



# LKT Laboratories, Inc.

## Abamectin

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### Product Information

**Product ID** A0501

**CAS No.** 71751-41-2

**Chemical Name** Avermectin B(sub 1)

**Synonym** Avermectin B1, 5-O-demethyl-25-de(91-methylpropyl)-25- (1-methylethyl) avermectin A1a (4:1)

**Formula** C<sub>48</sub>H<sub>72</sub>O<sub>14</sub>(B1a)

**Formula Wt.**

**Melting Point** 150-155°C

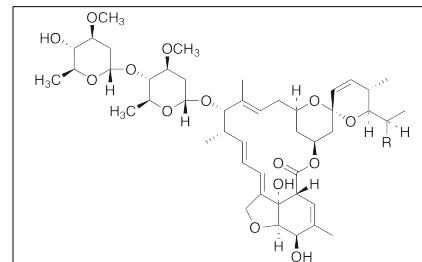
**Purity** ≥70%

**Solubility** Soluble in methanol, acetone, isopropanol or toluene.

**Store Temp** Ambient

**Ship Temp** Ambient

**Description** Abamectin is a macrocyclic lactone avermectin, produced from the soil organism streptomyces avermitilis, that exhibits antibiotic and anti-fertility activities. Abamectin inhibits F0F1-ATPase and the adenine nucleotide translocator (ANT), preventing mitochondrial respiration and acting as an anti-parasitic/anti-helminthic. Additionally, abamectin decreases sperm count and motility and increases seminiferous tubule damage in male rats. This compound also inhibits GABA receptors in some models; other avermectins increase GABA release, indirectly stimulating activity of GABA receptors.



**Bulk quantities available upon request**

Product ID	Size
A0501	1 g
A0501	5 g
A0501	25 g

**References** Castanha Zanoli JC, Maioli MA, Medeiros HC, et al. Abamectin affects the bioenergetics of liver mitochondria: A potential mechanism of hepatotoxicity. *Toxicol In Vitro*. 2012 Feb;26(1):51-6. PMID: 22024101.

Celik-Ozenci C, Tasatargil A, Tekcan M, et al. Effects of abamectin exposure on male fertility in rats: potential role of oxidative stress-mediated poly(ADP-ribose) polymerase (PARP) activation. *Regul Toxicol Pharmacol*. 2011 Dec;61(3):310-7. PMID: 21945325.

Holden-Dye L, Walker RJ. Avermectin and avermectin derivatives are antagonists at the 4-aminobutyric acid (GABA) receptor on the somatic muscle cells of *Ascaris*; is this the site of anthelmintic action? *Parasitology*. 1990 Oct;101 Pt 2:265-71. PMID: 2175874.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.