

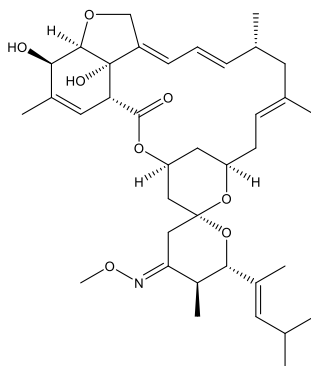
Catalog #10-4436

Moxidectin

CAS 113507-06-5

(1*R*,4*S*,4'*E*,5'*S*,6*R*,6'*S*,8*R*,10*E*,13*R*,14*E*,16*E*,20*R*,21*R*,24*S*)-21,24-dihydroxy-4'-methoxyimino-5',11,13,22-tetramethyl-6'-[(*E*)-4-methylpent-2-en-2-yl]spiro[3,7,19-trioxatetracyclo[15.6.1.1^{4,8}.0^{20,24}]pentacos-10,14,16,22-tetraene-6,2'-oxane]-2-one

Lot # FBS4083



Moxidectin is a macrocyclic lactone anthelmintic drug used in veterinary medicine for the treatment of various parasitic diseases. In 2018, It was approved for use in the treatment of river-blindness in humans.¹ Moxidectin is also being investigated as a possible treatment for scabies in humans.² Moxidectin inhibited the proliferation of several glioblastoma multiforme (GBM) cell lines via induction of apoptosis.³ It inhibited the MEK-ERK pathway resulting in blocking of nuclear translocation and transcription of the YAP/TAZ-TEAD complex in GBM cells. It suppressed growth of GBM tumors by 90% in an intracranial tumor model.

- 1) Maheu-Girous and Joseph (2018), *Moxidectin for deworming: from trials to implementation*; Lancet Infect. Dis. **18** 817
- 2) Mounsey7 *et al.* (2016), *Prospects for Moxidectin as a New Oral Treatment for Human Scabies*; PLoS Negl. Trop. Dis. **10** e0004389
- 3) Kaushik *et al.* (2025), *Moxidectin Unravels the Role of the Hippo-YAP Pathway in Maintaining Immunity of Glioblastoma Multiforme*; Mol. Cancer Ther. **24** 1156

PHYSICAL DATA

Molecular Weight:	639.83
Molecular Formula:	C ₃₇ H ₅₃ NO ₈
Purity:	>98% (HPLC)
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/mL)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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