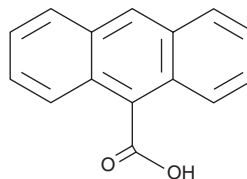


PRODUCT INFORMATION

9-Anthracenecarboxylic Acid

Item No. 36180

CAS Registry No.: 723-62-6
Synonyms: 9-AC, Anthracene-9-carboxylic Acid, 9-Anthroic Acid, 9-Carboxyanthracene, NSC 151909
MF: C₁₅H₁₀O₂
FW: 222.2
Purity: ≥98%
UV/Vis.: λ_{max}: 253 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

9-Anthracenecarboxylic acid is supplied as a solid. A stock solution may be made by dissolving the 9-anthracenecarboxylic acid in the solvent of choice, which should be purged with an inert gas. 9-Anthracenecarboxylic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 9-anthracenecarboxylic acid in these solvents is approximately 1 mg/ml.

Description

9-Anthracenecarboxylic acid is a chloride channel inhibitor.¹ It inhibits spontaneous transient inward currents (IC₅₀s = 90 and 300 μM at +50 and -50 mV, respectively) and caffeine-evoked calcium-activated chloride currents (IC₅₀ = 650 μM) in isolated rabbit portal vein smooth muscle cells. 9-Anthracenecarboxylic acid (100 μM) prevents decreases in the peritubular cell membrane potential in isolated frog (*R. esculenta*) kidney perfused with low-chloride Ringer's solution.² It has also been used as a building block in the synthesis of luminescent lanthanide complexes.³

References

1. Hogg, R.C., Wang, Q., and Large, W.A. Effects of Cl channel blockers on Ca-activated chloride and potassium currents in smooth muscle cells from rabbit portal vein. *Br. J. Pharmacol.* **111**(4), 1333-1341 (1994).
2. Oberleithner, H., Ritter, M., Lang, F., et al. Anthracene-9-carboxylic acid inhibits renal chloride reabsorption. *Pflügers Arch.* **398**(2), 172-174 (1983).
3. Casanovas, B., Speed, S., Maury, O., et al. Homodinuclear lanthanide 9-anthracenecarboxylate complexes: Field induced SMM and NIR-luminescence. *Polyhedron* **169**, 187-194 (2019).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/10/2022

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