

Product Name:	Delta-2-Avermectin B1a
Product Number:	D041
CAS Number:	110415-68-4
Molecular Formula:	C ₄₈ H ₇₂ O ₁₄
Molecular Weight:	873.1
Appearance:	White solid
Solubility:	soluble in ethanol, methanol, DMF and DMSO.
Source:	semi-synthetic
Storage Conditions:	-20°C
Description:	<p>Delta-2-Avermectin B1a is degradation product of Avermectin. It is formed by rearrangement of the naturally-occurring delta-3-group moving to the 2-position. It is an irreversible base degradation product found in animals treated with Avermectin. Delta-2-Avermectin B1a has lower activity than the parent Avermectin but nonetheless has activity at 1 ppm concentration.</p> <p>Abamectin belongs to the Avermectin family which are natural macrocyclic lactones produced by the soil actinomycete <i>Streptomyces avermitilis</i>. Abamectin is a mixture of ≥ 80% Avermectin B1a and ≤ 20% Avermectin B1b. Abamectin has anthelmintic and insecticidal properties.</p> <p>Delta-2-Avermectin B1a is soluble in ethanol, methanol, DMF and DMSO.</p>
References:	<p>Blizzard T, Fisher MH, Mrozik H, Shih TL (1990) Avermectins and Milbemycins. In: Lukacs G, Ohno M. (eds) Recent Progress in the Chemical Synthesis of Antibiotics. Springer, Berlin, Heidelberg</p> <p>Egerton JR et al (year) Avermectins, new family of potent anthelmintic agents: Efficacy of the B1a component. Antimicrob. Agents Chemother. 15(3):372-378 PMID 464563</p> <p>Pivnichny JV, Arison BY, Preiser FA, Shim JSK and Mrozik H (1988) Base-catalyzed isomerization of avermectins. J. Agric. Food Chem 36(4):826-828</p> <p>Pivnichny JV, Shim JK and Zimmerman LA (1983) Direct determination of avermectins in plasma at nanogram levels by high-performance liquid chromatography. J. Pharm. Sci. 72(12):1447-1450 PMID 464563</p>