

ACHE Antibody (monoclonal) (M02)

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

Specification

ACHE Antibody (monoclonal) (M02) - Product Information

Application Е **Primary Accession** P22303 Other Accession NM 000665 Reactivity Human Host Mouse Clonality **Monoclonal** Isotype IgG2a Kappa Calculated MW 67796

ACHE Antibody (monoclonal) (M02) - Additional

Gene ID 43

Information

Other Names

Acetylcholinesterase, AChE, ACHE

Target/Specificity

ACHE (NP_000656, 515 a.a. \sim 614 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

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.

ACHE Antibody (monoclonal) (M02) - Protocols

Provided below are standard protocols that you may find useful for product applications.

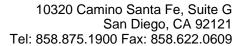
• Western Blot

ACHE Antibody (monoclonal) (M02) - 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.

ACHE Antibody (monoclonal) (M02) - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-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.





• Blocking Peptides

- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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.