

Semicarbazide-Sensitive Amine Oxidase Fluorometric Detection Kit

Product Information

Cat.No.

Kit-0804

Product Overview

SSAO's functional role has been suggested to be involved in: apoptosis, atherogenesis, cell adhesion, leucocyte trafficking, glucose transport and local production of hydrogen peroxide. Elevated levels of SSAO have been reported in congestive heart failure, diabetes mellitus, alzheimer's disease and various other inflammatory diseases. In addition, by products of SSAO deamination, such as formal-dehyde and methylglyoxal, have been proposed to be involved in pathogenesis of cancer, aging and atherosclerosis. The Fluoro SSAO detection kit utilizes a non-fluorescent detection reagent to measure H₂O₂ released from the conversion of Benzylamine to Benzaldehyde via SSAO. Furthermore, H₂O₂ oxidizes the detection reagent in a 1:1 stoichiometry to produce a fluorescent product resorufin. This oxidation is catalyzed by Peroxidase.

Applications

Fluorescence plate reader

Usage

1. For Research use only. Not for use in diagnostic procedures. 2. Practice safe laboratory procedures by wearing protective clothing and eyewear. 3. The fluorescent product of the detection reagent is not stable in the presence of thiols (DTT or 2-mercaptoethanol). Keep these reactants below 10mM. If you are using your own buffer, keep the reaction between pH 7-8 (optimal pH 7.4). 4. NADH and glutathione (reduced form: GSH) may interfere with the assay. 5. See Technical note 5.

Storage

1. The kit contains multiple storage temperature components. Please see labels of individual components for storage instructions. 2. Once a vial of the Detection reagent is opened, it should be used promptly and frozen since it is subject to oxidation by air. It is also light-sensitive.

Kit Components

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Reagent-Storage Temperature 1. 5X Reaction Buffer pH 7.4: 1 Bottle, 2-8°C; 2. Horseradish Peroxidase: 1 Vial, 2-8°C; 3. Detection Reagent: 1 Vial, -20°C (Aliquot in Single Use Vials); 4. SSAO Substrate Benzylamine: 1 Vial, -20°C (Aliquot in Single Use Vials); 5. SSAO Enzyme: 1 Vial, -20°C (Aliquot in Single Use Vials); 6. Pargyline: Monoamine Oxidase B Inhibitor (9-11): 1 Vial, -20°C (Aliquot in Single Use Vials); 7. Semicarbazide-Sensitive Amine Oxidase Inhibitor: 1 Vial, -20°C (Aliquot in Single Use Vials)

Features & Benefits

1. Non Radioactive. 2. Can monitor multiple time points to follow kinetics. 3. Monitors Enzymatic Activity. 4. One-step, no wash assay. 5. Adaptable for High Throughput format. 6. Enzyme Positive Control included in Kit. 7. Applications-Fluorescent Plate Reader.
