Lutein

Item No. 10010811

CAS Registry No.: 127-40-2
Formal Name: (6'R)-β,γ-carotene-3R,3'R-diol
Synonyms: E 161b, FloraGLO®, Xanthophyll
MF: C₄₀H₅₆O₂
FW: 568.9
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: λmax: 268, 445, 474 nm

Laboratory Procedures
For long term storage, we suggest that lutein be stored as supplied at -20°C. It should be stable for at least two years.

Lutein is supplied as a crystalline solid. A stock solution may be made by dissolving the lutein in the solvent of choice. Lutein is soluble in chloroform at a concentration of approximately 5 mg/ml.

Lutein is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Lutein is a natural yellow carotenoid, which can be found in plants, egg yolks, and in the human retina. It is a lipid-soluble antioxidant that can circulate in the plasma and confer cardioprotective, anti-inflammatory, and anti-angiogenic effects.1-3 Dietary lutein, in combination with zeaxanthin (Item No. 10009992), vitamins and ω-3 fatty acids, may be beneficial against age-related macular degeneration and cataract development.4-5

References
1. Sies, H. and Stahl, W. Vitamins E and C, ω-3 fatty acids, may be beneficial against age-related macular degeneration and cataract development.4-5

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/10010811