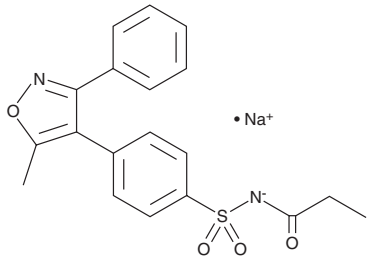
PRODUCT INFORMATION

Parecoxib (sodium salt)

Item No. 29017

CAS Registry No.:	198470-85-8
Formal Name:	N-[[4-(5-methyl-3-phenyl-4-isoxazolyl)phenyl]sulfonyl]-propanamide, monosodium salt
Synonym:	SC-69124A
MF:	$C_{19}H_{17}N_2O_4S \bullet Na$
FW:	392.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 245 nm
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Parecoxib (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the parecoxib (sodium salt) in the solvent of choice, which should be purged with an inert gas. Parecoxib (sodium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of parecoxib (sodium salt) in these solvents is approximately 3, 15, and 10 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of parecoxib (sodium salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of parecoxib (sodium salt) in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Parecoxib is a prodrug form of the COX-2 inhibitor valdecoxib (Item No. 10006120).[1] It is converted to valdecoxib by human liver microsomes *in vitro* and *in vivo* in rats, dogs, and cynomolgous monkeys. Parecoxib is also a cannabinoid (CB) receptor 1 agonist with an EC_{50} value of 2.4 µM in HEK293 cells.[2] It reduces hyperalgesia in a rat model of carrageenan-induced foot pad edema (ED_{50} = 5 mg/kg) and decreases inflammation in a rat model of *M. butyricum*-induced arthritis (ED_{50} = 0.08 mg/kg).[1]

References

1. Talley, J.J., Bertenshaw, S.R., Brown, D.L., *et al.* N-[[(5-methyl-3-phenylisoxazol-4-yl)-phenyl]sulfonyl] propanamide, sodium salt, parecoxib sodium: A potent and selective inhibitor of COX-2 for parenteral administration. *J. Med. Chem.* **43(9)**, 1661-1663 (2000).
2. Schröder, H., Höllt, V., and Becker, A. Parecoxib and its metabolite valdecoxib directly interact with cannabinoid binding sites in CB1-expressing HEK 293 cells and rat brain tissue. *Neurochem. Int.* **58(1),** 9-13 (2011).

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