# **PRODUCT** INFORMATION



## Benoxaprofen

Item No. 36001

CAS Registry No.:	51234-28-7	
Formal Name:	2-(4-chlorophenyl)-α-methyl-5-	
	benzoxazoleacetic acid	
Synonyms:	LRCL 3794, NSC 299582	
MF:	C <sub>16</sub> H <sub>12</sub> CINO <sub>3</sub>	
FW:	301.7	
Purity:	≥98%	
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

Benoxaprofen is supplied as a solid. A stock solution may be made by dissolving the benoxaprofen in the solvent of choice, which should be purged with an inert gas. Benoxaprofen is slightly soluble in DMSO and methanol (sonicated).

### Description

Benoxaprofen is a non-steroidal anti-inflammatory drug.<sup>1</sup> It inhibits prostaglandin  $E_2$  (PGE<sub>2</sub>; Item No. 14010) and leukotriene C<sub>4</sub> (LTC<sub>4</sub>; Item No. 20210) production in isolated mouse peritoneal macrophages stimulated with A23187 (Item No. 11016 | 22030) when used at a concentration of 100  $\mu$ M.<sup>2</sup> Benoxaprofen (25 and 50 µg/ml) inhibits serum-induced chemotaxis of isolated rat peritoneal leukocytes.<sup>3</sup> It induces hemolysis in isolated human erythrocytes and histamine release in isolated rat peritoneal mast cells in a light-dependent manner when used at a concentration of 10  $\mu$ M.<sup>4</sup> Benoxaprofen reduces carrageenan-induced paw edema and yeast-induced fever in rats and acetic acid-induced writhing in mice in a dose-dependent manner.<sup>1</sup> Formulations containing benoxaprofen have previously been used in the treatment of osteoarthritis and rheumatoid arthritis.

#### References

- 1. Cashin, C.H., Dawson, W., and Kitchen, E.A. The pharmacology of benoxaprofen (2-[4-chlorophenyl]a-methyl-5-benzoxazole acetic acid), LRCL 3794, a new compound with antiinflammatory activity apparently unrelated to inhibition of prostaglandin synthesis. J. Pharm. Pharmacol. 29(6), 330-336 (1977).
- 2. Brune, K., Aehringhaus, U., and Peskar, B.A. Pharmacological control of leukotriene and prostaglandin production from mouse peritoneal macrophages. Agents Actions 14(5-6), 729-734 (1984).
- Meacock, S.C. and Kitchen, E.A. Effects of the non-steroidal anti-inflammatory drug benoxaprofen on 3. leucocyte migration. J. Pharm. Pharmacol. 31(6), 366-370 (1979).
- 4. Sik, R.H., Paschall, C.S., and Chignell, C.F. The phototoxic effect of benoxaprofen and its analogs on human erythrocytes and rat peritoneal mast cells. Photochem. Photobiol. 38(4), 411-415 (1983).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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