Data Sheet (Cat.No.TMPY-01596)

TargetMol

Butyrylcholinesterase Protein, Mouse, Recombinant (His)

General Information

Synonyms: C730038G20Rik;butyrylcholinesterase

Protein Construction: Glu30-Leu603

Species: Mouse

Expression Host: HEK293 Cells

Accession: Q03311

Molecular Weight: 66.13 kDa (Predicted); 70-90 kDa (Reducing conditions due to glycosylation)

QC Testing

Biological Activity: Measured by its ability to cleave Butyrylthiocholine. The specific activity is > 50000 pmoles/min/μg. (QC Test)

Purity: > 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC

Endotoxin: < 1.0 EU/μg of the protein as determined by the LAL method.

Formulation: Supplied as 0.22μm filtered solution in 50 mM Tris, 150 mM NaCl (pH 8.0).

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

Solutions are shipped with dry ice.

Protein Background

Butyrylcholinesterase is a serine hydrolase biochemically related to the cholinergic enzyme acetylcholinesterase. It is capable of hydrolyzing esters of choline. Butyrylcholinesterase has unique enzymatic properties and is widely distributed in the nervous system, raising the possibility of its involvement in neural function.

Reference

Lockridge O. (1988) Structure of human serum cholinesterase. Bio Essays. 9(4):125-8.
Mesulam M,et al.(2002) Widely Spread Butyrylcholinesterase Can Hydrolyze Acetylcholine in the Normal and Alzheimer Brain. Neurobiology of Disease. 9(1): 88-93.
Nicolet Y,et al.(2003) Crystal Structure of Human Butyrylcholinesterase and of Its Complexes with Substrate and Products. The Journal of Biological Chemistry. 278: 41141-7.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481