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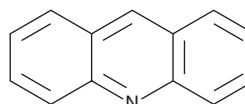
PRODUCT INFORMATION



Acridine

Item No. 35607

CAS Registry No.:	260-94-6
Synonyms:	2,3,5,6-Dibenzopyridine, 10-Azaanthracene, Dibenzopyridine, NSC 3408
MF:	C ₁₃ H ₉ N
FW:	179.2
Purity:	≥98%
UV/Vis.:	λ _{max} : 249 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

Acridine is supplied as a solid. A stock solution may be made by dissolving the acridine in the solvent of choice, which should be purged with an inert gas. Acridine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of acridine in DMF is approximately 2 mg/ml and approximately 10 mg/ml in ethanol and DMSO.

Description

Acridine is an azaarene.¹ It is a scaffold component of many pharmacologically active compounds, including topoisomerase inhibitors and DNA intercalators, as well as compounds with anticancer and antimalarial activities.²⁻⁵ Acridine is also the backbone of some fluorescent probes, such as acridine orange (Item No. 14338) and ICAAc (Item No. 28564).^{6,7} It is genotoxic to bacteria when used at a concentration of 50 µg/ml.¹

References

1. Skarek, M., Cupr, P., Réblova, K., *et al.* Assessment of toxic and genotoxic effects of N-heterocyclic polyaromatic hydrocarbons with miniaturized in vitro screening bioassays. (2004).
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3. Fukui, K., Tanaka, K., Fujitsuka, M., *et al.* Distance dependence of electron transfer in acridine-intercalated DNA. *J. Photochem. Photobiol. B Biol.* **50**, 18-27 (1999).
4. Heald, R.A., Modi, C., Cookson, J.C., *et al.* Antitumor polycyclic acridines. 8.1 Synthesis and telomerase-inhibitory activity of methylated pentacyclic acridinium salts. *J. Med. Chem.* **45(3)**, 590-597 (2002).
5. Kumar, R., Kaur, M., and Kumari, M. Acridine: A versatile heterocyclic nucleus. *Acta Pol. Pharm.* **69(1)**, 3-9 (2012).
6. Han, J. and Burgess, K. Fluorescent indicators for intracellular pH. *Chem. Revs.* **110(5)**, 2709-2728 (2010).
7. Nagy, M., Racz, D., Nagy, Z.L., *et al.* Amino-isocyanoacridines: Novel, tunable solvatochromic fluorophores as physiological pH probes. *Sci. Rep.* **9**, 8250 (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.

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