



Certificate of Analysis

www.tocris.com

Product Name: MNS Catalog No.: 2877 Batch No.: 1

CAS Number: 1485-00-3

IUPAC Name: 3,4-Methylenedioxy-β-nitrostyrene

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_9H_7NO_4$ Batch Molecular Weight:193.16Physical Appearance:Yellow solid

Solubility: DMSO to 100 mM

ethanol to 5 mM

Storage: Store at +4°C

Batch Molecular Structure:

O NO2

C₉H₇NO₄

Exact Mass: 193.04 Mol. Wt.: 193.16

2. ANALYTICAL DATA

Melting Point: At 161°C

HPLC: Shows >99.6% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 55.96 3.65 7.25 Found 55.98 3.61 7.19



Product Information

Print Date: Apr 28th 2015

www.tocris.com

Product Name: MNS Catalog No.: 2877 Batch No.: 1

CAS Number: 1485-00-3

IUPAC Name: 3,4-Methylenedioxy-β-nitrostyrene

Description:

Selective inhibitor of Src and Syk tyrosine kinases. Displays antiaggregative activity via inhibition of GPIIb/IIIa activation (IC $_{50}$ = 12.7 μ M for thrombin-induced platelet aggregation). Exhibits no effects on Ca $^{2+}$ -dependent enzymes, PKC or arachidonic acid metabolism.

Physical and Chemical Properties:

Batch Molecular Formula: C₉H₇NO₄ Batch Molecular Weight: 193.16 Physical Appearance: Yellow solid

Minimum Purity: >99%

Batch Molecular Structure:

C₉H₇NO₄ Exact Mass: 193.04 Mol. Wt.: 193.16 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 5 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:

Wang et al (2006) Prevention of platelet glycoprotein IIb/IIIa activation by 3,4-methylenedioxy-β-nitrostyrene, a novel tyrosine kinase inhibitor. Mol.Pharmacol. 70 1380. PMID: 16837624.

Wang *et al* (2007) Synthesis and pharmacological evaluation of novel γ-nitrostyrene derivatives as tyrosine kinase inhibitors with potent antiplatelet activity. Biochem.Pharmacol. **74** 601. PMID: 17601492.

