

ACHE Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant ACHE.
Catalog # AT1025a

Product Information

Application	E
Primary Accession	P22303
Other Accession	NM_000665
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	2C3
Calculated MW	67796

Additional Information

Gene ID	43
Other Names	Acetylcholinesterase, AChE, ACHE
Target/Specificity	ACHE (NP_000656, 515 a.a. ~ 614 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	ACHE Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

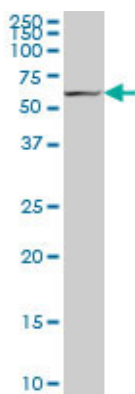
Background

Acetylcholinesterase hydrolyzes the neurotransmitter, acetylcholine at neuromuscular junctions and brain cholinergic synapses, and thus terminates signal transmission. It is also found on the red blood cell membranes, where it constitutes the Yt blood group antigen. Acetylcholinesterase exists in multiple molecular forms which possess similar catalytic properties, but differ in their oligomeric assembly and mode of cell attachment to the cell surface. It is encoded by the single ACHE gene, and the structural diversity in the gene products arises from alternative mRNA splicing, and post-translational associations of catalytic and structural subunits. The major form of acetylcholinesterase found in brain, muscle and other tissues is the hydrophilic species, which forms disulfide-linked oligomers with collagenous, or lipid-containing structural subunits. The other, alternatively spliced form, expressed primarily in the erythroid tissues, differs at the C-terminal end, and contains a cleavable hydrophobic peptide with a GPI-anchor site. It associates with the membranes through the phosphoinositide (PI) moieties added post-translationally.

References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. *Diabetes Care*, 2010 Jul 13. PMID 20628086. Physiogenomic analysis of statin-treated patients: domain-specific counter effects within the ACACB gene on low-density lipoprotein cholesterol? Rua?o G, et al. *Pharmacogenomics*, 2010 Jul. PMID 20602615. Evaluation of Candidate Genes for Cholinesterase Activity in Farmworkers Exposed to Organophosphorous Pesticides - Association of SNPs in BCHE. Howard TD, et al. *Environ Health Perspect*, 2010 Jun 8. PMID 20529763. Comparison of human and guinea pig acetylcholinesterase sequences and rates of oxime-assisted reactivation. Cadieux CL, et al. *Chem Biol Interact*, 2010 Sep 6. PMID 20433814. Single PCR multiplex SNaPshot reaction for detection of eleven blood group nucleotide polymorphisms: optimization, validation, and one year of routine clinical use. Di Cristofaro J, et al. *J Mol Diagn*, 2010 Jul. PMID 20431033.

Images



ACHE monoclonal antibody (M02), clone 2C3 Western Blot analysis of ACHE expression in NIH/3T3 (Cat # L018V1).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.