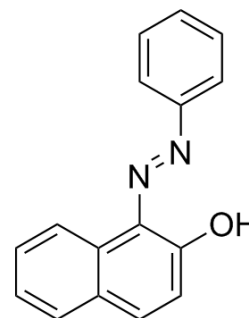


Sudan I

Cat. No.:	HY-D0024
CAS No.:	842-07-9
Molecular Formula:	C ₁₆ H ₁₂ N ₂ O
Molecular Weight:	248.28
Target:	Bacterial
Pathway:	Anti-infection
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (201.39 mM; Need ultrasonic)
H₂O : 0.67 mg/mL (2.70 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
		1 mM	4.0277 mL	20.1386 mL	40.2771 mL
	5 mM	0.8055 mL	4.0277 mL	8.0554 mL	
	10 mM	0.4028 mL	2.0139 mL	4.0277 mL	

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

BIOLOGICAL ACTIVITY

Description

Sudan I (Solvent Yellow 14) is a diazo-conjugate red dye and can be used as an additive to products such as oils, solvents or polishes. Sudan I inhibits growth of bacterial strains *Clostridium perfringens* and *L. rhamnosus*^[1].

In Vitro

Sudan I is a monoazo dye with the chemical formula of 1-phenylazo-2-naphthol. Sudan I can cause tumors in the liver or urinary bladder in mammals and is a potential mutagen and carcinogen for humans. Sudan I induces genotoxic effect in HepG2 cells and increases mutagenic and clastogenic effects in the MCL-5 cell lines compared to the AHH-1 cell line. In addition, Sudan I also gives positive results in *Salmonella Typhimurium* mutagenicity tests with S9 activation, a post-mitochondrial fraction prepared from the livers of rats^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Hongmiao Pan, et al. Evaluation of impact of exposure of Sudan azo dyes and their metabolites on human intestinal bacteria. *Anaerobe*. 2012 Aug;18(4):445-53.

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

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