

Nitrate/Nitrite Fluorometric Assay Kit

Product Information

Cat.No.

Kit-0629

Product Overview

Nitrate/Nitrite Fluorometric Assay Kit is a measurement for detecting total nitrate/nitrite concentration.

Description

Nitric Oxide (NO) is synthesized in biological systems by the enzyme Nitric Oxide Synthase (NOS). NOS is a remarkably complex enzyme which acts on molecular oxygen, arginine, and NADPH to produce NO, citrulline, and NADP⁺. This process requires five additional cofactors (FMN, FAD, Heme, calmodulin, and tetrahydrobiopterin) and two divalent cations (calcium and heme iron). Three distinct isoforms of NOS have been identified.

Usage

For research use only (RUO)

Storage

The kit will perform as specified if components are stored as directed below and used before the expiration date indicated on the outside of the box.

Item	Storage
Nitrate/Nitrite Assay Buffer	4°C
Nitrate Reductase Enzyme Preparation	-20°C
Nitrate Reductase Cofactor Preparation	-20°C
Nitrate Standard	4°C or Room Temperature
Nitrite Standard	4°C or Room Temperature
DAN Reagent	4°C
Sodium Hydroxide (2.8 M)	4°C or Room Temperature
96-Well Plate (white)	Room Temperature
96-Well Cover Sheet	Room Temperature

Kit Components

Nitrate/Nitrite Assay Buffer	1 vial
Nitrate Reductase Enzyme Preparation	2 vials
Nitrate Reductase Cofactor Preparation	2 vials
Nitrate Standard	1 vial
Nitrite Standard	1 vial
DAN Reagent	1 vial
Sodium Hydroxide (2.8 M)	1 vial
96-Well Plate (white)	3 plates
96-Well Cover Sheet	3 covers