

Diclofenac (diethylamine)

Catalog No: tcsc2701



Available Sizes

Size: 5g

Size: 10g



Specifications

CAS No:

78213-16-8

Formula:

$C_{18}H_{22}Cl_2N_2O_2$

Pathway:

Immunology/Inflammation

Target:

COX

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Observed Molecular Weight:

369.29

Product Description

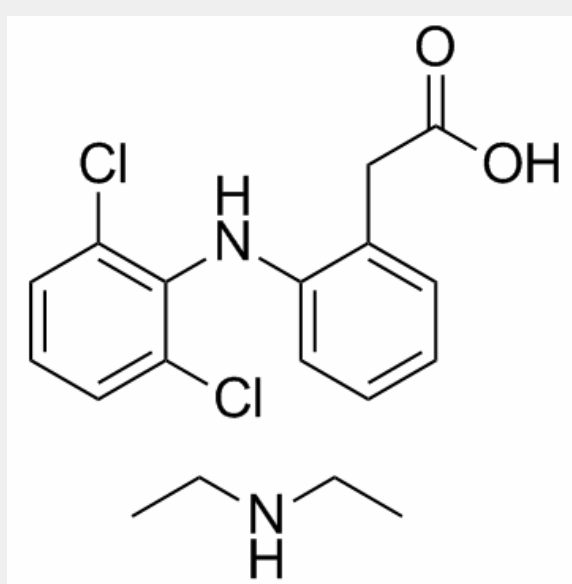
Diclofenac diethylamine is a potent and nonselective anti-inflammatory agent, acts as a **COX** inhibitor, with **IC₅₀**s of 4 nM, 1.3 nM for human COX-1 and COX-2 in CHO cells, and 5.1, 0.84 μM for ovine COX-1 and COX-2, respectively.

IC50 & Target: IC50: 4 nM (Human COX-1, in CHO cells), 1.3 nM (Human COX-2, in CHO cells)^[1], 5.1 μM (Ovine COX-1), 0.84 μM (Ovine COX-2)^[2]

In Vitro:

Diclofenac diethylamine is a potent COX inhibitor, with IC_{50} s of 4 nM and 1.3 nM for human COX-1 and COX-2 in the CHO cells, respectively. Diclofenac effectively blocks COX-1 mediated prostanoid production from U937 cell microsomes, with an IC_{50} of 7 ± 3 nM^[1]. Diclofenac sodium exhibits inhibition on COX-1 and COX-2 enzyme with IC_{50} s of 5.1 and 0.84 μ M, respectively^[2].

In Vivo: Diclofenac (3 mg/kg, b.i.d., for 5 days) significantly increases faecal ^{51}Cr excretion in rats, and such effect is also observed in squirrel monkeys after administrated of 1 mg/kg twice daily for 4 days^[1]. Diclofenac (10 mg/kg) shows anti-inflammatory activity in mice^[2]. Diclofenac (10 mg/kg) decreases oxidized low-densitylipoprotein (Ox-LDL), but shows no effects on the kinetics parameters of catalase and glutathione peroxidase via intramuscularly injection into rats^[3].



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