## Recombinant Human Butyrylcholinesterase/BCHE Protein (His Tag)

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Catalog Number: PKSH033346



Description Species Human Mol Mass 66.1 kDa Accession P06276 **Bio-activity** Not validated for activity **Properties** > 95 % as determined by reducing SDS-PAGE. Purity Endotoxin < 1.0 EU per µg of the protein as determined by the LAL method. Store at  $< -20^{\circ}$ C, stable for 6 months. Please minimize freeze-thaw cycles. Storage Shipping This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at  $< -20^{\circ}$ C. Formulation Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 7.5. Reconstitution Not Applicable

## Data

kDa 120 90 60	МК	R
40	-	A LUN
30	-	
20	-	
14	1	

> 95 % as determined by reducing SDS-PAGE.

## 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.

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