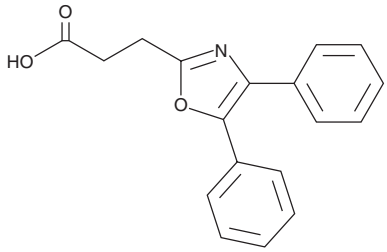
PRODUCT INFORMATION

Oxaprozin

Item No. 15476

CAS Registry No.:	21256-18-8
Formal Name:	4,5-diphenyl-2-oxazolepropanoic acid
Synonyms:	NSC 310839, Wy 21743
MF:	$C_{18}H_{15}NO_3$
FW:	293.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 224, 288 nm
Supplied as:	A crystalline 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

Oxaprozin is supplied as a crystalline solid. A stock solution may be made by dissolving the oxaprozin in the solvent of choice, which should be purged with an inert gas. Oxaprozin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of oxaprozin in ethanol is approximately 15 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Oxaprozin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, oxaprozin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Oxaprozin has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Oxaprozin is a non-steroidal anti-inflammatory drug (NSAID) and COX inhibitor (IC_{50}s = 2.2 and 36 µM for human COX-1 and COX-2, respectively).[1] It decreases acetic acid-induced writhing times and carrageenan-induced paw edema in mice when administered at doses of 100 and 70 mg/kg, respectively.[2] Formulations containing oxaprozin have been used in the treatment of pain associated with osteoarthritis and rheumatoid arthritis.

References

1. Kawai, S., Nishida, S., Kato, M., *et al*. Comparison of cyclooxygenase-1 and -2 inhibitory activities of various nonsteroidal anti-inflammatory drugs using human platelets and synovial cells. *Eur. J. Pharmacol.* **347(1)**, 87-94 (1998).
2. Zhou, X.-P., Zhang, M.-X., Sun, W., *et al*. Design, synthesis, and *in-vivo* evaluation of 4,5-diaryloxazole as novel nonsteroidal anti-inflammatory drug. *Biol. Pharm. Bull.* **32(12)**, 1986-1990 (2009).

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