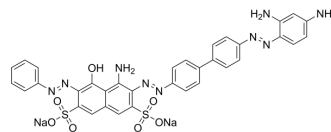


Direct Black 38

Cat. No.:	HY-D0256
CAS No.:	1937-37-7
Molecular Formula:	C ₃₄ H ₂₅ N ₉ Na ₂ O ₇ S ₂
Molecular Weight:	781.73
Target:	DNA/RNA Synthesis
Pathway:	Cell Cycle/DNA Damage
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 25 mg/mL (31.98 mM; Need ultrasonic)
H₂O : 5 mg/mL (6.40 mM; Need ultrasonic)

Concentration	Solvent	Mass	Preparing Stock Solutions		
			1 mg	5 mg	10 mg
1 mM			1.2792 mL	6.3961 mL	12.7921 mL
5 mM			0.2558 mL	1.2792 mL	2.5584 mL
10 mM			0.1279 mL	0.6396 mL	1.2792 mL

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

In Vivo

- Add each solvent one by one: PBS
Solubility: 3.85 mg/mL (4.92 mM); Clear solution; Need ultrasonic and warming and heat to 60°C
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (3.20 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (3.20 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Direct Black 38 (Chlorazol Black E) is an azo dye. Direct Black 38 induces unscheduled DNA synthesis in liver and micronucleus in bone marrow of rats in vivo^[1].

REFERENCES

[1]. Beije B. Induction of unscheduled DNA synthesis in liver and micronucleus in bone marrow of rats exposed in vivo to the benzidine-derived azo dye, Direct Black 38. Mutat Res. 1987 Apr;187(4):227-34.

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

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