

## 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 OH<sup>·</sup>, and can be easily read at Ex/Em= 540/590 nm. Hydroxyl Radical Detection Kit provides a sensitive fluorimetric probe to detect OH<sup>·</sup> 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 (HO<sup>·</sup>) 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  $\mu$ L