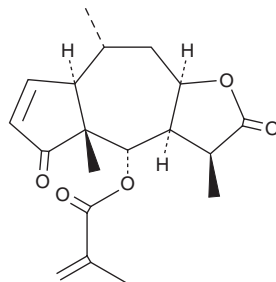


PRODUCT INFORMATION



Arnicolide D Item No. 36193

CAS Registry No.: 34532-68-8
Formal Name: 2-methyl-2-propenoic acid, (3S,3aR,4S,4aR,7aR,8R,9aR)-2,3,3a,4,4a,5,7a,8,9,9a-decahydro-3,4a,8-trimethyl-2,5-dioxoazuleno[6,5-b]furan-4-yl ester
MF: C₁₉H₂₄O₅
FW: 332.4
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Centipeda minima* herbs



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

Laboratory Procedures

Arnicolide D is supplied as a solid. A stock solution may be made by dissolving the arnicolide D in the solvent of choice, which should be purged with an inert gas. Arnicolide D is soluble in acetone, chloroform, dichloromethane, ethyl acetate, and DMSO.

Description

Arnicolide D is a sesquiterpene lactone that has been found in *Centipeda minima* and has anticancer activity.¹ It inhibits the proliferation of MDA-MB-231, MDA-MB-468, and MCF-7 human breast cancer cells (IC₅₀s = 5.211, 3.405, and 9.083 μM, respectively, after 48 hours). It induces apoptosis and cell cycle arrest at the G₂/M phase in MDA-MB-468 and MDA-MB-231 cells. Arnicolide D (2.5, 5, and 10 μM) inhibits migration of MDA-MB-231 cells. It also reduces protein levels of Akt, phosphorylated Akt, mammalian target of rapamycin (mTOR), phosphorylated mTOR, and STAT3 in MDA-MB-231 cells in a concentration-dependent manner. Arnicolide D (25 or 50 mg/kg) reduces tumor volume in an MDA-MB-231 orthotopic mouse xenograft model.

Reference

1. Qu, Z., Lin, Y., Mok, D.K.-W., *et al.* Arnicolide D inhibits triple negative breast cancer cell proliferation by suppression of AKT/mTOR and STAT3 signaling pathways. *Int. J. Med. Chem.* **17(11)**, 1482-1490 (2020).

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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