LKT Laboratories, Inc.

Diallyl Trisulfide

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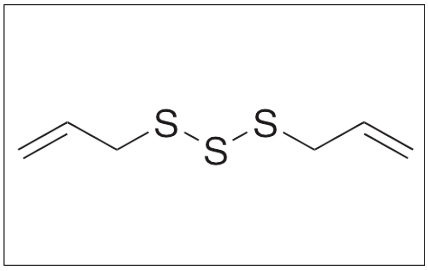
Product Information

Product ID D3202
CAS No. 2050-87-5
Chemical Name Di-2-propenyl trisulfide

Synonym Allyl trisulfide, DATS, Allitridin



Formula $C_6H_{10}S_3$
Formula Wt. 178.34
Melting Point
Purity ≥98%
Solubility Soluble in acetone. Slightly soluble in ethanol (3 mg/mL), DMSO (5 mg/mL), 2-propanol, and DMF (10 mg/mL).

Store Temp -20°C
Ship Temp Ambient

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
D3202	100 mg	$106.60
D3202	500 mg	$331.30
D3202	1 g	$558.70

Description Diallyl trisulfide is an organosulfur compound initially found in garlic; it exhibits anticancer chemotherapeutic, immunostimulatory, antioxidative, hepatoprotective, anti-fibrotic, anti-estrogenic, anti-metastatic, anti-inflammatory, anti-angiogenic, and cardioprotective activities. In vivo, diallyl trisulfide inhibits lipid peroxidation, increases phase II enzymes such as catalase, superoxide dismutase, glutathione peroxidase, and glutathione reductase, and decreases arsenic-induced hepatic dysfunction. Diallyl trisulfide also decreases collagen deposition, hepatic stellate cell activation, fibrosis, and levels of procollagen I and α-SMA. In animal models of colitis, diallyl trisulfide limits NF-κB activation, STAT3 signaling, and production of COX-2 and iNOS. Diallyl trisulfide inhibits diabetic cardiomyopathy, preventing decreases in cardiac function; it also decreases Notch1 signaling and suppresses angiogenesis in osteosarcoma cells. In breast cancer cells, diallyl trisulfide decreases expression and activity of ERß. In bladder carcinoma cells, this compound inhibits cellular migration and invasion and decreases matrix metalloproteinase (MMP) activity. Additionally, diallyl trisulfide modulates activity of HSP27. In leukemia cells, this compound induces G0/G1 phase cell cycle arrest and apoptosis and increases activation of caspase 3; in similar in vivo models, it increases macrophage phagocytosis and NK cell activity. In animal models of glioblastoma, diallyl trisulfide increases expression of p21 and p53, decreases expression of MDM2, survivin, Bcl-2, VEGF, mTOR, and c-Myc, limits activity of HDACs, and suppresses tumor growth. TEST!!!!!!

References

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