

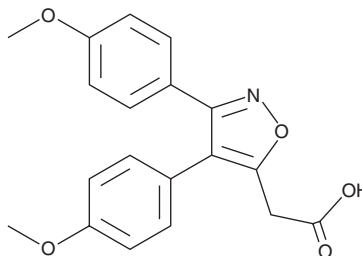
PRODUCT INFORMATION



Mofezolac

Item No. 34102

CAS Registry No.: 78967-07-4
Formal Name: 3,4-bis(4-methoxyphenyl)-5-isoxazoleacetic acid
Synonym: N-22
MF: C₁₉H₁₇NO₅
FW: 339.3
Purity: ≥98%
UV/Vis.: λ_{max}: 232 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

Mofezolac is supplied as a solid. A stock solution may be made by dissolving the mofezolac in the solvent of choice, which should be purged with an inert gas. Mofezolac is soluble in DMSO.

Description

Mofezolac is an inhibitor of COX-1 (IC₅₀ = 14 nM).¹ It is selective for COX-1 over COX-2 (IC₅₀ = 440 nM). Mofezolac (1 µg/ml) protects against LPS-induced cell death in BV-2 microglia. *In vivo*, mofezolac (6 mg/kg, i.p.) reduces hippocampal microglial activation and prostaglandin E₂ (PGE₂; Item No. 14010) production in a mouse model of LPS-induced neuroinflammation. It reduces phenylquinone-induced writhing in a mouse model of acute pain.² Dietary administration of mofezolac (1,200 ppm) reduces the number of aberrant crypt foci and tumors in a rat model of beef tallow diet-induced colon carcinogenesis.³

References

1. Calvello, R., Lofrumento, D.D., Perrone, M.G., *et al.* Highly selective cyclooxygenase-1 inhibitors P6 and mofezolac counteract inflammatory state both *in vitro* and *in vivo* models of neuroinflammation. *Front. Neurol.* **8**, 251 (2017).
2. Goto, K., Ochi, H., Yasunaga, Y., *et al.* Analgesic effect of mofezolac, a non-steroidal anti-inflammatory drug, against phenylquinone-induced acute pain in mice. *Prostaglandins Other Lipid Mediat.* **56(4)**, 245-254 (1998).
3. Miao, L., Shiraishi, R., Fujise, T., *et al.* Chemopreventive effect of mofezolac on beef tallow diet/azoxymethane-induced colon carcinogenesis in rats. *Hepatogastroenterology* **58(105)**, 81-88 (2011).

WARNING

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

SAFETY 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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