Allicin is a 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 Ca2+ 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 10 mg/mL.

References


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