



LKT Laboratories, Inc.

Allicin

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Product Information

Product ID A4440

CAS No. 539-86-6

Chemical Name Thio-2-propene-1-sulfinic acid S-allyl ester

Synonym Allylthiosulphinic acid allyl ester, Diallyl thiosulfinate

Formula $C_6H_{10}OS_2$

Formula Wt. 162.27

Melting Point $<25^{\circ}C$

Purity $\geq 98\%$

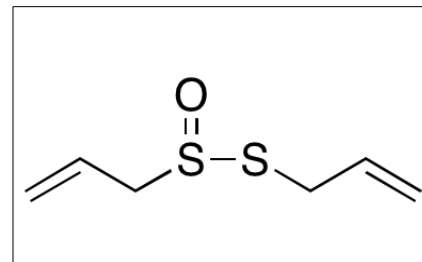
Solubility Soluble in water. Miscible with alcohol, ether, benzene. **This product is a solution of methanol:water:formic acid (60:40:0.1) and allicin at 10**

Store Temp $-80^{\circ}C$

Ship Temp Dry Ice

Description Allicin is an thiocyanate found in garlic; it exhibits a wide variety of properties, including anticancer, antioxidative, antihypertensive, anti-arrhythmic, anti-parasitic, and anti-diabetic activities. In vitro, allicin binds cellular nucleic acid, primarily nitrogenous bases and phosphate backbones, and induces autophagy and apoptosis, leading to cell death. The cardiovascular activities of allicin stem from its ability to decrease systolic blood pressure and triglyceride levels and to shorten action potential duration through inhibition of L-type voltage-gated Ca^{2+} channels and activation of inward rectifying K^{+} channels in animal models. The antioxidative activity of allicin is shown in vitro and in vivo through its ability to enhance Nrf2 signaling, to increase superoxide dismutase and glutathione levels, and also to inhibit cyclophosphamide-induced oxidative lung damage in animal models. Additionally, allicin inhibits multiplication of intracellular *Leishmania* promastigotes in vitro and ex vivo and decreases anti-islet cell antibodies and insulin levels in animal models of type 1 diabetes mellitus.

This product is a solution of methanol:water:formic acid (60:40:0.1) and allicin at 10mg/mL. TEST!!!!!!



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
A4440	1 mg	\$301.40
A4440	5 mg	\$1059.20

References Chu YL, Ho CT, Chung JG, et al. Allicin Induces Anti-human Liver Cancer Cells through the p53 Gene Modulating Apoptosis and Autophagy. *J Agric Food Chem*. 2013 Oct 16;61(41):9839-9848. PMID: 24059278.

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