

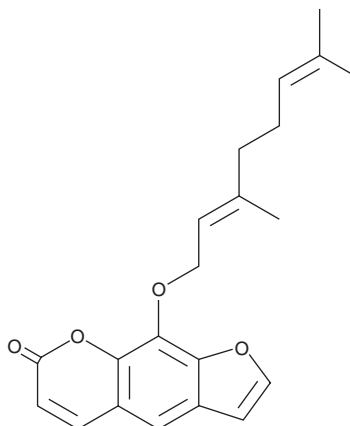
PRODUCT INFORMATION



8-Geranyloxypsoralen

Item No. 35167

CAS Registry No.: 7437-55-0
Formal Name: 9-[[[(2E)-3,7-dimethyl-2,6-octadien-1-yl]oxy]-7H-furo[3,2-g][1]benzopyran-7-one
Synonyms: 8-Geranopsoralen, 8-Geranoxypsoralen, Xanthotoxol geranyl ether
MF: C₂₁H₂₂O₄
FW: 338.4
Purity: ≥95%
UV/Vis.: λ_{max}: 219, 250, 302 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Heracleum hemsleyanum* Diels



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

Laboratory Procedures

8-Geranyloxypsoralen is supplied as a solid. A stock solution may be made by dissolving the 8-geranyloxypsoralen in the solvent of choice, which should be purged with an inert gas. 8-Geranyloxypsoralen is soluble in acetonitrile and chloroform.

Description

8-Geranyloxypsoralen is a prenylated furanocoumarin that has been found in *C. limon* and has diverse biological activities.¹⁻³ It inhibits the cytochrome P450 (CYP) isoform CYP3A4 and β-secretase 1 (BACE1; IC₅₀s = 3.93 and 20.4 μM, respectively).^{2,3} 8-Geranyloxypsoralen (50 μM) inhibits Epstein-Barr virus activation induced by 12-O-tetradecanoylphorbol-13-acetate (TPA; Item No. 10008014) in infected Raji B-lymphoblastoid cells, TPA-induced superoxide generation in HL-60 leukemia cells, and LPS- and IFN-γ-induced nitric oxide (NO) generation in RAW 264.7 macrophages.¹

References

1. Miyake, Y., Murakami, A., Sugiyama, Y., *et al.* Identification of coumarins from lemon fruit *citrus limon* as inhibitors of in vitro tumor promotion and superoxide and nitric oxide generation. *J. Agric. Food Chem.* **47**(8), 3151-3157 (1999).
2. Row, E.C. Synthesis of 8-geranyloxypsoralen analogues and their evaluation as inhibitors of CYP3A4. *Bioorg. Med. Chem.* **14**(11), 3865-3871 (2006).
3. Marumoto, S. and Miyazawa, M. Structure-activity relationships for naturally occurring coumarins as β-secretase inhibitor. *Bioorg. Med. Chem.* **20**(2), 784-788 (2012).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM