# abcam

### Product datasheet

# Acetylcholinesterase Assay Kit (Fluorometric -Red) ab138873

★★★★★ 1 Abreviews 3 References 画像数3

#### 製品の概要

製品名 Acetylcholinesterase Assay Kit (Fluorometric -Red)

検出方法 Colorimetric/Fluorometric サンプルの種類 Serum, Plasma, Cell Lysate

アッセイタイプ Enzyme activity 検出感度 0.1 mU/ml 全工程の試験時間 0h 20m

種交差性 交差種: Mammals, Other species

製品の概要 Acetylcholinesterase Assay Kit (Fluorometric -Red) (ab138873) uses a red indicator to quantify the choline produced from the hydrolysis of acetylcholine by AChE through choline oxidase-

mediated enzyme coupling reactions.

The assay can be used for monitoring and quantifying AChE activity in blood, cell extracts or other solutions. The fluorescence intensity of the indicator is proportional to the amount of choline formed, which is proportional to the AChE activity.

The assay is an optimized "mix and read" assay using a simple one-step fluorometric protocol to detect as little as 0.01 mU AChE in a 100 µl assay volume (0.1 mU/ml). The assay can be performed in a 96-well or 384-well microtiter-plate format, and can be easily read with a fluorescence microplate reader at Ex/Em = 540/590 nm or with an absorbance microplate reader at OD = 575 nm.

Acetylcholinesterase assay protocol summary:

- add samples and standards to wells
- add assay mixture and incubate for 10-30 min
- analyze with microplate reader

Please note this product does not differentiate between acetylcholesterase (AchE) or butyrylcholinesterase (BChE) activity as both enzymes can hydrolyze acetylcholine.

If you are looking for a colorimetric kit, we recommend Acetylcholinesterase Assay Kit (Colorimetric) (ab138871). If your plate reader has a filter to measure green fluorescnce (Ex/Em = 490/520 nm), you can use Acetylcholinesterase Assay Kit (Fluorometric - Green) (ab138872).

Microplate reader

試験プラットフォーム

特記事項

#### 製品の特性

#### 保存方法

Store at -20°C. Please refer to protocols.

内容	200 tests
AbRed Indicator	1 vial
Acetylcholine	1 vial
Acetylcholinesterase Probe	2 units
Acetylcholinesterase Standard	1 vial
Assay Buffer	1 x 10ml
Dilution Buffer	1 x 10ml
DMSO	1 x 100µl

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

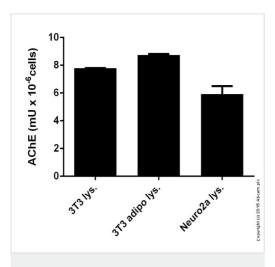
Belongs to the type-B carboxylesterase/lipase family.

細胞内局在

Cell membrane; Cell junction > synapse. Secreted. Cell membrane and Nucleus. Only observed in

apoptotic nuclei.

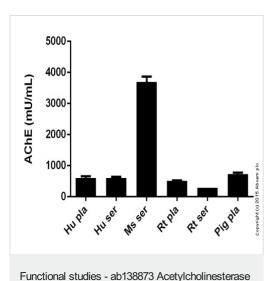
#### 画像



Functional studies - ab138873 Acetylcholinesterase

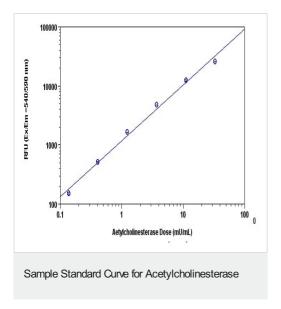
Assay Kit (Fluorometric -Red)

AChE measured in cell lysates showing activity per 1 million cells



Assay Kit (Fluorometric -Red)

AChE measured in various species showing activity per mL sample tested



Acetylcholinesterase dose response was measured in a solid black 96-well plate with ab138873 using a fluorescence microplate reader. As low as 0.01 mU/well (0.1 mU/ml) acetylcholinesterase can be detected with 20 minutes incubation (n=3).

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

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