

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

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

customercare-usa@hellobio.com



DATASHEET

Methoxy-X04

Product overview

Name	Methoxy-X04
Cat No	HB5252
Biological description	Methoxy-X04 is a blood-brain barrier (BBB) permeable fluorescent amyloid β marker which specifically binds to amyloid deposits in postmortem AD brain sections.

It can be used to stain amyloid beta plaques, tangles and cerebrovascular amyloid.

It shows in vitro binding affinity of Amyloid beta fibrils ($K_i = 26.87 \text{ nM}$). The compound is active *in vivo*

Excitation wavelength: 370nm

Emission wavelength: 452nm

Biological action	Dyes & stains
Purity	>98%
Description	Fluorescent amyloid β stain. BBB permeable.

Solubility & Handling

Storage instructions	+4°C. Protect from light.
Solubility overview	Soluble in DMSO (100 mM), and in ethanol (20 mM). Protect 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	4,4'-[2-methoxy-1,4-phenylene]di-(1E)-2,1-ethenediyli]bisphenol
Molecular Weight	344.4
Chemical structure	The chemical structure shows a central methoxy group (-OCH ₃) attached to a 1,4-phenylene ring. This ring is connected via two ethene groups (-CH=CH-) to two bisphenol A units. Each bisphenol A unit consists of a phenol ring with a hydroxyl group (-OH) and a methyl group (-CH ₃) at the para position, linked by a carbon-carbon double bond.
Molecular Formula	C ₂₃ H ₂₀ O ₃
CAS Number	863918-78-9
PubChem identifier	16049314
SMILES	COC1=C(C=CC(=C1)/C=C/C2=CC=C(C=C2)O)/C=C/C3=CC=C(C=C3)O
Source	Synthetic
InChiKey	FGYNZFHVGOFCMD-KHVHPYDTSA-N
Appearance	Yellow solid

References

Fibrillar amyloid plaque formation precedes microglial activation

Jung CK et al (2015) PLoS One 10(3)

PubMedID

25799372

Imaging Abeta plaques in living transgenic mice with multiphoton microscopy and methoxy-X04, a systemically administered Congo red derivative

Klunk WE *et al* (2002) J Neuropathol Exp Neurol 61(9)

PubMedID

12230326

A Study of Amyloid-beta and Phosphotau in Plaques and Neurons in the Hippocampus of Alzheimer's Disease Patients

Furcila D *et al* (2018) J Alzheimers Dis 64(2)

PubMedID

29914033
