

## 32-7509: Recombinant Human Butyrylcholine Esterase/BCHE (C-6His)

**Gene :** BCHE  
**Gene ID :** 590  
**Uniprot ID :** P06276

### Description

Source: Human Cells.  
MW :66.12kD.

Recombinant Human Butyrylcholine Esterase is produced by our Mammalian expression system and the target gene encoding Glu29-Leu602 is expressed with a 6His tag at the C-terminus. Butyrylcholine Esterase (BCHE) is a secreted protein that belongs to the type-B carboxylesterase/lipase family. BCHE is a major acetylcholine hydrolyzing enzyme in the circulation. It is detected in blood plasma and present in most cells except erythrocytes. BCHE is an esterase with broad substrate specificity. BCHE can contribute to the inactivation of the neurotransmitter acetylcholine. BCHE can degrade a large number of neurotoxic organophosphate esters. Thus, it plays important pharmacological and toxicological roles and is thought to be involved in the pathological progression. Defects in BCHE are the cause of butyrylcholinesterase deficiency (BChE deficiency) which is a metabolic disorder characterized by prolonged apnoea after the use of certain anesthetic drugs, including the muscle relaxants succinylcholine and other ester local anesthetics.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 150mM NaCl, pH 7.5.  
**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.  
**Amino Acid :** EDDIIIIATKNGKVRGMNLTVFGGTVTAFLGIPYAQPPLGRLRFKKPQSLTKWSDIWNATKYANSCCQNIDQSFPG  
FHGSEMWNPNNTDLSIEDCLYLNWVWIPAPKPKNATVLIWIYGGGFQTGTSSLHVVYDGKFLARVERVIVVSMNYRV  
GALGFLALPGNPEAPGNMGLFDQQLALQWVQKNIAAFGGNPKSVTLFGESAGAASVSLHLLSPGSHSLFTRAIL  
QSGSFNAPWAVTSLYEARNRTLNLAKLTGCSRENETEIIKCLRNDPQEILLNEAFVVPYGTPLSVNFGPTVDGD  
FLTDMPDILLELGQFKKTQILVGVNKDEGTAFLVYGAPGFSKDNNSIITRKEFQEGLKIFFPGVSEFGKESILFHYT  
DWVDDQRPENYREALGDVVGVDYNFICPALEFTKKFSEWGNNAFFYFEHRSSKLPWPEWVMGVMHGYEIEFVF  
GLPLERRDNYTKAEEILSRIVKRWANFAKYGNPNETQNNSTSWPVFKSTEQKYLTLNTESTRIMTKLRAQQCR  
FWTSFFPKVLEMTGNIDEAEWEWKAGFHRWNNYMMDWKNQFNDYTSKKESCGLVDHHHHHHH

### Application Note

**Endotoxin :** Less than 0.1 ng/Åµg (1 IEU/Åµg) as determined by LAL test.