ANTIBODYSHOP®

PRODUCT SPECIFICATION

Anti Acetylcholinesterase (human brain, AChE) mouse monoclonal antibody

Subclass: IgG_1/k

PRODUCT NO. **HYB 111-05**

PRESENTATION

Preparation:	Protein-A/G purified
Content:	Available in 200 µL and 1 mL, 1 mg/mL
Solvent:	0.01 M phosphate buffer, pH 7.4, with 0.5 M NaCl and 15mM sodium azide
Storage:	In the dark at 4-8ºC

ANTIGEN

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 (1,2).

IMMUNOGEN

Brain acetylcholinesterase, human, purified and detergent solubilized (1).

SPECIFICITY

HYB 111-05 has specificity for human acetylcholinesterase. No cross-reaction is seen with human BtChE, or with AChE from flounder or Torpedo marmorata.

EPITOPE SPECIFICITY

Not determined

REACTIVITY

HYB 111-05 reacts with both G2-and G4-AChE (native detergent soluble) in ELISA and EAIA using the antibody as capture antibody. HYB 111-05 reacts 17 times stronger with human brain AChE than with human erythrocyte AChE.

CULTURE MEDIUM

Dulbecco's modified Eagle's medium with 10% fetal calf serum

FUSION PARTNER

X63-Ag8.653.

IMMUNIZATION

Female CF1 x BALB/c mice immunized i.p. with immunogen adsorbed onto Al(OH)3

APPLICATION

Method	Usability	Dilution guideline	References
ELISA	Yes	1:4000	
Immunoblotting	Yes		
Immunohistochemistry	Not determined		

The dilution guideline for ELISA is based on plates coated with anti-mouse antibody to catch the monoclonal antibody followed by antigen at 20 units/mL. Detection is done with Ellmans reagent. Users should determine the optimal dilutions for their own purpose.

REFERENCES

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3. Liao J, Boschetti N, Mortensen V, Jensen SP, Koch C, Norgaard-Pedersen B, Brodbeck U (1994) Characterization of salt-soluble forms of acetylcholinesterase from bovine brain. J Neurochem 63:1446-1453.
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6. Norgaard-Pedersen B, Hangaard J, Bjerrum OJ (1983) Quantitative enzyme antigen immunoassay of acetylcholinesterase in amniotic fluid. Clin Chem 29:1061-1064.