



Reactive Oxygen Species (ROS) Fluorometric Assay Kit

Cat No: HR3BC1141

For research use only

Overview

Detection Method	Fluorescence method
Storage	Reagent 1: -20?, Reagent 2: 2-8?
Instrument	Fluorescence Microplate reader (Ex/Em=500 nm/525 nm), Fluorescence Spectrophotometer (Ex/Em=500 nm/525 nm)
Assay Time	60 min
Validity	6
Assay Type	Cell-based (quantitative)
Sample Type	Fresh tissue, cultured cells
Synonyms	ROS
Instrument	Fluorescence Microplate reader (Ex/Em=500 nm/525 nm), Fluorescence Spectrophotometer (Ex/Em=500 nm/525 nm)
Detection Principle	DCFH-DA (2,7-dichlorofluorescin diacetate) is a fluorescent probe without fluorescence that can freely cross the membrane. After entering the cell, it can be hydrolyzed by intracellular esterase to form DCFH (dichlorofluorescin). In the presence of reactive oxygen species (ROS), DCFH is oxidized to DCF (dichlorofluorescein) which is a strong green fluorescent substance that cannot penetrate the cell membrane. DCF has a maximum wave peak near the excitation wavelength of 502 nm and the emission wavelength of 525 nm, and the intensity is proportional to the level of intracellular reactive oxygen species.
Reagents	
Labware	Vortex mixer, Micropipettor, Water bath, Incubator, Centrifuge
Size	96T
Sensitivity	
Detection Range	
Recovery Rate	