Overview

Product name: Acetylcholinesterase Activity Colorimetric Assay Kit
Detection method: Colorimetric
Sample type: Serum, Plasma, Cell culture extracts, Tissue, Whole Blood
Assay type: Enzyme activity
Range: 0 nmol/L - 5 nmol/L
Assay duration: Multiple steps standard assay

Product overview

Acetylcholinesterase Activity Assay Kit provides a simple and sensitive method for continuous monitoring of enzymatic activity using colorimetry (OD 570 nm). In this assay, AChE converts acetylcholine substrate to choline, which is then oxidized by choline oxidase (CO) to produce an intermediate. The intermediate reacts with a highly specific probe to generate color. This assay kit can detect acetylcholinesterase activity as low as 0.5 mU/ml in a variety of samples.

Applications:

- Measurement of AChE activity in various tissues/cells
- Screening of AChE inhibitors

Tested applications: Suitable for: Functional Studies
Platform: Microplate (12 x 8 well strips)

Properties

Storage instructions: Store at -20°C. Please refer to protocols.

<table>
<thead>
<tr>
<th>Components</th>
<th>96 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>AChE Assay buffer</td>
<td>1 x 25ml</td>
</tr>
<tr>
<td>AChE Positive Control (Lyophilized)</td>
<td>1 vial</td>
</tr>
</tbody>
</table>
Function
Terminates signal transduction at the neuromuscular junction by rapid hydrolysis of the acetylcholine released into the synaptic cleft. Role in neuronal apoptosis.

Tissue specificity
Isoform H is highly expressed in erythrocytes.

Sequence similarities
Belongs to the type-B carboxylesterase/lipase family.

Cellular localization
Cell membrane; Cell junction > synapse. Secreted. Cell membrane and Nucleus. Only observed in apoptotic nuclei.

Components

<table>
<thead>
<tr>
<th>Components</th>
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</tr>
</thead>
<tbody>
<tr>
<td>AChE Probe (DMSO)</td>
<td>1 x 200µl</td>
</tr>
<tr>
<td>AChE Substrate (Lyophilized)</td>
<td>1 vial</td>
</tr>
<tr>
<td>Choline Oxidase Enzyme Mix (Lyophilized)</td>
<td>1 vial</td>
</tr>
<tr>
<td>Choline Standard (Lyophilized)</td>
<td>1 vial</td>
</tr>
</tbody>
</table>

Applications

The Abpromise guarantee
Our Abpromise guarantee covers the use of ab287842 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional Studies</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>

Images

ab287842 standard curve.
Acetylcholinesterase Activity Colorimetric Assay Kit

ab287842 positive control and serum test sample against background.

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

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- We investigate all quality concerns to ensure our products perform to the highest standards

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