Hello Bio, Inc. 304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500 F. 609-228-4994

customercare-usa@m2stage.hellobio.com



# **DATASHEET**

Fura-2 AM (Cell permeant)

### **Product overview**

Name Fura-2 AM (Cell permeant)

Cat No HB0780

**Biological description** Fura-2 AM (Cell permeant) is a high affinity, cell permeable calcium indicator which is ratiometric and

UV light excitable. AM ester derivative of Fura-2.

Fura-2 AM (Cell permeant) can noninvasively be loaded into live cells by incubation and is widely used for ratio-imaging microscopy and measuring intracellular calcium elevations in neurons and other excitable cells.

Excitation 340/380nm, Emission 505nm.

For optimal cell loading, F-127 is available either as a 10% solution in water (HB16503) and 20%  $\,$ 

solution in DMSO (HB9631).

Biological action

Purity

Dyes & stains >95%

Customer comments Reliable product - product worked well for live cell calcium imaging in multiple cell types i.e. primary

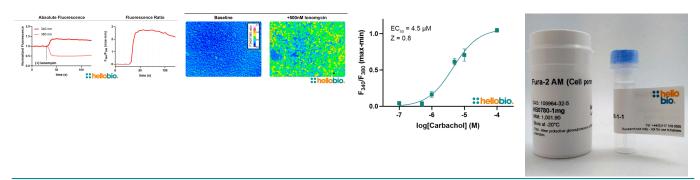
hippocampal neurons and HEK293 kidney cells. Verified customer, University College Dublin

Reliable - I have tried Fura-2 AM across multiple cell types and in different assays. Works well and is

reliable. Verified customer, UEA: University of East Anglia

**Description** High affinity, cell permeable calcium indicator which is ratiometric and UV light excitable

## **Images**



## **Biological Data**

**Application notes** Please follow our Fura-2 AM protocol.

## **Solubility & Handling**

Storage instructions
Solubility overview

-20°C

Soluble in DMSO

Handling

Important

This compound is light sensitive; exposure to light may affect compound performance. We therefore

recommend storing the solid material and any solutions in the dark and protecting from light.

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not

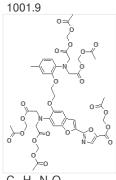
for human or veterinary use.

### **Chemical Data**

Chemical name 1-[2-(5-Carboxyoxazol-2-yl)-6-aminobenzofuran-5-oxy]-2-(2'-amino-5'-methyl-phenoxy)ethane-

N,N,N',N'-tetraacetic acid, pentaacetoxymethyl ester

Molecular Weight Chemical structure



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

InChiKey VPSRLGDRGCKUTK-UHFFFAOYSA-N

MDL numberMFCD00036976AppearanceYellow solidExcitation340/380nmEmission505nm

#### References

Calcium imaging of cortical neurons using Fura-2 AM.

Barreto-Chang OL *et al* (2009) J Vis Exp -23 **PubMedID** 19229178

Effects of transmitters and amyloid-beta peptide on calcium signals in rat cortical astrocytes: Fura-2AM measurements and stochastic model simulations.

Toivari E et al (2011) PLoS One 6(3)

**PubMedID** 21483471

Fura-2 measurement of cytosolic free Ca2+ in monolayers and suspensions of various types of animal cells.

Malgaroli A *et al* (1987) J Cell Biol 105(5) **PubMedID**3680375