abcam

Product datasheet

Acetylcholinesterase Assay Kit (Colorimetric) ab138871

★★★★★ 2 Abreviews 46 References 画像数 5

製品の概要

製品名 Acetylcholinesterase Assay Kit (Colorimetric)

検出方法 Colorimetric

サンプルの種類 Serum, Plasma, Cell culture extracts, Cell Lysate, Tissue Lysate

アッセイタイプ Enzyme activity

検出感度 1 mU/ml **全工程の試験時間** 0h 30m

製品の概要 Acetylcholinesterase Assay Kit ab138871 provides a convenient colorimetric assay for the

detection of AChE activity in blood, cell extracts and other samples from mammals and other

species.

The acetylcholinesterase assay protocol uses DTNB to quantify the thiocholine produced from the hydrolysis of acetylthiocholine by AChE. The absorption intensity of DTNB adduct (410 nm) is used to measure the amount of thiocholine formed, which is proportional to the AChE activity.

The assay will detect as little as 0.1 mU AChE in a 100 µL assay volume (1 mU/mL).

Acetylcholinesterase assay protocol summary:

- add standards and samples to wells

- add acetylthiocholine reaction mix and incubate for 10-30 min at room temp

- analyze with a microplate reader

特記事項 Please note this product does not differentiate between acetylcholesterase (AchE) or

butyrylcholinesterase (BChE) activity as both enzymes can hydrolyze acetylcholine. However, an

acetylcholinesterase inhibitor like Donepezil hydrochloride can be used as a control.

If you are looking for a fluorometric kit, we recommend **Acetylcholinesterase Assay Kit**

(Fluorometric-Green) (ab133872) (Ex/Em = 490/520 nm) or Acetylcholinesterase Assay Kit

(Fluorometric-Red) (ab133873) (Ex/Em = 540/590 nm).

試験プラットフォーム Microplate reader

製品の特性

保存方法 Store at -20°C. Please refer to protocols.

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内容	200 tests
Acetylcholinesterase Standard	1 x 5 units
Acetylthiocholine	1 vial
Assay Buffer	1 x 25ml
DTNB	1 vial

機能 Terminates signal transduction at the neuromuscular junction by rapid hydrolysis of the

acetylcholine released into the synaptic cleft. Role in neuronal apoptosis.

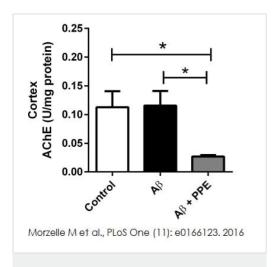
組織特異性 Isoform H is highly expressed in erythrocytes.

配列類似性 Belongs to the type-B carboxylesterase/lipase family.

細胞内局在 Cell membrane; Cell junction > synapse. Secreted. Cell membrane and Nucleus. Only observed in

apoptotic nuclei.

画像

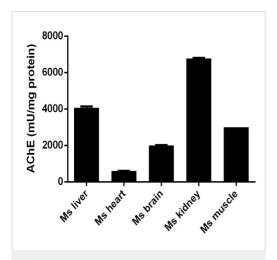


Evaluation of acetylcholinesterase (AChE) activity

using ab138871

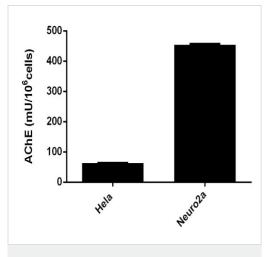
Morzelle Met al., PLoS One, 11(11). Fig 6. doi: 10.1371/journal.pone.0166123 Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

ab138871 was used to determine AChE activity in the cortex and in the hippocampus. AChE activity was measured at 410 nm.



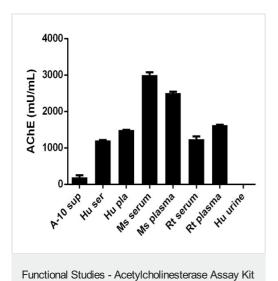
AChE measured in mouse tissue lysates showing quantity (mU) per mg protein of tested sample

Functional Studies - Acetylcholinesterase Assay Kit (ab138871)



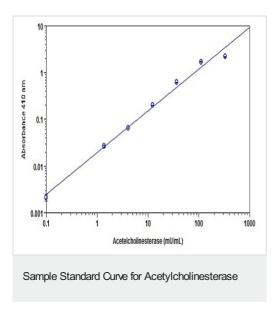
Functional Studies - Acetylcholinesterase Assay Kit (ab138871)

AChE measured in cell lysates showing quantity (mU) per 1 mln of tested cells



(ab138871)

AChE measured in biological fluids showing quantity (mU) per mL of tested sample



Acetylcholinesterase dose response was measured in a white/clear bottom 96-well plate with ab138871 Acetylcholinesterase Assay Kit (Colorimetric) using a microplate reader. As low as 0.1 mU/well of acetylcholinesterase can be detected with 30 minutes incubation (n=3)

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