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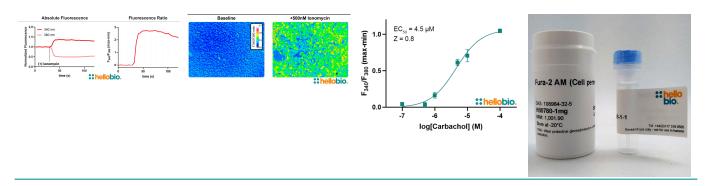
# DATASHEET

Fura-2 AM (Cell permeant)

## **Product overview**

Name Cat No Biological description	Fura-2 AM (Cell permeant) HB0780 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.
Biological action Purity Customer comments	Excitation 340/380nm, Emission 505nm. Dyes & stains >95% 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
Description	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 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 Handling

Important

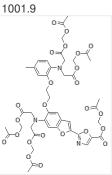
#### -20°C Soluble in DMSO

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**

Molecular Weight Chemical structure 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



 $C_{44}H_{47}N_3O_{24}$ 

Molecular Formula CAS Number PubChem identifier SMILES

InChiKey MDL number Appearance Excitation Emission 108964-32-5 3364574 CC1=CC(=C(C=C1)N(CC(=O)OCOC(=O)C)CC(=O)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)VPSRLGDRGCKUTK-UHFFFAOYSA-N MFCD00036976 Yellow solid 340/380nm 505nm

### 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