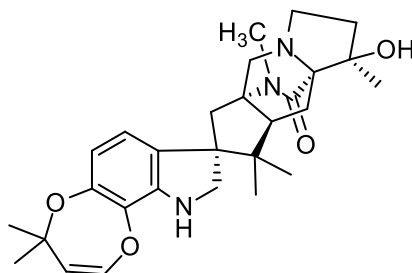


Derquantel

Code No.: **BIA-D1514**

Pack sizes: **5 mg, 25 mg**



Synonyms : 2-Deoxoparaherquamide, 2-Deoxoparaherquamide A, 2-Desoxoparaherquamide A, PF 00520904, PNU 141962

Specifications

CAS #	: 187865-22-1
Molecular Formula	: C₂₈H₃₇N₃O₄
Molecular Weight	: 479.6
Source	: Semi-synthetic
Appearance	: White solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

Application Notes

Derquantel is a semi-synthetic paraherquamide analogue prepared by removal of the 2-oxo group in a four-step sequence of N-protection, reduction, N-deprotection and a final reduction. Derquantel is a potent nematocide and was the first paraherquamide to be successfully commercialised in combination with avermectin. Derquantel, like other paraherquamides, induces a flaccid paralysis in nematodes thought to be due to inhibition of nicotinic acetylcholine receptors acting as an antagonist of acetylcholine.

References

1. Ligands of the nicotinic acetylcholine receptor as insecticides. Nauen R. et al., Pestic. Sci. 1999, 55, 608-610.
2. Semisynthesis of 2-deoxo- and 3-*epi*-paraherquamide A. Lee B.H. et al., Bioorg. Med. Chem. Lett. 2001, 11, 553-554.
3. Marcfortine and paraherquamide class of anthelmintics: Discovery of PNU-141962. Lee B.H. et al., Current Topics in Med. Chem. 2002, 2, 779.