

## 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  $\mu\text{L}$