

Butyrylcholinesterase Assay Kit ab241010

3 Images

Overview

Product name	Butyrylcholinesterase Assay Kit
Detection method	Colorimetric
Product overview	Butyrylcholinesterase Assay Kit (ab241010) is based on the ability of Butyrylcholinesterase (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.
Notes	This product is manufactured by BioVision, an Abcam company and was previously called K516 Butyrylcholinesterase Activity Kit (Colorimetric). K516-100 is the same size as the 100 test size of ab241010.
Platform	Microplate reader

Properties

Storage instructionsStore at -20°C. Please refer to protocols.

Components	100 tests
Assay Buffer XXXIII	1 x 50ml
BChE Positive Control	1 vial
BChE Substrate	1 x 100µl
DTNB	1 vial
TNB Standard	1 vial

Function	Esterase with broad substrate specificity. Contributes to the inactivation of the neurotransmitter acetylcholine. Can degrade neurotoxic organophosphate esters.
Tissue specificity	Detected in blood plasma (at protein level). Present in most cells except erythrocytes.
Involvement in disease	Defects in BCHE are the cause of butyrylcholinesterase deficiency (BChE deficiency) [MIM:177400]. BChE deficiency is a metabolic disorder characterized by prolonged apnoea after the use of certain anesthetic drugs, including the muscle relaxants succinylcholine or mivacurium and other ester local anesthetics. The duration of the prolonged apnoea varies significantly

depending on the extent of the enzyme deficiency. BChE deficiency is a multifactorial disorder. The hereditary condition is transmitted as an autosomal recessive trait.

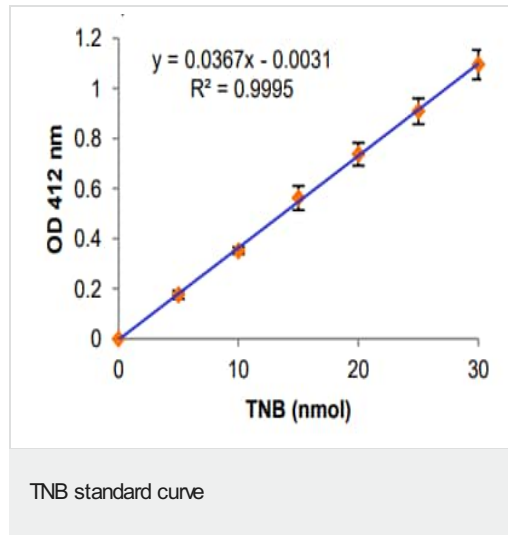
Sequence similarities

Belongs to the type-B carboxylesterase/lipase family.

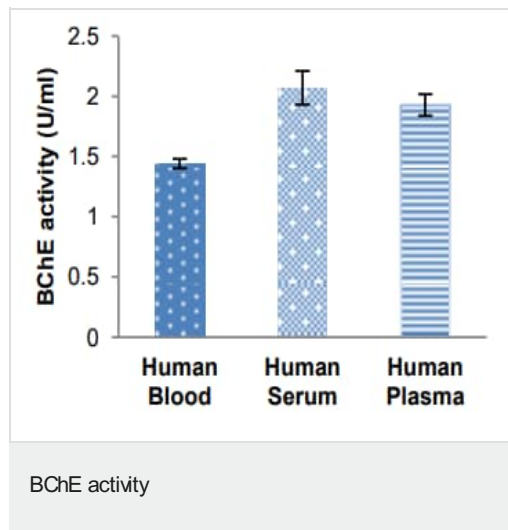
Cellular localization

Secreted.

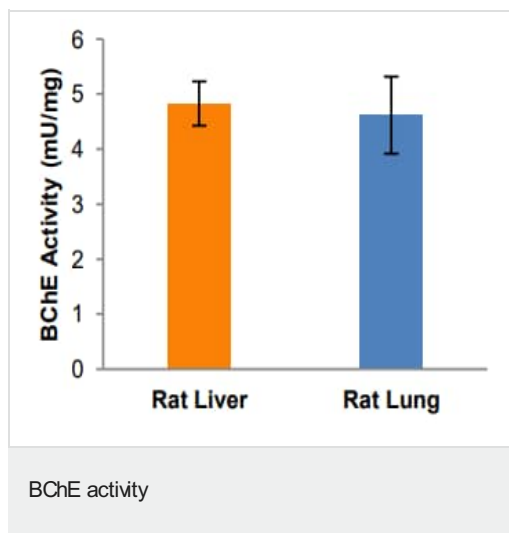
Images



TNB standard curve



BChE activity in Human Blood (10 μ L, 1:100 dilution), Human Serum (10 μ L, 1:50 dilution) and Human Plasma (10 μ L, 1:50 dilution).



BChE activity in Rat Liver (30 µg protein) and Rat Lung (15 µg protein). Assays were performed following the kit protocol.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors