PRODUCT INFORMATION



ICAAc

Item No. 28564

Formal Name: Synonym: MF: FW: Desites	6-isocyanoacridin-3-amine 3-amino-6-Isocyanoacridine $C_{14}H_9N_3$ 219.2	
Purity:	≥98%	
UV/Vis.:	λ _{max} : 245, 288 nm	
Ex./Em. Max.:	466/553, 431/515, and 418/503 nm in water, dioxane, and hexane, respectively	H ₂ N N ⁺
Abs./Em.:	470/554 and 428/553 nm at pH 3 and 11, respectively, in aqueous buffer	~C-
Supplied as:	A crystalline solid	
Storage:	-20°C	
Stability:	≥4 years	
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Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

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

ICAAc is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ICAAc should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ICAAc 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

ICAAc is a solvatochromic fluorescent pH probe.¹ As the polarity of the solvent increases, the emission wavelength of ICAAc increases. It displays excitation/emission maxima of 466/553, 431/515, and 418/503 nm in water, dioxane, and hexane, respectively. The absorption maximum of ICAAc decreases with increasing pH. It displays absorption/emission maxima of 470/554 and 428/553 nm at pH 3 and 11, respectively, in aqueous Britton-Robinson buffer, and the fluorescence intensity increases as pH decreases. ICAAc can be used for live cell applications.

Reference

1. Nagy, M., Racz, D., Nagy, Z.L., et al. Amino-isocyanoacridines: Novel, tunable solvatochromic fluorophores as phystiological pH probes. Sci. Rep. 9, 8250 (2019).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY 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

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