

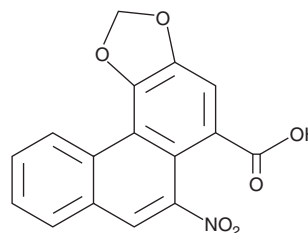
PRODUCT INFORMATION



Aristolochic Acid B

Item No. 28504

CAS Registry No.: 475-80-9
Formal Name: 6-nitro-phenanthro[3,4-d]-1,3-dioxole-5-carboxylic acid
Synonym: Aristolochic Acid II
MF: C₁₆H₉NO₆
FW: 311.3
Purity: ≥98%
UV/Vis.: λ_{max}: 217, 251, 298, 358 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Aristolochia debilis*



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

Laboratory Procedures

Aristolochic acid B is supplied as a crystalline solid. A stock solution may be made by dissolving the aristolochic acid B in the solvent of choice, which should be purged with an inert gas. Aristolochic acid B is soluble in organic solvents such as ethanol and DMSO. The solubility of aristolochic acid B in DMSO is approximately 25 mg/ml.

Aristolochic acid B is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Aristolochic acid B is an alkaloid that has been found in *Aristolochia* with mutagenic activity.¹ It forms DNA adducts under anaerobic conditions *in vitro* when used at a concentration of 0.4 mM. Oral administration of aristolochic acid B (0.03 mmol/kg) induces bladder, forestomach, and kidney DNA adduct formation in rats. Aristolochic acid B reduces body weight and urine concentrations of sodium, potassium, and calcium, enlarges the liver and kidneys, and increases blood concentrations of hemoglobin and hematocrit in rats.²

References

- Schmeiser, H.H., Schoepe, K.-B., and Wiessler, M. DNA adduct formation of aristolochic acid I and II *in vitro* and *in vivo*. *Carcinogenesis* **9(2)**, 297-303 (1988).
- Yeh, Y.-H., Lee, Y.-T., Hsieh, H.-S., *et al.* Short-term toxicity of aristolochic acid, aristolochic acid-I and aristolochic acid-II in rats. *Food Chem. Toxicol.* **46(3)**, 1157-1163 (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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