

Intracellular Nitric Oxide Synthase (NOS) Detection Kit

Product Information

Cat

Kit-2404

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Product Overview

Nitric oxide synthases (EC 1.14.13.39) (NOSs) are a family of enzymes that catalyze the production of nitric oxide (NO) from L-arginine. Nitric oxide (NO) plays an important role in neurotransmission, vascular regulation, immune response and apoptosis. There are three isoforms of NOS: endothelial (eNOS), neuronal (nNOS), and inducible (iNOS). nNOS accounts for the production of NO in central nervous system, where NO participates in cell communication and information storage. eNOS produces NO in blood vessels and is involved with the regulation of vascular function. In contrast to other isoforms, iNOS is expressed de novo under oxidative stress conditions and produces large amounts of NO as a part of body's defense mechanism. Intracellular Nitric Oxide Synthase Detection kit uses a dye that reacts with intracellular NO produced by NOS to produce fluorescence (Ex/Em = 485/530 nm), which is proportional to the concentration of intracellular NOS and can be detected using a microplate reader or a fluorescence microscope. This kit provides a simple, non-radiometric method for detection of intracellular NOS in the cells.

Applications

Detection of NOS activity in adherent cells.

Screening/studying/characterizing stimulators/inhibitors that affect intracellular levels of NOS.

Storage

-20°C

Shipping

Gel Pack

Size

Intracellular Nitric Oxide Synthase (NOS) Detection Kit

100 assays

Kit Components

NOS Assay Buffer; Staining Dye (In DMSO)

Target Species

Mammalian cells

Detection method Detection method- fluorescence microscope (Ex/Em = 485/530)

Features & Benefits

Simple one step staining procedureTakes only 1-2 hrs; Non-radiometric fluorescent detection
