

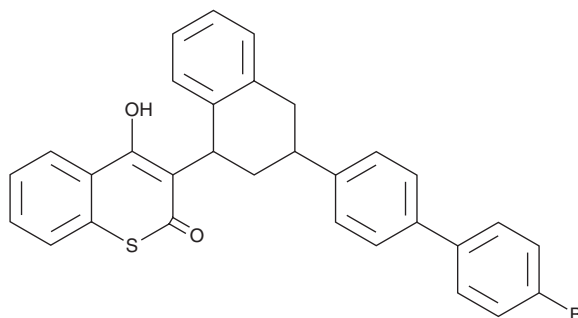
PRODUCT INFORMATION



Difethialone

Item No. 36225

CAS Registry No.: 104653-34-1
Formal Name: 3-[3-(4'-bromo[1,1'-biphenyl]-4-yl)-1,2,3,4-tetrahydro-1-naphthalenyl]-4-hydroxy-2H-1-benzothiopyran-2-one
Synonym: LM-2219
MF: C₃₁H₂₃BrO₂S
FW: 539.5
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

Difethialone is supplied as a solid. A stock solution may be made by dissolving the difethialone in the solvent of choice, which should be purged with an inert gas. Difethialone is slightly soluble in chloroform and methanol.

Description

Difethialone is an anticoagulant rodenticide and a vitamin K antagonist.¹ It binds to vitamin K epoxide reductase (VKOR; K_is = 0.04 and 0.05 μM for the wild-type and VKOR^{Y139F} enzyme, respectively). Difethialone is toxic to mice (LD₅₀ = 1.29 mg/kg).² Formulations containing difethialone have been used in the control of rodent pest populations.

References

1. Hodroge, A., Longin-Sauvageon, C., Fourel, I., *et al.* Biochemical characterization of spontaneous mutants of rat VKORC1 involved in the resistance to antivitamin K anticoagulants. *Arch. Biochem. Biophys.* **515**(1-2), 14-20 (2011).
2. Vandenbroucke, V., Bousquet-Melou, A., De Backer, P., *et al.* Pharmacokinetics of eight anticoagulant rodenticides in mice after single oral administration. *J. Vet. Pharmacol. Ther.* **31**(5), 437-445 (2008).

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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