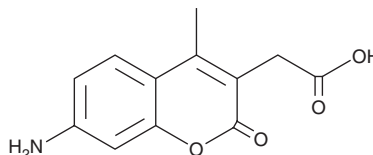


PRODUCT INFORMATION

AMCA

Item No. 29184

CAS Registry No.: 106562-32-7
Formal Name: 7-amino-4-methyl-2-oxo-2H-1-benzopyran-3-acetic acid
Synonyms: AMCA blue,
 7-Amino-4-methyl-3-coumarinylacetic Acid,
 7-Amino-4-methylcoumarin-3-acetic Acid
MF: C₁₂H₁₁NO₄
FW: 233.2
Purity: ≥90%
UV/Vis.: λ_{max}: 234, 354 nm
Abs./Em. Max: UV/400-460 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

AMCA is supplied as a solid. A stock solution may be made by dissolving the AMCA in the solvent of choice, which should be purged with an inert gas. AMCA is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of AMCA in these solvents is approximately 3 and 2 mg/ml, respectively.

AMCA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AMCA should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. AMCA has a solubility of approximately 0.14 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

AMCA is fluorescent protein labeling agent.¹ It contains an N-hydroxysuccinimide ester that reacts with lysine residues to form photostable amide links. Upon activation with UV light, AMCA displays emission maxima of 400-460 nm. It has commonly been used in multiplex immunophenotyping applications.²⁻⁴

References

1. Khalfan, H., Abuknesha, R., Rand-Weaver, M., *et al.* Aminomethyl coumarin acetic acid: A new fluorescent labelling agent for proteins. *Histochem. J.* **18(9)**, 497-499 (1986).
2. Ferri, G.-L., Gaudio, R.M., Castello, I.F., *et al.* Quadruple immunofluorescence: A direct visualization method. *J. Histochem. Cytochem.* **45(2)**, 155-158 (1997).
3. Nederlof, P.M., Robinson, D., Abuknesha, R., *et al.* Three-color fluorescence in situ hybridization for the simultaneous detection of multiple nucleic acid sequences. *Cytometry* **10(1)**, 20-27 (1989).
4. Gothot, A., Grosdent, J.-C., and Paulus, J.-M. A strategy for multiple immunophenotyping by image cytometry: Model studies using latex microbeads labeled with seven streptavidin-bound fluorochromes. *Cytometry* **24(3)**, 214-225 (1996).

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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