

PRODUCT INFORMATION



Derquantel

Item No. 19441

CAS Registry No.: 187865-22-1

Formal Name: (1'R,5'aS,7'R,8'aS,9'aR)-2',3',8'a,9,9',10-hexahydro-1'-hydroxy-1',4,4,8',11'-hexamethyl-spiro[4H,8H-[1,4]dioxepino[2,3-g]indole-8,7'(8'H)-[5H,6H-5a,9a](iminomethano)[1H]cyclopent[f]indolizin]-10'-one

Synonyms: PF-00520904, PNU 141962, 2-deoxy-Paraherquamide

MF: C₂₈H₃₇N₃O₄

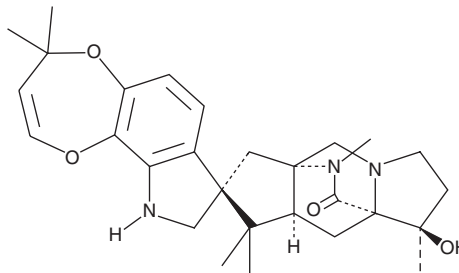
FW: 479.6

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

Derquantel is supplied as a solid. A stock solution may be made by dissolving the derquantel in the solvent of choice, which should be purged with an inert gas. Derquantel is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

Derquantel is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Derquantel is an anthelmintic spiroindole that acts as a nicotinic acetylcholine receptor antagonist, causing flaccid paralysis and expulsion of nematodes.¹ A combination of derquantel and the macrocyclic lactone, abamectin (Item No. 19201), has been found to have synergistic anthelmintic effects against gastrointestinal nematode parasites in sheep.²

References

1. Holden-Dye, L. and Walker, R.J. Anthelmintic drugs and nematicides: Studies in *Caenorhabditis elegans*. *WormBook* **16**, (2014).
2. Abongwa, M., Buxton, S.K., Robertson, A.P., *et al.* Curiouser and curiouser: The macrocyclic lactone, abamectin, is also a potent inhibitor of pyrantel/tribendimidine nicotinic acetylcholine receptors of gastro-intestinal worms. *PLoS One* **11(1)**, (2016).

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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