CREATIVE BIOMART®
Assay Kit

Monoamine Oxidase Activity (Total MAO/MAO-A/MAO-B) Fluorometric Assay Kit

Product Information

Cat

Kit-2221

Cat.No. Kit-2221

Product Overview

Monoamine oxidases (MAO, EC 1.4.3.4) are a family of enzymes that can oxidize a wide variety of endogenous primary amines. Two isoforms, MAO-A and MAO-B, have been identified based on their substrate, inhibitor specificity and tissue localization. Clonogenic studies have shown that these two isozymes have similar catalytic characteristics, yet their amino acid sequences are different. MAO-A favors Serotonin, Norerpinephrine and Dopamine as substrates, while phenylethylamine and benzylamine are MAO-B preferred substrates. MAO-A and MAO-B are mitochondrial-bound enzymes that are ubiquitously expressed throughout the brain and other tissues. Imbalance of MAOs levels has been associated with schizophrenia, depression, attention deficit and other disorders. MAO-A has been implicated in panic, anxiety and depression, whereas MAO-B defects result in Alzheimer's and Parkinson's diseases. Monoamine Oxidase Activity (Total MAO/MAO-A/MAO-B) assay is a sensitive assay to detect total monoamine oxidase activity as well as MAO-A and MAO-B isoenzyme activities separately in the presence of Clorgyline and Selegiline - specific inhibitors for MAO-A and MAO-B, respectively. The assay is based on the fluorometric detection of H2O2, one of the byproducts generated during the oxidative deamination of the MAO substrate. The assay can detect as little as 5 μU of MAO enzymatic activity.

Applications

Measurement of Total MAO, MAO-A and MAO-B activities in various biological samples.

Storage

-20°C

Shipping

Gel Pack

Size

Tel: 1-631-559-9269 1-516-512-3133
Email:info@creative-biomart.org
Fax:1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

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100 assays

Kit Components

MAO Assay Buffer; OxiRed Probe (in DMSO); MAO Substrate (Lyophilized); Developer (Lyophilized); Positive Control (MAO-A Enzyme) (Lyophilized) (Lyophilized); MAO-A Inhibitor, Clorgyline (Lyophilized); MAO-B Inhibitor, Selegiline (Lyophilized); H2O2 Standard (0.88 M)

Detection method Fluorescence (Ex/Em = 535/587 nm)

Features & Benefits

Rapid & Convenient;
The assay can detect as little as 5 μU of MAO enzymatic activity.
Includes MAO-A specific Inhibitor Clorgyline, MAO-B specific Inhibitor Selegiline & MAO-A Enzyme as Positive Control

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