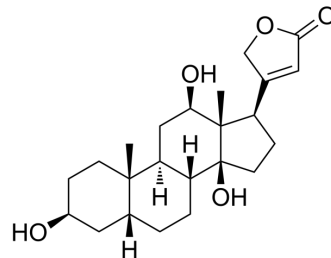


Digoxigenin

Cat. No.:	HY-B1025
CAS No.:	1672-46-4
Molecular Formula:	C ₂₃ H ₃₄ O ₅
Molecular Weight:	390.51
Target:	Fluorescent Dye
Pathway:	Others
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (256.08 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.5608 mL	12.8038 mL	25.6075 mL
		5 mM	0.5122 mL	2.5608 mL	5.1215 mL
		10 mM	0.2561 mL	1.2804 mL	2.5608 mL
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (5.33 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (5.33 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (5.33 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	Digoxigenin (DIG) is a steroid. DIG is used for situ hybridization as a labeling molecule probe due to long shelf life and fast detection and high sensitivity of DIG-labeled riboprobes ^{[1][3]} .	
In Vitro	Digoxigenin is a potent activator of RORγ-dependent transcription at 1 μM with an EC ₅₀ value of 0.358 μM ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Viability Assay ^[2]	
	Cell Line:	HepG2 (human hepatocellular carcinoma) cell line

Concentration:	0-10 μ M
Incubation Time:	24 h
Result:	Identified the optimal concentration for Digoxigenin: 1 μ M.

Cell Cytotoxicity Assay^[2]

Cell Line:	ROR γ -HepG2 cells
Concentration:	0-2 μ M
Incubation Time:	24 h
Result:	Increased the luciferase activity with concentration-dependent in cells.

REFERENCES

- [1]. Luo, Yuhao, et al. Long noncoding RNA (lncRNA) EIF3J-DT induces chemoresistance of gastric cancer via autophagy activation. *Autophagy* vol. 17,12 (2021): 4083-4101.
- [2]. Karaś, Kaja, et al. The cardenolides strophanthidin, digoxigenin and dihydroouabain act as activators of the human ROR γ /ROR γ T receptors. *Toxicology letters* vol. 295 (2018): 314-324.
- [3]. Barratt, Kristen S, et al. Production of Digoxigenin-Labeled Riboprobes for In Situ Hybridization Experiments. *Current protocols in mouse biology* vol. 10,2 (2020): e74.

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