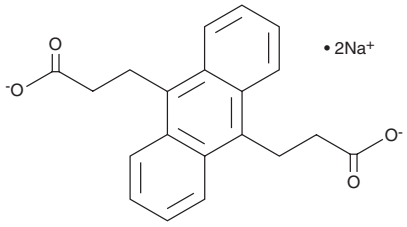
PRODUCT INFORMATION

3,3'-(Anthracene-9,10-diyl)dipropanoate (sodium salt)

Item No. 46095

CAS Registry No.: 82767-90-6
Formal Name: 9,10-anthracenedipropanoic acid, disodium salt
Synonyms: AAP, ADPA
MF: $C_{20}H_{16}O_4 \bullet 2Na$
FW: 343.3
Purity: ≥95%
Abs. Max: 400 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

3,3'-(Anthracene-9,10-diyl)dipropanoate (sodium salt) is supplied as a solid. Aqueous solutions of 3,3'-(anthracene-9,10-diyl)dipropanoate can be prepared by directly dissolving the solid in aqueous buffers. 3,3'-(Anthracene-9,10-diyl)dipropanoate is sparingly soluble (1-10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

3,3'-(Anthracene-9,10-diyl)dipropanoate is a singlet oxygen acceptor that has been used for the detection of singlet oxygen. It displays an absorbance maximum of 400 nm that disappears upon reaction with singlet oxygen.[1] It has been used to measure singlet oxygen production in aqueous solutions and cell-free assays.[1-3]

References

1. Lindig, B.A., Rodgers, M.A.J., and Schaap, A.P. Determination of the lifetime of singlet oxygen in D20 using 9, l0-anthracenedipropionic acid, a water-soluble probe. *J. Am. Chem. Soc.* **100**, 2609-2613 (1980).
2. Fabregat, V. Enhancing emerging pollutant removal in industrial wastewater: Validation of a photocatalysis technology in agri-food industry effluents. *Appl. Sci.* **14**, 6308 (2024).
3. Deby-Dupont, G., Deby, C., Mouithys-Mickalad, A., *et al.* The antibiotic ceftazidime is a singlet oxygen quencher as demonstrated by ultra-weak chemiluminescence and by inhibition of AAP consumption. *Biochim. Biophys. Acta* **1379(1)**, 61-68 (1998).

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
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