



Hydroxyl Radical Detection Kit

Product Information

Cat.No.

Kit-2091

Product Overview

Hydroxyl Radical Detection Kit is optimized for detecting ROS in mitochondria. OH580 is live-cell permeant probe and can rapidly and selectively target hydroxyl radical in live cells. It generates red fluorescence when it reacts with $\text{OH}\cdot$, and can be easily read at Ex/Em= 540/590 nm. Hydroxyl Radical Detection Kit provides a sensitive fluorimetric probe to detect $\text{OH}\cdot$ in live cells with one hour incubation. This kit can be used for fluorescence microplate readers and fluorescence microscopy applications.

Size

200 Tests

Description

The detection of intracellular hydroxyl radical is of central importance to understanding proper cellular redox regulation and the impact of its dysregulation on various pathologies. The hydroxyl radical ($\text{HO}\cdot$) is one of the reactive oxygen species (ROS) highly reactive with other molecules to achieve stability. In general, hydroxyl radical is considered to be a harmful by-product of oxidative metabolism, which can cause molecular damage in living system. It shows an average lifetime of 10^{-9} s and can react with nearly every biomolecule such as nuclear DNA, mitochondrial DNA, proteins and membrane lipids.

Storage

Keep in freezer. Avoid exposure to light.

Kit Components

Component A: OH580: 1 vial
Component B: Assay Buffer: 1 bottle (50 mL)
Component C: DMSO: 100 μL