abcam

Product datasheet

Cellular ROS Assay Kit (Red) ab186027

41 References 2 图像

概述

产品名称	Cellular ROS Assay试剂盒(Red)
样品类型	Adherent cells, Suspension cells
检测类型	Cell-based (quantitative)
检测时间	0h 60m
产品概述	Cellular ROS Assay Kit (Red) ab186027 uses a ROS sensor to quantify ROS (Reactive Oxygen Species) in live cells. The red dye used in the ROS assay protocol is cell-permeable and generates red fluorescence when it reacts with ROS. The kit is an optimized “mix and read” assay format that is compatible with HTS liquid handling instruments. ab186027 provides an ultrasensitive fluorometric one-step ROS assay. The ROS assay can be performed in a convenient 96-well or 384-well microtiter-plate format. Its signal can be easily read by a fluorescence microplate reader at Ex/Em = 520/605 nm and can be used to either quantify ROS levels in cells or to screen ROS inhibitors.
说明	Previously called Cellular Reactive Oxygen Species Detection Assay Kit (Red Fluorescence). Reactive oxygen species (ROS) are natural byproducts of the normal metabolism of oxygen and play important roles in cell signaling. However, during oxidative stress-related states, ROS levels can increase dramatically. The accumulation of ROS results in significant damage to cell structures. The role of oxidative stress in cardiovascular disease, diabetes, osteoporosis, stroke, inflammatory diseases, a number of neurodegenerative diseases and cancer has been well established. The ROS measurement will help to determine how oxidative stress modulates varied intracellular pathways. **Related products** Review the **oxidative stress marker and assay guide**, or the full **metabolism assay guide** to learn about more assays for metabolites, metabolic enzymes, mitochondrial function, and oxidative stress, and also how to assay metabolic function in live cells using your plate reader. To measure reactive oxygen species within cells, we recommend **DCFDA / H2DCFDA - Cellular ROS Assay Kit ab113851**. Alternative ROS assays are available in orange (**ab186028**), red (ab186027), and deep red (**ab186029**). **ab238535** is used to measure ROS in biofluids, culture supernatants and cell lysates. For assays designed to differentiate ROS, superoxides, and reactive nitrogen species: to assay ROS and superoxides use **ab139476**; to assay ROS, superoxides, and reactive nitrogen species use **ab139473**; to assay superoxides use **ab219943**.

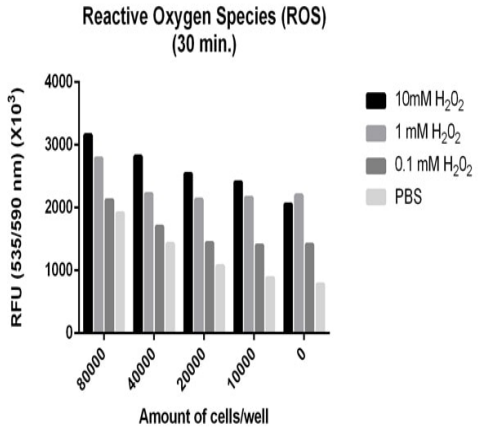
平台 Microplate reader, Fluorescence microscope

性能

存放说明 Store at -20°C. Please refer to protocols.

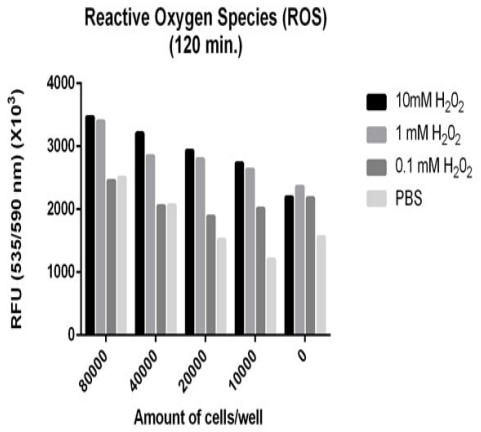
组件	200 tests
Assay Buffer	1 x 20ml
DMSO	1 x 200µl
ROS Red Dye (Lyophilized)	1 vial

图片



Functional Studies - Cellular Reactive Oxygen Species Detection Assay Kit (ab186027)

Bar graph showing relative fluorescence of Reactive Oxygen Species induced in various quantities of Hela cells at various concentrations of H_2O_2 after 30 min. exposure time.



Functional Studies - Cellular Reactive Oxygen Species Detection Assay Kit (ab186027)

Bar graph showing relative fluorescence of Reactive Oxygen Species induced in various quantities of Hela cells at various concentrations of H_2O_2 after 120 min. exposure time.

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