

Human butyrylcholinesterase (B ChE) mouse monoclonal antibody (clone 14)

Catalog PODI-0071

Product specification sheet PS-PAb0071

Product description

Butyrylcholinesterase, also known as pseudocholinesterase, is a disulfide linked tetrameric enzyme produced by the liver and also found in the blood circulation. Its function is not fully understood but it is known to hydrolyze a range of (choline) esters and therefore important for the detoxification of drugs and toxins including the muscle relaxant succinylcholine and several pesticides.

In the healthy brain, cholinesterase is mainly responsible for regulating acetyl choline levels while BChE plays a minor role. In contrast, BChE activity is reported to be increased in Alzheimer's disease patients and it was suggested that selective inhibition of BChE could have a therapeutic effect.

Product type:	Primary antibodies
Clone number:	14
Immunogen:	Purified recombinant human butyrylcholinesterase (BChE) expressed in HEK293 cells
Reacts with:	Human
Tested applications:	ELISA
Purity:	MabSelect Protein A purified, >95%
Isotype:	IgG1
Light chain type:	Kappa
Storage buffer:	PBS
Form:	Liquid
Concentration:	0.5 mg/ml

Storage and stability

Store at 4 °C, short term (1-2 weeks). For long-term storage, aliquot and keep at or below -20° C. Avoid repeated freeze-thaw cycles

Data



Anti-BChE clone 14 and clone recognizes only folded butyrylcholinesterase but not after the protein has been denatured with SDS. Dot blot characterization of anti-BChE clone 14. Purified BChE (50 ng protein/spot) was incubated in PBS with additives prior to spotting: (from left to right) nothing added, 100 mM DTT, 0.1% SDS, 100 mM DTT + 0.1% SDS

References

Darvesh S, Hopkins DA, Geula C. Neurobiology of butyrylcholinesterase. *Nat Rev Neurosci.* 2003 Feb;4(2):131-8.

Nicolet Y, Lockridge O, Masson P, Fontecilla-Camps JC, Nachon F. Crystal structure of human butyrylcholinesterase and of its complexes with substrate and products. *J Biol Chem*. 2003 Oct 17;278(42):41141-7.

Mesulam M, Guillozet A, Shaw P, Quinn B. Widely spread butyrylcholinesterase can hydrolyze acetylcholine in the normal and Alzheimer brain. *Neurobiol Dis*. 2002 Feb;9(1):88-93.

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