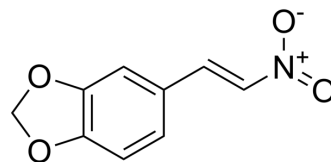


MNS

Cat. No.:	HY-78263		
CAS No.:	1485-00-3		
Molecular Formula:	C ₉ H ₇ NO ₄		
Molecular Weight:	193.16		
Target:	Src; Syk		
Pathway:	Protein Tyrosine Kinase/RTK		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (258.85 mM; Need ultrasonic)
 H₂O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	5.1771 mL	25.8853 mL	51.7706 mL
	5 mM	1.0354 mL	5.1771 mL	10.3541 mL
	10 mM	0.5177 mL	2.5885 mL	5.1771 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: 2.5 mg/mL (12.94 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (12.94 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

MNS (NSC 170724), the beta-nitrostyrene derivative, is a potent tyrosine kinase inhibitor and a broad-spectrum antiplatelet agent. MNS completely inhibits U46619, ADP-, arachidonic acid-, collagen-, and thrombin-induced platelet aggregation with IC₅₀ values of 2.1, 4.1, 5.8, 7.0, and 12.7 μM, respectively. MNS inhibits Src, Syk, and FAK with IC₅₀ of 27.3, 2.8, and 97.6 μM, respectively^{[1][2]}.

REFERENCES

[1]. Wang WY, et al. Synthesis and pharmacological evaluation of novel beta-nitrostyrene derivatives as tyrosine kinase inhibitors with potent antiplatelet activity. *Biochem Pharmacol.* 2007;74(4):601-611.

[2]. Wang WY, et al. Prevention of platelet glycoprotein IIb/IIIa activation by 3,4-methylenedioxy-beta-nitrostyrene, a novel tyrosine kinase inhibitor. *Mol Pharmacol.* 2006;70(4):1380-1389.

Caution: Product has not been fully validated for medical applications. For research use only.

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