotransmitter acetylcholine. In humans, the choline acetyltransferase enzyme is encoded by the CHAT gene. This gene product is a characteristic feature of cholinergic neurons, and changes in these neurons may explain some of the symptoms of Alzheimer's disease. Polymorphisms in this gene have been associated with Alzheimer's disease and mild cognitive impairment. 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.

Application Notes

Optimal dilution of the ChAT antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids T25-K731) was used as the immunogen for the ChAT antibody.

Storage

After reconstitution, the ChAT antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.