
Acetylcholinesterase (4E11) Antibody

Subcategory: Mouse Monoclonal Antibody

Cat. No.: 250379

Unit: 0.2 mg

Description:

Acetylcholinesterase (AChE, EC.3.1.1.7.) is an enzyme located in the postsynaptic membrane and in the muscle endplates, where it hydrolyses the neurotransmitter acetylcholin. AChE from brain is a tetramer (G4-AChE) with a molecular mass of 320 kDa, AChE from erythrocytes is a dimer (G2-AChE) with a molecular mass of 170 kDa. Detection of higher levels of AChE in amniotic fluid can indicate fetal malformations such as neural tube defects. This antibody is specific for brain AChE and does not recognize AChE from erythrocytes. The antibody can thus distinguish between mammalian brain AChE and erythrocyte AChE. There is a weak cross-reactivity with *Torpedo marmorata* AChE but none with AChE from electric eel or human BtChE.

Isotype: Mouse IgG1/k

Applications: E, WB

Species Reactivity: H, B, MI, Other

Format: Each vial contains 0.2 mg IgG in 0.2 ml (1 mg/ml) of PBS pH7.4 with 0.09% sodium azide. Antibody was purified by Protein-A/G affinity chromatography.

Alternate Names: AChE

Accession No.: P22303

Antigen: C-terminal 10 residues of brain acetylcholinesterase (human and bovine), absent from the erythrocyte enzyme.

Application Notes: Product Cat. No. 250379 can be used in ELISA on amniotic fluid for the diagnosis of neural tube defects. Product Cat. No. 250379 is used as capture antibody (immobilized with an anti-mouse IgG) in enzyme antigen immunoassay (EAIA), in which the AChE is captured and used directly as substrate for acetylthiocholiniodide (Ellmann's reaction). Product Cat. No. 250379 reacts in western blot with native and denatured human and bovine detergent-soluble and salt-soluble AChE. No cross-reactivity is seen with erythrocyte AChE. E: 1:250; WB: 1:75

Storage: Store at 4°C. Product is guaranteed 6 months from the date of shipment.

For research use only, not for diagnostic or therapeutic procedures.