

Product Information



Sesamin

Item No. 70310

CAS Registry No.: 607-80-7

Formal Name: [1S-(1 α ,3 α ,4 α ,6 α)]-5,5'-(tetrahydro-1H,3H-furo[3,4-c]furan-1,4-diyl)bis-1,3-benzodioxole

MF: C₂₀H₁₈O₆

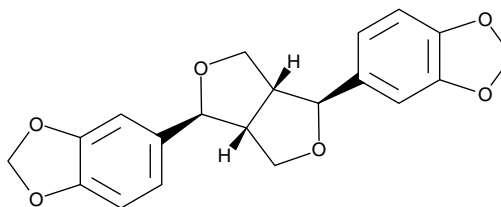
FW: 354.4

Purity: \geq 95%

Stability: \geq 1 year at -20°C

Supplied as: A crystalline solid

UV/Vis.: λ_{\max} : 235, 286 nm



Laboratory Procedure

For long term storage, we suggest that sesamin be stored as supplied at -20°C. It should be stable for at least one year.

Sesamin is supplied as a crystalline solid. A stock solution may be made by dissolving the sesamin in an organic solvent purged with an inert gas. Sesamin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of sesamin in these solvents is approximately 0.5, 12, and 33 mg/ml, respectively.

Sesamin is sparingly soluble in aqueous buffers. Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. For maximum solubility in aqueous buffers, sesamin should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Sesamin has a solubility of approximately 50 μ g/ml in a 1:10 solution of DMF:PBS (pH 7.2) using this method. Store aqueous solutions of sesamin on ice and use within 12 hours of preparation. Although the aqueous solutions of sesamin may be stable for more than 12 hours, we strongly recommend using a fresh preparation each day.

Sesamin is a non-competitive inhibitor of Δ^5 -desaturase. It inhibits the conversion of dihomo- γ -linolenic acid to arachidonic acid with a K_i value of 155 μ M in rat liver microsomes.¹

Reference

1. Shimizu, S., Akimoto, K., Sugano, M., *et al.* Studies on desaturase inhibitors of polyunsaturated fatty acid biosynthesis, in *Essential Fatty Acids and Eicosanoids*. Sinclair, A. and Gibson, R., editors. *American Oil Chemist Society, Champaign*, 37-41 (1992).

Related Product

Carnosol - Item No. 89800

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

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