

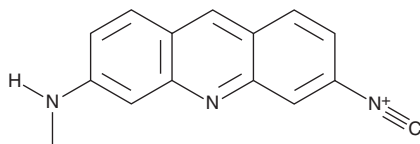
PRODUCT INFORMATION



monoMICAAC

Item No. 28565

Formal Name:	6-isocyano-N-methylacridin-3-amine
Synonyms:	3-N-methylamino-6-Isocyanoacridine
MF:	C ₁₅ H ₁₁ N ₃
FW:	233.3
Purity:	≥98%
Ex. Max	425/491, 437/515, and 472/554 nm in hexane, dioxane, and water, respectively
Em. Max	475/553 and 446/553 nm at pH 3 and 11, respectively, in aqueous buffer
UV/Vis.:	λ _{max} : 247, 293 nm
Supplied as:	A crystalline 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

MonoMICAAC is supplied as a crystalline solid. A stock solution may be made by dissolving the monoMICAAC in the solvent of choice, which should be purged with an inert gas. MonoMICAAC is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of monoMICAAC in ethanol is approximately 1 mg/ml and approximately 20 mg/ml in DMSO and DMF.

MonoMICAAC is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, monoMICAAC should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. MonoMICAAC has a solubility of approximately 0.1 mg/ml in a 1:6 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

MonoMICAAC is a solvatochromic fluorescent pH probe.¹ As the polarity of the solvent increases, the emission wavelength of monoMICAAC increases. It displays excitation/emission maxima of 425/491, 437/515, and 472/554 nm in hexane, dioxane, and water, respectively. The absorption maximum of monoMICAAC decreases with increasing pH. It displays absorbance/emission maxima of 475/553 and 446/553 nm at pH 3 and 11, respectively, in aqueous Britton-Robinson buffer, and the fluorescence intensity increases as pH decreases. monoMICAAC can be used for live cell fluorescent applications.

Reference

1. 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.

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, 03/19/2024

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