

## BCHE

### Native Equine Butyrylcholinesterase

<b>Catalog No.</b>	CSI10407	<b>Quantity:</b>	5 KU
	CSI10408		15 KU

**Alternate Names:** Carboxylic ester hydrolase, butyrylcholinesterase, BCHE

**Description:** Butyrylcholinesterase (BCHE, or BuChE), is a non-specific cholinesterase enzyme that hydrolyses many different choline esters. In humans, it is found primarily in the liver and is encoded by the BCHE gene. It is very similar to the neuronal acetylcholinesterase, which is also known as RBC or erythrocyte cholinesterase. The term "serum cholinesterase" is generally used in reference to a clinical test that reflects levels of both of these enzymes in the blood. Assay of butyrylcholinesterase activity in plasma can be used as a liver function test as both hypercholinesterasemia and hypocholinesterasemia indicate pathological processes.

**UniProt ID:** Q9N1N9

**CAS Number:** 9001-08-5

**Source:** Equine (horse) serum

**Appearance:** White to pale gray-green

**Formulation:** Lyophilized, salt free powder

**Purity:** 95% (biuret)

**Molecular Weight:** 400 kDa

**Protein Content:** 0.20 mg protein/mg solid ( $E^{0.1\%}_{280nm} = 1.36$ ) lot specific

**Biological Activity:** > 50 Units/mg (typically 100-300 Units/mg)  
One unit defined as the amount of enzyme causing the hydrolysis of one micromole of butyrylthiocholine iodide per minute at 25°C and pH 7.4.

**Reconstitution:** Reconstitute to 5 mg/ml with 0.05M Tris-HCl, pH 7.3-7.5  
Protein should be kept within the concentration range of 4-5 mg/ml.

**Storage & Stability:** Store lyophilized protein at -20°C to -80°C for at least 1 year.

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**

