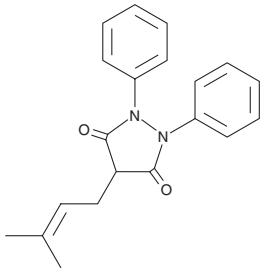
PRODUCT INFORMATION

Feprazone

Item No. 20652

CAS Registry No.:	30748-29-9
Formal Name:	4-(3-methyl-2-buten-1-yl)-1,2-diphenyl-3,5-pyrazolidinedione
MF:	$C_{20}H_{20}N_2O_2$
FW:	320.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 240 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

Feprazone is supplied as a crystalline solid. A stock solution may be made by dissolving the feprazone in the solvent of choice, which should be purged with an inert gas. Feprazone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). It is also soluble in water. The solubility of feprazone in ethanol, DMSO, DMF, and water is approximately 50, 25, 25, and 1 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 feprazone can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of feprazone in PBS, pH 7.2, is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Feprazone is a non-steroidal anti-inflammatory drug (NSAID) and COX inhibitor that is 10-fold selective for COX-2 over COX-1.[1] It reduces LPS-induced prostaglandin E_2 (PGE_2; Item No. 14010) production in bovine arterial endothelial cells (IC_{50} = 1 µM). Oral administration of feprazone (25-100 mg/kg) reduces vascular permeability, edema, and nociception in a rat model of adjuvant-induced arthritis.[2]

References

1. Hou, Q., Hu, Y., Guo, Y., *et al.* Effects of feprazone on cyclooxygenase in vitro. *Yaoxue Xuebao* **35(7)**, 481-483 (2000).
2. Tsurumi, K., Kyuki, K., Togawa, Y., *et al.* Pharmacological studies of 4-prenyl-1,2-diphenyl-3,5-pyrazolidinedione (Feprazone DA-2370). 1. Anti-inflammatory, analgesic and antipyretic properties. *Oyo Yakuri* **16(3)**, 413-429 (1978).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM