abcam

Product datasheet

Fura-2 AM, Ca2+ selective fluorescent indicator ab120873

18 References 画像数 3

製品の概要

製品名 Fura-2 AM, Ca2+ selective fluorescent indicator

製品の詳細 High affinity Ca²⁺ selective fluorescent indicator

生理活性の詳細 High affinity Ca^{2+} selective fluorescent indicator ($K_d = 145 \text{ nM}$). Rapidly metabolized by

cytoplasmic esterases leading to the active dye Fura 2. Cell-permeable. Excitation spectrum

dependent on [Ca²⁺]_i. Ex_{340/380}/Em₅₀₅.

精製度 > 95%

特記事項 1 unit = 50 μg

1 mg - 1 x 1 mg vial 20 units - 20 x 50 μg vials 10 units - 10 x 50 μg vials 50 μg - 1 x 50 μg vial

Related protocols:

Fura-2 AM imaging protocol

Calcium imaging using Fura-2 AM in motor neurons

Measurement of free cytosolic calcium concentration in single CHO-K1 cells

CAS 番号 108964-32-5

構造式

1

製品の特性

oxoethyl]amino]-5-methylphenoxy]ethoxy]-2-benzofuranyl]-5-oxazolecarboxylic acid

(acetyloxy)methyl ester

分子量 1001.86

分子式 C₄₄H₄₇N₃O₂₄

PubChem 登録番号 3364574

保存方法 Shipped at Room Temperature. Store at -20°C. Store under desiccating conditions. The product

can be stored for up to 12 months.

溶解性 Soluble in DMSO to 10 mM

使用に関する注意 Wherever possible, you should prepare and use solutions on the same day. However, if you need

to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room

temperature for at least 1 hour.

Need more advice on solubility, usage and handling? Please visit our frequently asked

questions (FAQ) page for more details.

SMILES 線形表記 CC1=CC(=C(C=C1)N(CC(=O)OCOC(=O)C)CC(=O)C)OCOC(=O)C)OCCOC2=C(C=C3C(=C2)C

= C(O3)C4 = NC = C(O4)C(=O)OCOC(=O)C)N(CC(=O)OCOC(=O)C)CC(=O)OCOC(=O)C

由来 Synthetic

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab120873の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Functional Studies		Use at an assay dependent concentration.

画像

CH₃

CH₃

CH₃

CH₃

CH₃

CH₃

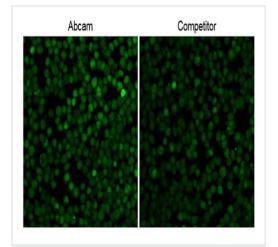
CH₃

CH₃

CH₃

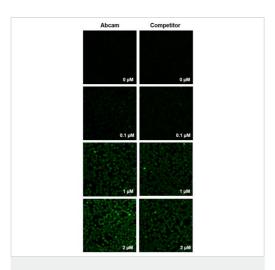
Chemical Structure - Fura-2 AM, Ca²⁺ selective fluorescent indicator (ab120873)

2D chemical structure image of ab120873, Fura-2 AM, Ca2+ selective fluorescent indicator



Fluorescent Cell Imaging - Fura-2 AM, Ca²⁺ selective fluorescent indicator (ab120873)

Direct comparison of Abcam and competitor's Fura-2 AM. RAW 264.7 cells were loaded with 2 μ M of Fura-2 AM from Abcam (ab120873) and competitor's in a DMSO/ HBSS solution for 30 minutes at room temperature and in the dark. After performing two washes with pre-warmed HBSS the cells were further incubated for 30 minutes at 37°C in the dark. Finally, washes with pre-warmed HBSS were performed and the live cells were imaged on a confocal microscope (using the same exposure settings): excitation laser = 405nm, emission gate center = 519nm.



Fluorescent Cell Imaging - Fura-2 AM, Ca²⁺ selective fluorescent indicator (ab120873)

Direct comparison of Abcam and competitor's Fura-2 AM. RAW 264.7 cells were loaded with different concentrations of Fura-2 AM from Abcam (ab120873) and competitor's in a DMSO/HBSS solution for 30 minutes at room temperature and in the dark. After performing two washes with pre-warmed HBSS the cells were further incubated for 30 minutes at 37°C in the dark. Finally, washes with pre-warmed HBSS were performed and the live cells were imaged on a confocal microscope (using the same exposure settings): excitation laser = 405nm, emission gate center = 519nm.

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