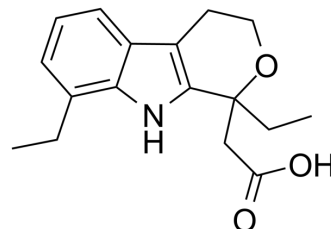


## Etodolac

Cat. No.:	HY-76251		
CAS No.:	41340-25-4		
Molecular Formula:	C <sub>17</sub> H <sub>21</sub> NO <sub>3</sub>		
Molecular Weight:	287.35		
Target:	COX		
Pathway:	Immunology/Inflammation		
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 (348.01 mM)  
 H<sub>2</sub>O : < 0.1 mg/mL (insoluble)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.4801 mL	17.4004 mL	34.8008 mL
	5 mM	0.6960 mL	3.4801 mL	6.9602 mL
	10 mM	0.3480 mL	1.7400 mL	3.4801 mL

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.5 mg/mL (8.70 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (8.70 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (8.70 mM); Clear solution

### BIOLOGICAL ACTIVITY

Description	Etodolac (AY-24236) is a non-steroidal anti-inflammatory compound that is a non-selective inhibitor of COX (IC <sub>50</sub> =53.5 nM)	
IC <sub>50</sub> & Target	COX-2 41 nM (IC <sub>50</sub> , in CHO cells)	COX-1 -50000 nM (IC <sub>50</sub> , in CHO cells)

## In Vitro

Post-marketing studies demonstrated that etodolac inhibition of cyclooxygenase is somewhat COX-2 selective similar to celecoxib and other "COX-2 inhibitors." Unlike rofecoxib, both etodolac and celecoxib can fully inhibit COX-1 and are designated as having "preferential selectivity" toward COX-2. The (inactive against COX) r-enantiomer of etodolac inhibits beta-catenin levels in hepatoma cells.

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

## REFERENCES

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- [2]. Ito S, Tajima K, Nogawa M et al. Etodolac, a cyclooxygenase-2 inhibitor, attenuates paclitaxel-induced peripheral neuropathy in a mouse model of mechanical allodynia. *J Pharmacol Exp Ther.* 2012 Jul;342(1):53-60.
- [3]. Yanaoka K, Oka M, Yoshimura N et al. Preventive effects of etodolac, a selective cyclooxygenase-2 inhibitor, on cancer development in extensive metaplastic gastritis, a *Helicobacter pylori*-negative precancerous lesion. *Int J Cancer.* 2010 Mar 15;126(6):146
- [4]. Matsuyama M, Yoshimura R, Hase T et al. Administration of the selective cyclooxygenase (COX)-2 inhibitor etodolac prolongs cardiac allograft survival in a mouse model. *Mol Med Report.* 2010 Sep-Oct;3(5):771-4.

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

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