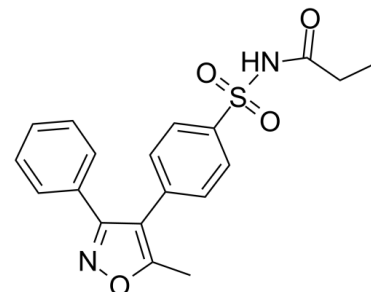


Data Sheet

Product Name:	Parecoxib
Cat. No.:	CS-1959
CAS No.:	198470-84-7
Molecular Formula:	C ₁₉ H ₁₈ N ₂ O ₄ S
Molecular Weight:	370.42
Target:	COX
Pathway:	Immunology/Inflammation
Solubility:	DMSO : ≥ 50 mg/mL (134.98 mM)



BIOLOGICAL ACTIVITY:

Parecoxib is a potent and selective COX-2 inhibitor. IC₅₀ value: Target: COX-2 in vitro: The prodrug Parecoxib as well as its active metabolite val have a specific affinity to the cannabinoid (CB) receptor measured in CB1-expressing HEK 293 cells and rat brain tissue [1]. in vivo: Adult male Sprague-Dawley rats were administered parecoxib (10 or 30 mg kg⁻¹, IP) or isotonic saline twice a day starting 24 h after middle cerebral artery occlusion (MCAO) for three consecutive days [2]. The selective COX-2 inhibitor parecoxib was delivered 20 min before or 20 min after the incision by intraperitoneal injection. Pretreatment with parecoxib markedly attenuated the pain hypersensitivity induced by incision [3].

References:

- [1]. Ye Z, et al. Delayed administration of parecoxib, a specific COX-2 inhibitor, attenuated postischemic neuronal apoptosis by phosphorylation Akt and GSK-3β. *Neurochem Res.* 2012 Feb;37(2):321-9.
- [2]. Schröder H, et al. Parecoxib and its metabolite valdecoxib directly interact with cannabinoid binding sites in CB1-expressing HEK 293 cells and rat brain tissue. *Neurochem Int.* 2011 Jan;58(1):9-13.
- [3]. Guo YJ, et al. Analgesic effects of the COX-2 inhibitor parecoxib on surgical pain through suppression of spinal ERK signaling. *Exp Ther Med.* 2013 Jul;6(1):275-279.

CAIndexNames:

Propanamide, N-[[4-(5-methyl-3-phenyl-4-isoxazolyl)phenyl]sulfonyl]-

SMILES:

CCC(NS(=O)(=O)C1=CC=C(C2=C(C)ON=C2C3=CC=CC=C3)C=C1)=O

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

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