



# Butyrylcholinesterase Fluorometric Detection Kit

## Product Information

### Cat.No.

Kit-0133

### Product Overview

The Fluoro BChE detection kit utilizes a non-fluorescent molecule that covalently binds to the thiol product of the reaction between the BChE substrate and the BChE in the standards and samples, yielding a fluorescent product read at 510nm in a fluorescent plate reader with excitation at 390nm.

### Description

Butyrylcholinesterase (BChE) belongs to the same structural class of proteins as acetylcholinesterase (AChE). The 440kDa tetrameric glycoprotein is predominantly found in blood, kidneys, intestine, liver, lung, heart and the central nervous system. BChE preferentially acts on butyrylcholine, but also hydrolyzes acetylcholine. Alzheimer's disease appears to be associated with decreased acetylcholinesterase activity and an increase in Butyrylcholinesterase activity. BChE activity, therefore, has potential applications as a biomarker for progression or as a target for future therapies.

### Applications

Fluorescence plate reader

### Storage

Long Term Storage: -20°C; Upon Arrival: 2-8°C

### Kit Components

1. Butyrylcholinesterase standard, Storage 2-8°C; 2. Thiol Detection Reagent-2 vials, Storage 2-8°C; 3. BChE Substrate-2 vials, Storage 2-8°C; 4. Dry DMSO, Storage 2-8°C; 5. Assay Buffer concentrate, Storage 2-8°C; 6. Black 96-well Costar 3650 plates-2

### Features & Benefits

Measure BChE activity as fluorescent readout; endpoint or kinetically; Run serum, plasma, CSF or cell/tissue lysates as samples; Sensitive-measure  $<0.02\mu\text{I}^{-1}\text{min}^{-1}\text{of}^{-1}\text{bche}^{-1}\text{mU}^{-1}$