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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](#).

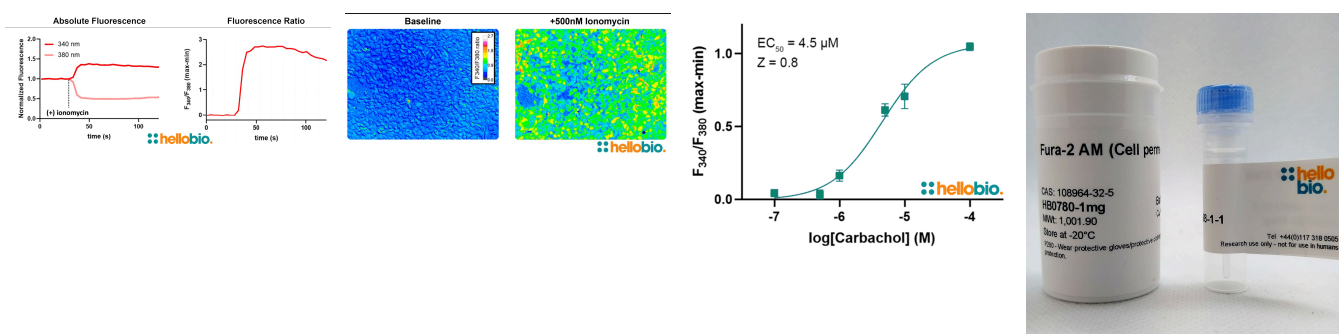
Fura-2 AM (Cell permeant) can noninvasively be loaded into live cells by incubation and is widely used for ratio-imaging microscopy and measuring intracellular calcium elevations in neurons and other excitable cells.

Biological action Excitation 340/380nm, Emission 505nm.
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



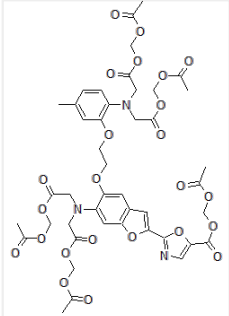
Biological Data

Application notes Please follow our [Fura-2 AM protocol](#).

Solubility & Handling

Storage instructions -20°C
Solubility overview Soluble in DMSO
Handling 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.
Important 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	1001.9
Chemical structure	
Molecular Formula	C ₄₄ H ₄₇ N ₃ O ₂₄
CAS Number	108964-32-5
PubChem identifier	3364574
SMILES	<chem>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</chem>
InChiKey	VPSRLGDRGCKUTK-UHFFFAOYSA-N
MDL number	MFCD00036976
Appearance	Yellow solid
Excitation	340/380nm
Emission	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](#)
