

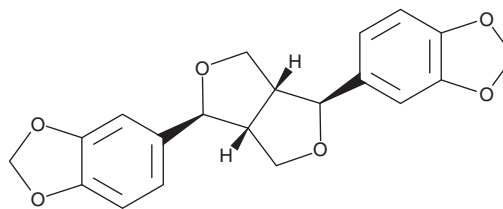
PRODUCT INFORMATION



Sesamin

Item No. 70301

CAS Registry No.: 607-80-7
Formal Name: [1S-(1 α ,3 $\alpha\alpha$,4 α ,6 $\alpha\alpha$)]-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%
UV/Vis.: λ_{max} : 235, 286 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

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 $\mu\text{g/ml}$ 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.

Description

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 μM 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).

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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