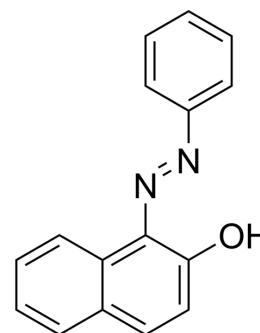


Sudan I

| | |
|--------------------|--|
| Cat. No.: | HY-D0024 |
| CAS No.: | 842-07-9 |
| Molecular Formula: | C ₁₆ H ₁₂ N ₂ O |
| Molecular Weight: | 248 |
| 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 : 10 mg/mL (40.32 mM; Need ultrasonic)
H₂O : < 0.1 mg/mL (ultrasonic) (insoluble)

| Solvent | Mass | Concentration | | |
|---------------------------|-------|---------------|------------|------------|
| | | 1 mg | 5 mg | 10 mg |
| Preparing Stock Solutions | 1 mM | 4.0323 mL | 20.1613 mL | 40.3226 mL |
| | 5 mM | 0.8065 mL | 4.0323 mL | 8.0645 mL |
| | 10 mM | 0.4032 mL | 2.0161 mL | 4.0323 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.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA