CREATIVE BIOMART®
Assay Kit

Fluo-8 No Wash Calcium Assay kit

Product Information

Cat.No. Kit-0343

Product Overview

Fluo-8 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 Fluo-8 which can cross the cell membrane. Once inside the cell, the lipophilic blocking groups of Fluo-8 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 Fluo-8. The characteristics of its long wavelength, high sensitivity, and >100 times fluorescence enhancement make Fluo-8 the brightest green calcium indicator available in the marker, and it is an ideal tool for the measurement of cellular calcium through HTS screening. 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

96 tests

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. Readers with an in built pipetter are essential for measuring calcium response accurately due to transient property of the calcium signal. Depending on dose of the agonist, the peak response is few seconds to 20 seconds, so one will need to add the compound by instrument and read the fluorescent signal simultaneously every second for ~1-2 min. 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 .

Applications

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Fax:1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

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Functional Studies more details

Target Species

Reacts with: Human

Storage

Store at -20°C.

Kit Components

Components: 96 tests; 10X Pluronic F127 Plus: 1 x 1ml; Fluo-8: 1 vial; HHBS: 1 x 9ml

Detection method Fluorescent

Compatible Sample Types

Adherent cells, Suspension cells

Assay time

1h 00m

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