



NAD/NADH Cell-Based Assay Kit

Product Information

Cat.No.

Kit-1983

Size

1 ea

Description

Nicotinamide adenine dinucleotide (NAD) exists in an oxidized form, NAD⁺, as well as a reduced form, NADH. NAD, the main free form in cells, functions in modulating cellular redox status and by controlling signaling and transcriptional events, making it an important cofactor when investigating normal cellular function. The NAD/NADH Cell-Based Assay Kit provides a colorimetric method for measuring intracellular NAD⁺ and NADH in cultured cells. In this assay, NAD⁺ found in cell samples is reduced to NADH by alcohol dehydrogenase during the oxidation of ethanol to acetaldehyde. The newly formed and the existing NADH found in the samples is then oxidized resulting in the reduction of a tetrazolium salt substrate (WST-1) to a highly-colored formazan which absorbs at 450 nm. The amount of formazan produced is proportional to the amount of total NAD in the cell lysate and can be used as an indicator of the total cellular NAD concentration.

Storage

-20°C

Kit Components

WST-1 Developer Reagent: 1 vial/600 µl; -20°C Cell-Based Assay Ethanol Solution: 1 vial/250 µl; -20°C Cell-Based Assay Alcohol Dehydrogenase: 1 vial/250 µg; -20°C Cell-Based Assay NAD⁺ Diaphorase: 1 vial/1.5 mg; -20°C NAD⁺ Standard: 1 vial/70 µg; -20°C Cell-Based Assay Digitonin Solution: 1 vial/250 µl; -20°C Cell-Based Assay Buffer Tablet: 1; Tablet RT