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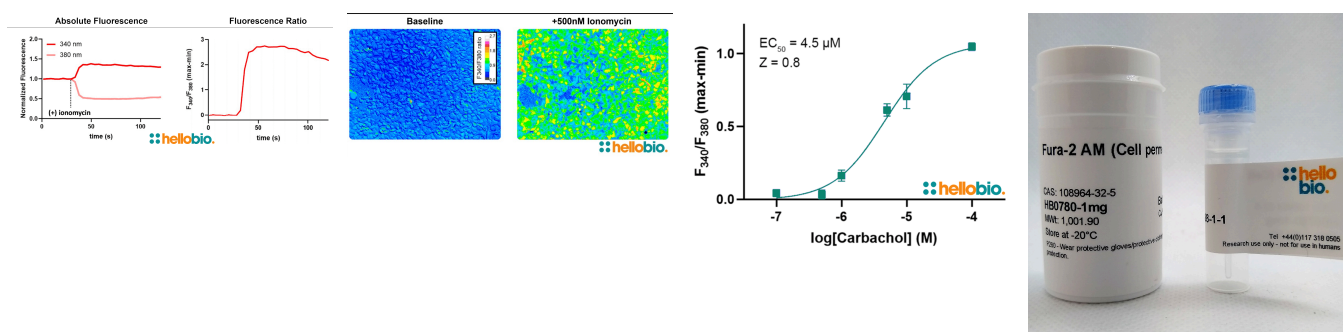
## DATASHEET

### Fura-2 AM (Cell permeant)

## Product overview

<b>Name</b>	Fura-2 AM (Cell permeant)
<b>Cat No</b>	HB0780
<b>Biological description</b>	<p>Fura-2 AM (Cell permeant) is a high affinity, cell permeable calcium indicator which is ratiometric and UV light excitable. AM ester derivative of <a href="#">Fura-2</a>.</p> <p>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.</p>
<b>Biological action</b>	Excitation 340/380nm, Emission 505nm.
<b>Purity</b>	Dyes & stains >95%
<b>Customer comments</b>	<p><i>Reliable product - product worked well for live cell calcium imaging in multiple cell types i.e. primary hippocampal neurons and HEK293 kidney cells. <b>Verified customer, University College Dublin</b></i></p> <p><i>Reliable - I have tried Fura-2 AM across multiple cell types and in different assays. Works well and is reliable. <b>Verified customer, UEA: University of East Anglia</b></i></p>
<b>Description</b>	High affinity, cell permeable calcium indicator which is ratiometric and UV light excitable

## Images



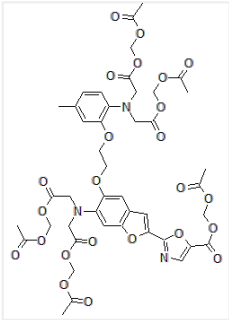
## Biological Data

<b>Application notes</b>	Please follow our <a href="#">Fura-2 AM protocol</a> .
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## Solubility & Handling

<b>Storage instructions</b>	-20°C
<b>Solubility overview</b>	Soluble in DMSO
<b>Handling</b>	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.
<b>Important</b>	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-Carboxyxazol-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 <sub>44</sub> H <sub>47</sub> N <sub>3</sub> O <sub>24</sub>
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 Ca<sup>2+</sup> in monolayers and suspensions of various types of animal cells.

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

**PubMedID** [3680375](#)