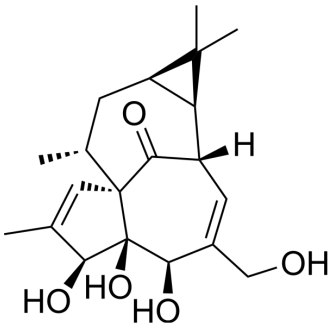
Ingenol

Cat. No.:	HY-N0865
CAS No.:	30220-46-3
Molecular Formula:	$C_{20}H_{28}O_5$
Molecular Weight:	348.43
Target:	PKC
Pathway:	Epigenetics; TGF-beta/Smad
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (287.00 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.8700 mL	14.3501 mL	28.7002 mL
	5 mM	0.5740 mL	2.8700 mL	5.7400 mL
	10 mM	0.2870 mL	1.4350 mL	2.8700 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 (7.18 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (7.18 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (7.18 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Ingenol is a PKC activator, with a K_i of 30 μM, with antitumor activity.

IC_{50} & Target

PKC
30 μM (Ki)

In Vitro

Ingenol is a PKC activator, with a K_i of 30 μM. Ingenol induces ornithine decarboxylase activity (1, 3 mM), and causes morphological changes (1 mM) in primary mouse epidermal keratinocytes. Ingenol (125 μM, 250 μM, 500 μM, 1 mM) also

inhibits cell-cell communication[1].

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

REFERENCES

[1]. Hasler CM, et al. Specific binding to protein kinase C by ingenol and its induction of biological responses. Cancer Res. 1992 Jan 1;52(1):202-8.

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

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