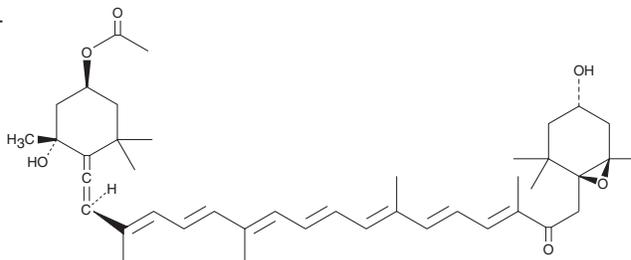


PRODUCT INFORMATION



Fucoxanthin Item No. 13068

CAS Registry No.: 3351-86-8
Formal Name: 6'R,7'-didehydro-5R,6-epoxy-4',5',6S,7-tetrahydro-3S,3'S,5'R-trihydroxy-β,β-caroten-8(5H)-one
MF: C₄₂H₅₈O₆
FW: 658.9
Purity: ≥95%
UV/Vis.: λ_{max}: 450 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Alga/Kelp



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

Laboratory Procedures

Fucoxanthin is supplied as a crystalline solid. A stock solution may be made by dissolving the fucoxanthin in the solvent of choice, which should be purged with an inert gas. Fucoxanthin is soluble in organic solvents such as DMSO and acetone. The solubility of fucoxanthin in these solvents is approximately 20 and 10 mg/ml, respectively. Fucoxanthin has limited stability when stored in solvents, we recommend preparing stock solutions immediately prior to use.

Description

Fucoxanthin is a carotenoid that occurs naturally in certain algae. It significantly reduces abdominal white adipose tissue (WAT) in mice and rats when included in their diet.¹ Fucoxanthin increases the amount of mitochondrial uncoupling protein 1 (UCP1), a fatty acid-stimulated protein involved in respiration and thermogenesis in WAT of mice and rats.¹ In KK-Ay mice, which are used to model obese type 2 diabetics with hyperinsulinemia, fucoxanthin reduces WAT gain and also decreases blood glucose and plasma insulin levels.^{1,2}

References

1. Maeda, H., Hosokawa, M., Sashima, T., *et al.* Fucoxanthin from edible seaweed, *Undaria pinnatifida*, shows antiobesity effect through UCP1 expression in white adipose tissues. *Biochem. Biophys. Res. Commun.* **332(2)**, 392-397 (2005).
2. Chen, J.-K., Chen, J., Imig, J.D., *et al.* Identification of novel endogenous cytochrome p450 arachidonate metabolites with high affinity for cannabinoid receptors. *J. Biol. Chem.* **283(36)**, 24514-24524 (2008).

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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