

**Anti Acetylcholinesterase (human brain, AChE)  
Mouse Monoclonal Antibody**Subclass: IgG<sub>1</sub>/κ

PRODUCT NO.	<b>HYB 111-05</b>																
PRESENTATION	Preparation: Protein-A/G purified Content: 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 4-8°C																
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 <i>Torpedo marmorata</i> .																
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) <sub>3</sub>																
APPLICATION	<table border="1"><thead><tr><th>Method</th><th>Usability</th><th>Dilution guideline</th><th>References</th></tr></thead><tbody><tr><td>ELISA</td><td>Yes</td><td></td><td></td></tr><tr><td>Immunoblotting</td><td>Yes</td><td></td><td></td></tr><tr><td>Immunohistochemistry</td><td>Not determined</td><td></td><td></td></tr></tbody></table>	Method	Usability	Dilution guideline	References	ELISA	Yes			Immunoblotting	Yes			Immunohistochemistry	Not determined		
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REFERENCES	<ol style="list-style-type: none"><li>Sorensen K, Gentinetta R, Brodbeck U (1982) An amphiphile-dependent form of human brain caudate nucleus acetylcholinesterase: purification and properties. <i>J Neurochem</i> 39:1050-1060.</li><li>Massoulie J, Bon S (1982) The molecular forms of cholinesterase and acetylcholinesterase in vertebrates. <i>Annu Rev Neurosci</i> 5:57-106.</li><li>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. <i>J Neurochem</i> 63:1446-1453.</li><li>Liao J, Mortensen V, Noregaard-Pedersen B, Koch C, Brodbeck U (1993) Monoclonal antibodies against brain acetylcholinesterases which recognize the subunits bearing the hydrophobic anchor. <i>Eur J Biochem</i> 215:333-340.</li><li>Aziz-Aloya R, Sternfeld M, Soreq H (1993) Promoter elements and alternative splicing in the human AChE gene. <i>Prog Brain Res</i> 98:147-153.</li><li>Norgaard-Pedersen B, Hangaard J, Bjerrum OJ (1983) Quantitative enzyme antigen immunoassay of acetylcholinesterase in amniotic fluid. <i>Clin Chem</i> 29:1061-1064.</li></ol>
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**CONDITIONS**

All products are supplied on the understanding that they are for in vitro use only. The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.