

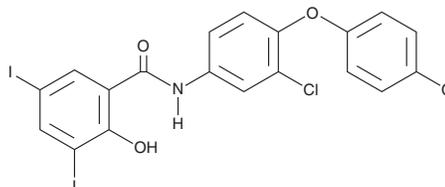
PRODUCT INFORMATION



Rafoxanide

Item No. 29616

CAS Registry No.: 22662-39-1
Formal Name: N-[3-chloro-4-(4-chlorophenoxy)phenyl]-2-hydroxy-3,5-diiodo-benzamide
Synonym: NSC 355278
MF: C₁₉H₁₁Cl₂I₂NO₃
FW: 626.0
Purity: ≥98%
UV/Vis.: λ_{max}: 222, 338, 386 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

Rafoxanide is supplied as a crystalline solid. A stock solution may be made by dissolving the rafoxanide in the solvent of choice, which should be purged with an inert gas. Rafoxanide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of rafoxanide in ethanol is approximately 2 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Rafoxanide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, rafoxanide should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Rafoxanide has a solubility of approximately 0.1 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Rafoxanide is an anthelmintic.¹⁻³ *In vivo*, rafoxanide (50 mg/kg) completely eradicates *E. caproni* infection in mice.¹ It is active against *H. contortus* in sheep when administered at a dose of 10 mg/kg and eliminates mature *F. hepatica* flukes in cattle when administered at a dose of 7.5 mg/kg.^{1,2} It is also cytotoxic to A375 and A431 skin cancer cells *in vitro* (IC₅₀s = 10.9 and 1.31 μM, respectively) and reduces tumor growth in an A375 mouse xenograft model when administered at a dose of 40 mg/kg.³ Formulations containing rafoxanide have been used in the treatment of parasitic infections in sheep and cattle.

References

1. Maurar, K., Decere, M., and Fried, B. Effects of the anthelmintics clorsulon, rafoxanide, mebendazole and aprinocid on *Echinostoma caproni* in ICR mice. *J. Helminthol.* **70(1)**, 95-96 (1996).
2. Egerton, J.R., Yakstis, J.J., and Campbell, W.C. Efficacy of rafoxanide (3,5-diiodo-3'-chloro-4'-(p-chlorophenoxy) salicylanilide) against *Haemonchus contortus* in sheep. *Res. Vet. Sci.* **11(4)**, 382-388 (1970).
3. Knapp, S.E. and Presidente, P.J.A. Efficacy of rafoxanide against natural fasciola hepatica infections in cattle. *Am. J. Vet. Res.* **32(8)**, 1289-1291 (1971).

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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