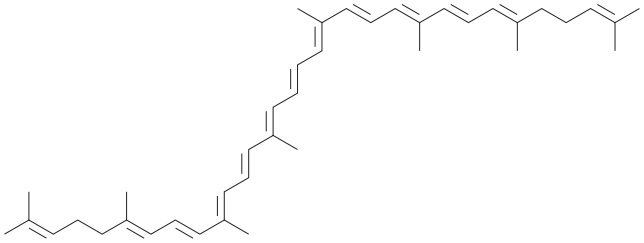
PRODUCT INFORMATION

Lycopene

Item No. 70945

CAS Registry No.: 502-65-8
Formal Name: ψ,ψ-carotene
Synonym: NSC 407322
MF: $C_{40}H_{56}$
FW: 536.9
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -80°C
Stability: ≥4 years
Special Conditions: Light/temperature sensitive, not stable in solution.



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

Laboratory Procedures

Lycopene is supplied as a crystalline solid. A stock solution may be made by dissolving the lycopene in the solvent of choice. Lycopene is soluble in chloroform at a concentration of approximately 3 mg/ml.

Description

Lycopene is a red-colored carotenoid found in tomatoes and other red fruits and vegetables.[1] Carotenoids, including lycopene, are powerful antioxidants that efficiently quench singlet oxygen.[1,2] Presumably through this action, carotenoids may protect against cancers, cardiovascular stress, and other diseases.[3-6]

References

1. Stahl, W., Heinrich, U., Aust, O., *et al*. Lycopene-rich products and dietary photoprotection. *Photochem. Photobiol. Sci*. **5(2)**, 238-242 (2006).
2. Cantrell, A., McGarvey, D.j., Truscott, T.G., *et al*. Singlet oxygen quenching by dietary carotenoids in a model membrane environment. *Arch. Biochem. Biophys*. **412(1)**, 47-54 (2003).
3. Vance, T.M., Su, J., Fontham, E.T., *et al*. Dietary antioxidants and prostate cancer: A review. Nutr. *Cancer* **65(6)**, 793-801 (2013).
4. Sato, R., Helzlsouer, K.J., Alberg, A.J., *et al*. Prospective study of carotenoids, tocopherols, and retinoid concentrations and the risk of breast cancer. *Cancer Epidemiol. Biomarkers Prev*. **11(5)**, 451-457 (2002).
5. Giordano, P., Scicchitano, P., Locorotondo, M., *et al*. Carotenoids and cardiovascular risk. *Curr. Pharm. Des*. **18(34)**, 5577-5589 (2012).
6. Aune, D., Chan, D.S.M., Vieira, A.R., *et al*. Dietary compared with blood concentrations of carotenoids and breast cancer risk: A systematic review and meta-analysis of prospective studies. *Am. J. Clin. Nutr*. **96(2)**, 356-373 (2013).

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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