Proteins

Inhibitors

Acemetacin

Cat. No.: HY-B0482 CAS No.: 53164-05-9

Molecular Formula: $C_{21}H_{18}CINO_6$

Molecular Weight: 415.82 COX Target:

Pathway: Immunology/Inflammation

Storage: Powder -20°C 3 years

2 years

-80°C In solvent 2 years

> -20°C 1 year

Product Data Sheet

SOLVENT & SOLUBILITY

DMSO: 125 mg/mL (300.61 mM; Need ultrasonic) In Vitro

H₂O: < 0.1 mg/mL (insoluble)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.4049 mL	12.0244 mL	24.0489 mL
	5 mM	0.4810 mL	2.4049 mL	4.8098 mL
	10 mM	0.2405 mL	1.2024 mL	2.4049 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 (5.00 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (5.00 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (5.00 mM); Clear solution

BIOLOGICAL ACTIVITY

Description Acemetacin (TVX 1322) is a non-steroidal anti-inflammatory drug and a glycolic acid ester of indometacin that is a cyclooxygenase inhibitor.

COX-1 IC₅₀ & Target

85 μM (IC₅₀, in human intact cell)

In Vitro

Acemetacin (TVX 1322) is a non-steroidal anti-inflammatory drug, used for the treatment of osteoarthritis, rheumatoid arthritis, lower back pain, and relieving post-operative pain. Acemetacin (TVX 1322), a glycolic acid ester of indometacin, acts as a prodrug; in the body, it is metabolized to indometacin, which then acts as an inhibitor of cyclooxygenase, producing the anti-inflammatory effects. An advantage of Acemetacin (TVX 1322) is that it reduces gastric damage when compared to indometacin. From Wikipedia.

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

REFERENCES

[1]. Tavares IA, et al. Non-steroidal anti-inflammatory drugs that cause relatively little gastric damage. J Gastroenterol Hepatol. 1998 Nov;13(S3):S190-S192.

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

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