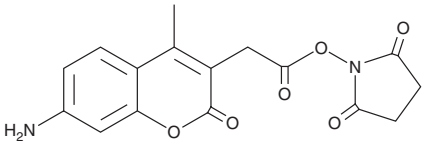
PRODUCT INFORMATION

AMCA N-succinimidyl ester

Item No. 34668

CAS Registry No.:	113721-87-2
Formal Name:	7-amino-4-methyl-2-oxo-2H-1-benzopyran-3-acetic acid, 2,5-dioxo-1-pyrrolidinyl ester
Synonyms:	7-Amino-4-methylcoumarin-3-acetic Acid N-succinimidyl ester, 7-Amino-4-methyl-3-coumarinylacetic Acid N-succinimidyl ester
MF:	$C_{16}H_{14}N_2O_6$
FW:	330.3
Purity:	≥90%
Abs./Em. Max:	UV/400-460 nm
UV/Vis.:	λ_{max}: 236, 359 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 N-succinimidyl ester is supplied as a solid. A stock solution may be made by dissolving the AMCA N-succinimidyl ester in the solvent of choice, which should be purged with an inert gas. AMCA N-succinimidyl ester is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of AMCA N-succinimidyl ester in these solvents is approximately 30 mg/ml.

AMCA N-succinimidyl ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AMCA N-succinimidyl ester should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. AMCA N-succinimidyl ester has a solubility of approximately 0.25 mg/ml in a 1:3 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 N-succinimidyl ester is an amine-reactive fluorescent probe and ester form of AMCA (Item No. 29184).[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. AMCA N-succinimidyl ester has commonly been used in multiplex immunophenotyping applications.[2-4]

References

1. Villalobos-Molina, R., Gallardo-Ortíz, I.A., López-Guerrero, J.J., *et al.* Evidence that NAN-190-induced hypotension involves vascular α_1-adrenoceptor antagonism in the rat. *Eur. J. Pharmacol.* **455(1)**, 59-64 (2002).
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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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