

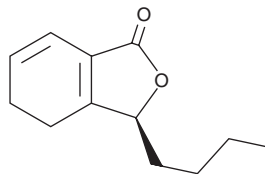
PRODUCT INFORMATION



Senkyunolide A

Item No. 25199

CAS Registry No.: 63038-10-8
Formal Name: (3S)-3-butyl-4,5-dihydro-1(3H)-isobenzofuranone
Synonyms: (-)-Sedanenolide, (S)-Sedanenolide
MF: C₁₂H₁₆O₂
FW: 192.3
Purity: ≥98%
UV/Vis.: λ_{max}: 278 nm
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Senkyunolide A is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of senkyunolide A in these solvents is approximately 5 mg/ml.

Senkyunolide A is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of senkyunolide A should be diluted with the aqueous buffer of choice. Senkyunolide A has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method.

Description

Senkyunolide A is a phthalide originally isolated from celery seed essential oil that has cytoprotective and antiproliferative activities.¹ It protects against cell injury induced by corticosterone in PC12 cells in a time-dependent manner when used at concentrations ranging from 0.125 to 0.5 mg/ml and reduces corticosterone-induced apoptosis at a concentration of 0.5 mg/ml.² It also reverses increases in protein levels of phosphatase 2A (PP2A) and α-synuclein and reverses decreases in the phosphorylated forms of PP2A and α-synuclein. Senkyunolide A inhibits cell proliferation of HT-29 colon cancer (IC₅₀ = 54.17 μM) but not non-cancerous human CCD-18Co colon cells (IC₅₀ = 109.11 μM).³

References

1. Bjeldanes, L.F. and Kim, I.-S. Phthalide components of celery essential oil. *J. Org. Chem.* **42**(13), 2333-2334 (1977).
2. Gong, S., Zhang, J., Guo, Z., et al. Senkyunolide A protects corticosterone-induced cell apoptosis via modulating protein phosphatase 2A and α-synuclein. *Drug Des. Devel. Ther.* **12**, 1865-1879 (2018).
3. Kan, W.L., Cho, C.H., Rudd, J.A., et al. Study of the anti-proliferative effects and synergy of phthalides from *Angelica sinensis* on colon cancer cells. *J. Ethnopharmacol.* **120**(1), 36-43 (2008).

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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