LKT Laboratories, Inc.

Erucin

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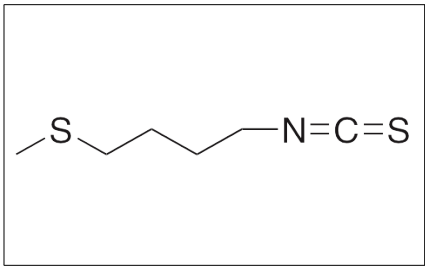
Product Information

Product ID E6880
CAS No. 4430-36-8
Chemical Name 1-isothiocyanato-4-(methylthio)-butane

Synonym 4-methylthiobutyl isothiocyanate



Formula $C_6H_{11}NS_2$
Formula Wt. 161.29
Melting Point
Purity ≥98%
Solubility Soluble in DMSO to 75 mM, and ethanol to 75 mM.

Bulk quanitites available upon request

Product ID	Size
E6880	25 mg
E6880	50 mg
E6880	100 mg

Store Temp -20˚C
Ship Temp Ambient

Description Erucin is an isothiocyanate (ITC) and analog of sulforaphane found in cruciferous vegetables. Erucin exhibits antioxidative, anti-inflammatory, neuroprotective, anticancer chemotherapeutic, and chemopreventive activities. Like other ITCs, erucin induces phase II enzymes. Erucin also inhibits telomerase and cellular proliferation in hepatocellular carcinoma cells. In animal models of bladder cancer, erucin decreases tumor weight. In animal and cellular models of inflammation, erucin decreases LPS-stimulated expression of IL-6, IL-1β, TNF-α, iNOS, and COX-2. Additionally, this compound decreases ROS and neuronal apoptosis and increases levels of glutathione, preventing 6-OHDA-induced neurodegeneration in cellular models of Parkinson's disease.

References

Herz C, Hertrampf A, Zimmermann S, et al. The isothiocyanate erucin abrogates telomerase in hepatocellular carcinoma cells in vitro and in an orthotopic xenograft tumour model of HCC. J Cell Mol Med. 2014 Sep 25. [Epub ahead of print]. PMID: 25256442.

Cho HJ, Lee KW, Park JH. Erucin exerts anti-inflammatory properties in murine macrophages and mouse skin: possible mediation through the inhibition of NFκB signaling. Int J Mol Sci. 2013 Oct 15;14(10):20564-77. dPMID: 24132147.

Tarozzi A, Morroni F, Bolondi C, et al. Neuroprotective Effects of Erucin against 6-Hydroxydopamine-Induced Oxidative Damage in a Dopaminergic-like Neuroblastoma Cell Line. Int J Mol Sci. 2012;13(9):10899-910. PMID: 23109827.

Abbaoui B, Riedl KM, Ralston RA, et al. Inhibition of bladder cancer by broccoli isothiocyanates sulforaphane and erucin: characterization, metabolism, and interconversion. Mol Nutr Food Res. 2012 Nov;56(11):1675-87. PMID: 23038615.

Melchini A, Traka MH. Biological profile of erucin: a new promising anticancer agent from cruciferous vegetables. Toxins (Basel). 2010 Apr;2(4):593-612. PMID: 22069601.

Melchini A, Costa C, Traka M, et al. Erucin, a new promising cancer chemopreventive agent from rocket salads, shows anti-proliferative activity on human lung carcinoma A549 cells. 2009 Jul;47(7):1430-1436. PMID: 19328833.