LKT Laboratories, Inc.

R-Sulforaphane, synthetic

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

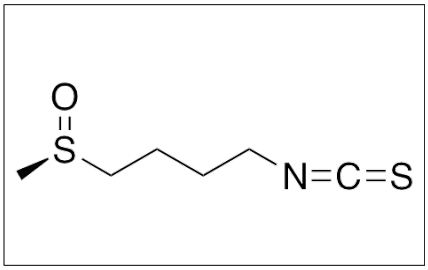
Product Information

Product ID S8051
CAS No. 142825-10-3
Chemical Name 1-Isothiocyanato-4-(methylsulfinyl)-butane, synthetic

Synonym L-Sulforaphane synthetic

Formula $C_6H_{11}NOS_2$
Formula Wt. 177.29
Melting Point
Purity ≥98%
Solubility Soluble in ethanol, methanol, or ethyl acetate. Miscible with water and/or DMSO.

Store Temp -20°C
Ship Temp Ambient



Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
S8051	50 mg	$350.00
S8051	100 mg	$500.00
S8051	250 mg	$980.00
S8051	500 mg	$1800.00

Description R-Sulforaphane Synthetic is the synthetic version of R-sulforaphane.
R-Sulforaphane is a naturally-occurring isothiocyanate found in broccoli. This compound exhibits antioxidative, anticancer, and chemopreventive activities; research suggests that it may be more bioactive than the S-isomer. R-Sulforaphane increases expression of phase II enzymes such as glutathione-S-transferase and quinone reductase; it also increases activity and expression of glucuronosyl transferase and epoxide hydrolase. At low doses, R-sulforaphane promotes proliferation of stem cells and hematopoiesis. This compound also inhibits the aryl hydrocarbon receptor.

Please note: This compound is a neat liquid at room temperature, clear to slightly yellow in color. It is not dissolved in solvent. In small quantities the material will coat the sides of the ampule it is shipped in and may appear to be invisible, or it may be trapped in the tip of the ampoule. Wash the upper and lower parts of the ampoule with solvent to ensure all of the material is obtained.

References

Abdull Razis AF, Hanlon N, Soltys E, et al. The naturally occurring aliphatic isothiocyanates sulforaphane and erucin are weak agonists but potent non-competitive antagonists of the aryl hydrocarbon receptor. Arch Toxicol. 2012 Oct;86(10):1505-14. PMID: 22643862.

Zanichelli F, Capasso S, Cipollaro M, et al. Dose-dependent effects of R-sulforaphane isothiocyanate on the biology of human mesenchymal stem cells, at dietary amounts, it promotes cell proliferation and reduces senescence and apoptosis, while at anti-cancer drug doses, it has a cytotoxic effect. Age (Dordr). 2012 Apr;34(2):281-93. PMID: 21465338.

Abdull Razis AF, Bagatta M, De Nicola GR, et al. Induction of epoxide hydrolase and glucuronosyl transferase by isothiocyanates and intact glucosinolates in precision-cut rat liver slices: importance of side-chain substituent and chirality. Arch Toxicol. 2011 Aug;85(8):919-27. PMID: 21132492.

Abdull Razis AF, Iori R, Ioannides C. The natural chemopreventive phytochemical R-sulforaphane is a far more potent inducer of the carcinogen-detoxifying enzyme systems in rat liver and lung than the S-isomer. Int J Cancer. 2011 Jun 15;128(12):2775-82. PMID: 20726001.

Christine A. Houghton, Sulforaphane: Its "Coming of Age" as a Clinically Relevant Nutraceutical in the Prevention and Treatment of Chronic Disease. Oxidative Medicine and Cellular Longevity Volume 2019, Article ID 2716870, 27 pages https://doi.org/10.1155/2019/2716870

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