

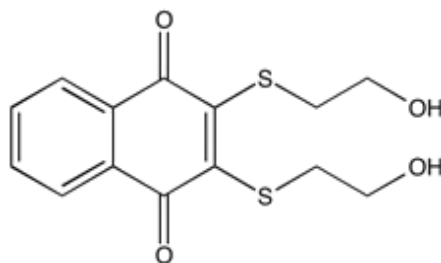
Catalog # 10-1565

NSC95397

CAS# 93718-83-3

2,3-bis[(2-Hydroxyethyl)thiol]-1,4-naphthoquinone

Lot # X106532



A potent and selective inhibitor of Cdc25 phosphatase ($K_i = 32, 96$ and 40 nM for Cdc25A, B and C respectively). NSC-95397 inhibits the growth of several human tumor cell lines and blocks G2/M cell cycle transition.¹ Induces cell cycle arrest, phosphorylation of EGFR and activation of ERK-1 and -2.² Inhibits carboxyl-terminal binding protein a transcriptional corepressor that suppresses multiple pro-apoptotic and epithelial genes.³ Induces eryptosis in human erythrocytes.⁴

- 1) Lazo *et al.* (2002), *Identification of a potent and selective pharmacophore for Cdc25 dual specificity phosphatase inhibitors*; Mol. Pharmacol., **61** 720
- 2) Melchheier *et al.* (2005), *Quinone-induced Cdc25A inhibition causes ERK-dependent connexin phosphorylation*; Biochem. Biophys. Res. Commun., **327** 1016
- 3) Blevins *et al.* (2015), *Small Molecule, NSC95397, inhibits the CtBP1-Protein Partner Interaction and CtBP1-Mediated Transcriptional Repression*; J. Biomol. Screen., **20** 663
- 4) Jemaa *et al.* (2016), *Stimulation of Suicidal Erythrocyte Death by the CDC25 Inhibitor NSC-95397*; Cell. Physiol. Biochem., **40** 597

PHYSICAL DATA

Molecular Weight:	310.39
Molecular Formula:	C ₁₄ H ₁₄ O ₄ S ₂
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	Soluble in DMSO (up to 15 mg/ml) or in Ethanol (up to 1 mg/ml)
Physical Description:	Orange solid
Storage and Stability:	Store as supplied, desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.