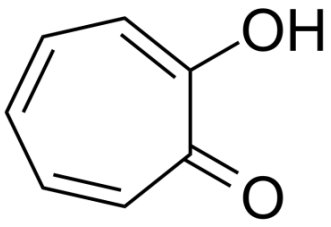
Tropolone

Cat. No.:	HY-N7135
CAS No.:	533-75-5
Molecular Formula:	$C_7H_6O_2$
Molecular Weight:	122.12
Target:	Tyrosinase
Pathway:	Metabolic Enzyme/Protease
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (818.87 mM)
H_2O : 25 mg/mL (204.72 mM; Need ultrasonic)
* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	8.1887 mL	40.9433 mL	81.8867 mL
	5 mM	1.6377 mL	8.1887 mL	16.3773 mL
	10 mM	0.8189 mL	4.0943 mL	8.1887 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: ≥ 2.5 mg/mL (20.47 mM); Clear solution
2. Add each solvent one by one: **10% DMSO >> 90% (20% SBE-β-CD in saline)**
   Solubility: ≥ 2.5 mg/mL (20.47 mM); Clear solution
3. Add each solvent one by one: **10% DMSO >> 90% corn oil**
   Solubility: ≥ 2.5 mg/mL (20.47 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Tropolone, a tropone derivative with a hydroxyl group in the 2-position, is a precursor of manyazulene derivatives such as methyl 2-methylazulene-1-carboxylate[1]. Tropolone is a potent inhibitor of **mushroom tyrosinase** with a **IC_{50}** of 0.4 μM, and the inhibition can be reversed by dialysis or by excess CU^{2+}[2].

IC_{50} & Target	IC50: 0.4 μM (mushroom tyrosinase)[2]

REFERENCES

[1]. Donald D Nolting,et al. Synthesis of bicyclo[5.3.0]azulene derivatives. Nat Protoc. 2009; 4(8): 1113–1117.

[2]. VardaKahn, et al.Inhibition of mushroom tyrosinase by tropolone Phytochemistry. Volume 24, Issue 5, 1985, Pages 905-908

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