



Nitric Oxide Cell-Based HTS Assay Kit

Product Information

Cat

Kit-2200

Cat.No.

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Product Overview

Nitric oxide (NO) plays an important role in neurotransmission, vascular regulation, immune response and apoptosis. NO has been established as one of the key regulators in cardiovascular, nervous, and immune systems. NO plays a pivotal role in numerous processes: in central nervous system, NO participates in cell communication and information storage; in vascular endothelium, NO is involved with regulation of vascular function. Finally, NO is produced by immune cells, including macrophages, as a part of body's defense mechanism during immunological responses and oxidative stress conditions. However, chronic overproduction of NO is one of the fundamental causes underlying disorders including neurodegenerative diseases and pathophysiology of blood vessels. Nitric Oxide Cell-Based HTS Assay Kit utilizes a dye that reacts with intracellular NO to produce a highly-Fluorescent Triazole Product (Ex/Em= 488/532 nm). The kit includes Diphenyliodonium (DPI), a potent inhibitor of nitric oxide cellular production, which has been widely used to inhibit NO synthesis in order to evaluate NO function in different systems and diseases. This kit provides a simple, standardized and HTS method to quantitate the amount of NO in cell-based assays. This Assay Kit is user-friendly, sensitive and can detect the NO Fluorescent product as low as 5 pmol in a 96-well plate.

Applications

Detection of concentration of nitric oxide.

Storage

-20°C

Shipping

Gel Pack



Nitric Oxide Cell-Based HTS Assay Kit

Size

100 assays

Kit Components

NOS Assay Buffer; NO Staining Dye; NO Inhibitor (DPI, 1 mM); NO Standard (100 μ M)

Target Species

Mammalian cell culture

Detection method Fluorometric analysis (Ex/Em = 488/532 nm)

Features & Benefits

Simple, HTP adaptable protocol

Sensitivity as low as 5 pmol of nitric oxide in cells

Fluorometric detection