

Product Name: Methoxy-X04

Catalog No.: 4920

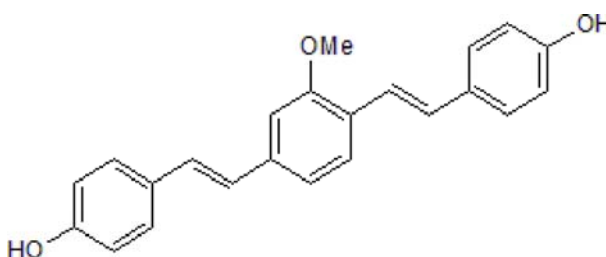
Batch No.: 3

CAS Number: 863918-78-9

IUPAC Name: 4,4'-[(2-methoxy-1,4-phenylene)di-(1E)-2,1-ethenediyl]bisphenol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₃H₂₀O₃
Batch Molecular Weight: 344.4
Physical Appearance: Yellow solid
Solubility: DMSO to 100 mM
 ethanol to 20 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.22 (Ethyl acetate:Petroleum ether [3:7])
HPLC: Shows 99.4% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	80.21	5.85	
Found	79.98	5.9	0.05

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: Methoxy-X04

Catalog No.: 4920

Batch No.: 3

CAS Number: 863918-78-9

IUPAC Name: 4,4'-[(2-methoxy-1,4-phenylene)di-(1E)-2,1-ethenediyl]bisphenol

Description:

Fluorescent amyloid β ($A\beta$) probe for the detection and quantification of plaques, tangles and cerebrovascular amyloid. Displays high in vitro binding affinity ($K_i = 26.8$ nM); binds selectively to fibrillar β -sheet deposits. Brain penetrant.

Physical and Chemical Properties:

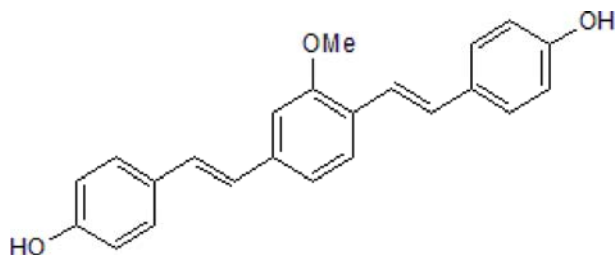
Batch Molecular Formula: $C_{23}H_{20}O_3$

Batch Molecular Weight: 344.4

Physical Appearance: Yellow solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at +4°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 20 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Yamanaka et al (2012) PPAR γ /RXR α -induced and CD36-mediated microglial amyloid- β phagocytosis results in cognitive improvement in amyloid precursor protein/presenilin 1 mice. *J.Neurosci.* **32** 17321. PMID: 23197723.

Bolmont et al (2008) Dynamics of the microglial/amyloid interaction indicate a role in plaque maintenance. *J.Neurosci.* **28** 4283. PMID: 18417708.

Klunk et al (2002) Imaging $A\beta$ plaques in living transgenic mice with multiphoton microscopy and methoxy-X04, a systemically administered Congo red derivative. *J.Neuropathol.Exp.Neurol.* **61** 797. PMID: 12230326.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956