



## Butyrylcholinesterase Activity Kit (Colorimetric)

### Product Information

**Cat**

Kit-2349

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### Product Overview

Butyrylcholinesterase (EC 3.1.1.8; BChE), also known as plasma cholinesterase or pseudocholinesterase, is a serine hydrolase present in almost all mammalian tissues with the highest levels detected in plasma and liver. BChE hydrolyzes choline esters, as well as other esters and acts as an endogenous scavenger for anticholinesterase agents. BChE in plasma serves as the first line of defense against toxic compounds reaching the bloodstream that might inhibit acetylcholinesterase activity, which is essential in the nervous system. In clinical toxicology and clinical chemistry, determination of BChE activity in plasma is the most commonly used and preferred method to diagnose patients showing symptoms of intoxication. A recent study using genome-wide analysis suggested that BChE is a marker of obesity, insulin resistance and metabolic syndrome, hyperlipidemia, coronary artery disease and hypertension. Serum BChE has been proposed as a marker of low-grade systemic inflammation and a marker of cardiovascular risk factor being even capable to predict mortality. Butyrylcholinesterase Activity Kit is based on the ability of BChE to hydrolyze substrate and produce thiocholine. Thiocholine reacts with 5, 5'-dithiobis (2-nitrobenzoic acid) (DTNB) and generates a yellow chromophore that can be quantified at 412 nm. The assay is simple, sensitive and can detect as low as 0.2 U/ml in variety of samples.

### Applications

Measurement of Butyrylcholinesterase activity in various biological samples and purified/crude enzyme preparations

### Storage

-20°C

### Shipping



## Butyrylcholinesterase Activity Kit (Colorimetric)

Gel Pack

### Size

100 assays

### Kit Components

BChE Assay Buffer; BChE Substrate (in DMSO); Butyrylcholinesterase; DTNB; TNB Standard

### Target Species

Mammalian

**Detection method** Absorbance (412 nm)

### Features & Benefits

Simple, rapid & convenient assay to measure Butyrylcholinesterase; Includes Positive Control (Butyrylcholinesterase)