CREATIVE BIOMART®
Assay Kit

Rhod-4 Medium Removal No Wash Calcium Assay kit

Product Information

Cat.No. Kit-0143

Product Overview

Rhod-4 Medium Removal No Wash Calcium Assay Kit is a fluorescence-based assay for detecting intracellular calcium mobilization. Cells expressing a GPCR of interest that signals through calcium are pre-loaded with Rhod-4 which can cross the cell membrane. Once inside the cell, the lipophilic blocking groups of Rhod-4 are cleaved by an esterase, resulting in a negatively charged fluorescent dye that stays inside the cell. Its fluorescence is greatly enhanced upon binding to calcium. When cells are stimulated with agonists, the receptor signals the release of intracellular calcium, which significantly increases the fluorescence of Rhod-4. The characteristics of its long wavelength, high sensitivity, and >250 times fluorescence enhancement make Rhod-4 the brightest red calcium indicator available in the marker, and it is an ideal tool for the measurement of cellular calcium through HTS screening. Compared to Fluo-8, Rhod-4 is more photostable, making its fluorescence imaging more robust. The kit provides an optimized assay method for monitoring the G-protein-coupled receptors and calcium channels using HTS instrumentation. The assay can be performed in a convenient 96-well or 384-well microtiter-plate format.

Size

1 kit

Description

This product is intended to be used for monitoring calcium fluctuations in vivo in live cells using the following HTS imaging plate readers: FLIPR, FDSS, BMG NOVOstar, FLexStation, ViewLux, IN Cell Analyzer or Arrayscan.If you would like to quantify calcium concentration in vitro using cell extracts, we recommend using Calcium Detection Kit (Colorimetric) or Calcium Quantification Assay Kit, as they provide stock standards for comparison.

Applications

Functional Studies more details

Target Species

Tel: 1-631-559-9269 1-516-512-3133
Email:info@creative-biomart.org
Fax:1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

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Reacts with: Human

Storage

Store at -20°C.

Kit Components

Components: 1 kit; 10X Pluronic F127 Plus: 1 x 1ml; HHBS: 1 x 9ml; Rhod-4: 1 vial

Compatible Sample Types

Adherent cells, Suspension cells

Assay time

1h 00m

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