

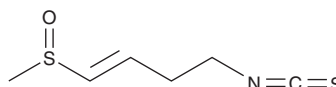
PRODUCT INFORMATION



L-Sulforaphene

Item No. 17152

CAS Registry No.: 592-95-0
Formal Name: 4-isothiocyanato-1-(methylsulfinyl)-1-butene
Synonyms: Raphanin, (S)-Sulforaphene
MF: C₆H₉NOS₂
FW: 175.3
Purity: ≥95%
UV/Vis.: λ_{max}: 232 nm
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years
Item Origin: Plant/*Raphanus sativus* L.



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

L-Sulforaphene is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of L-sulforaphene in these solvents is approximately 15 and 1 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of L-sulforaphene is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of L-sulforaphene in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

L-Sulforaphene is a natural isothiocyanate found in cruciferous vegetables. Like the related compound L-sulforaphane (Item No. 14797), it has antioxidant, anti-inflammatory, and anti-carcinogenic effects.^{1,2} Radish root extract, which contains L-sulforaphene, induces apoptosis in a p53-independent manner.²

References

1. Shishu, Singla, A.K., and Kaur, I.P. Inhibition of mutagenicity of food-derived heterocyclic amines by sulphoraphene - an isothiocyanate isolated from radish. *Planta Med.* **69(2)**, 184-186 (2003).
2. Beevi, S.S., Mangamoori, L.N., Subathra, M., *et al.* Hexane extract of *Raphanus sativus* L. roots inhibits cell proliferation and induces apoptosis in human cancer cells by modulating genes related to apoptotic pathway. *Plant Foods Hum. Nutr.* **65(3)**, 200-209 (2010).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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