

**Recombinant Protein Technical Manual** 

Recombinant Human Butyrylcholinesterase/BCHE Protein (His Tag) RPES2406

Expression host: Human Cells

## Product Data:

Product SKU: RPES2406

Species: Human

**Size:** 10µg

luman

**Uniprot:** NP\_000046.1

## **Protein Information:**

Molecular Mass:	66.1 kDa
AP Molecular Mass:	90 kDa
Tag:	C-6His
Bio-activity:	
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.
Storage:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping:	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.
Formulation:	Supplied as a 0.2 $\mu m$ filtered solution of 20mM TrisHCl, 150mM NaCl, pH 7.5.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Cholinesterase; Acylcholine Acylhydrolase; Butyrylcholine Esterase; Choline Esterase II; Pseudocholinesterase; BCHE; CHE1

## Sequence: Glu29-Leu602

## Background:

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.