

# Human BCHE/Butyrylcholinesterase Protein

Cat. No. BCE-HM101

## Description

<b>Source</b>	Recombinant Human BCHE/Butyrylcholinesterase Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Glu29-Leu602.
<b>Accession</b>	P06276
<b>Molecular Weight</b>	The protein has a predicted MW of 66.18 kDa. Due to glycosylation, the protein migrates to 70-110 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE

## Formulation and Storage

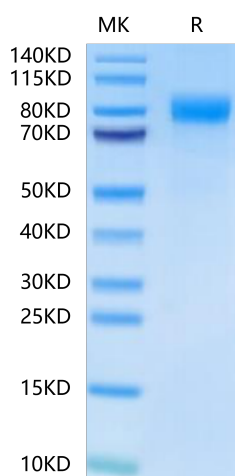
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in 50mM Tris, 150mM NaCl (pH 8.0). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## 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.

## Assay Data

### Tris-Bis PAGE



Human BCHE on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### Bioactivity Data

Measured by its ability to cleave Butyrylthiocholine. The specific activity is > 70000 pmoles/min/ $\mu\text{g}$ .