

PRODUCT INFORMATION



1-O-Acetylbritannilactone

Item No. 35137

CAS Registry No.: 33627-41-7
Formal Name: (3aS,4S,7aR)-5-[(1S)-4-(acetyloxy)-1-methylbutyl]-3a,4,7,7a-tetrahydro-4-hydroxy-6-methyl-3-methylene-2(3H)-benzofuranone

Synonyms: ABL, Inulicin

MF: C₁₇H₂₄O₅

FW: 308.4

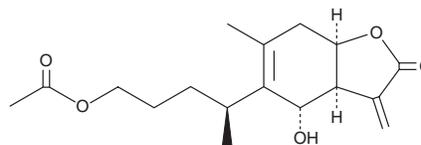
Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

Item Origin: Plant/*Inula japonica*



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

Laboratory Procedures

1-O-Acetylbritannilactone is supplied as a solid. A stock solution may be made by dissolving the 1-O-acetylbritannilactone in the solvent of choice, which should be purged with an inert gas. 1-O-Acetylbritannilactone is soluble in the organic solvent DMSO.

Description

1-O-Acetylbritannilactone is a sesquiterpene lactone that has been found in *I. britannica* and has diverse biological activities.^{1,2} It inhibits LPS-induced production of prostaglandin E₂ (PGE₂; Item No. 14010) and nuclear translocation of NF-κB in primary rat aorta vascular smooth muscle cells (VSMCs).¹ 1-O-Acetylbritannilactone (5 and 10 μM) inhibits VEGF-induced capillary tube formation in human umbilical vein endothelial cells (HUVECs).² It reduces tumor growth in an A549 mouse xenograft model when administered at a dose of 12 mg/kg per day.

References

1. Liu, Y.-P., Wen, J.-K., Zheng, B., *et al.* Acetylbritannilactone suppresses lipopolysaccharide-induced vascular smooth muscle cell inflammatory response. *Eur. J. Pharmacol.* **577(1-3)**, 28-34 (2007).
2. Zhengfu, H., Hu, Z., Huiwen, M., *et al.* 1-o-acetylbritannilactone (ABL) inhibits angiogenesis and lung cancer cell growth through regulating VEGF-Src-FAK signaling. *Biochem. Biophys. Res. Commun.* **464(2)**, 422-427 (2015).

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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