

S-Nitrosylated Protein Detection Kit

Product Information

Cat.No.

Kit-2027

Size

1 ea

Description

Nitric oxide (NO) is produced by three distinct isoforms of nitric oxide synthase and functions as a key signaling molecule in physiology and pathophysiology. NO transduces its effects by reacting either directly with heme and non-heme centers of proteins or indirectly via further oxidation to various reactive nitrogen species (RNS). The S-Nitrosylated Protein Detection Assay employs a modification of the Jaffrey et al. Biotin-switch method to allow for the direct visualization of S-NO proteins in whole cells or tissues, as well as by western blot analysis. Using this method, free SH groups are first blocked (an addition of 125.1 amu per residue) and any S-NO bonds present in the sample are then cleaved. Biotinylation of the newly formed SH groups (an addition of 523.6 amu per residue) provides the basis for visualization using streptavidin-based colorimetric or fluorescence detection.

Storage

-20°C

Kit Components

1S-Nitrosylation Wash Buffer (10X): 1 vial/25 ml; Room Temperature S-Nitrosylation Buffer: A 1 vial/30 ml; Room Temperature S-Nitrosylation Buffer B (5X): 1 vial/60 ml; Room Temperature S-Nitrosylation Blocking Reagent: 3 vials; -20°C S-Nitrosylation Labeling Reagent: 3 vials; -20°C S-Nitrosylation Reducing Reagent: 3 vials; Room Temperature S-Nitrosylation Detection Reagent I (HRP): 1 vial; -20°C S-Nitrosylation Detection Reagent II (Fluorescein): 1 vial; -20°C