

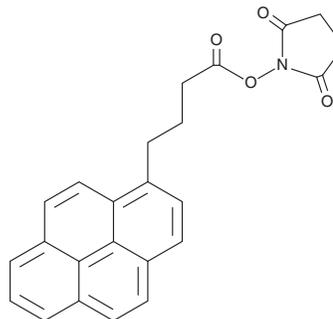
PRODUCT INFORMATION



2,5-Dioxopyrrolidin-1-yl 4-(pyren-1-yl)butanoate

Item No. 34666

CAS Registry No.: 114932-60-4
Formal Name: 1-pyrenebutanoic acid, 2,5-dioxo-1-pyrrolidinyl ester
Synonyms: 1-Pyrenebutanoic Acid N-hydroxysuccinimide ester, 1-Pyrenebutanoic Acid succinimidyl ester, PSE
MF: C₂₄H₁₉NO₄
FW: 385.4
Purity: ≥98%
UV/Vis.: λ_{max}: 234, 243, 265, 276, 326, 342 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

2,5-Dioxopyrrolidin-1-yl 4-(pyren-1-yl)butanoate is supplied as a solid. A stock solution may be made by dissolving the 2,5-dioxopyrrolidin-1-yl 4-(pyren-1-yl)butanoate in the solvent of choice, which should be purged with an inert gas. 2,5-Dioxopyrrolidin-1-yl 4-(pyren-1-yl)butanoate is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 2,5-dioxopyrrolidin-1-yl 4-(pyren-1-yl)butanoate in these solvents is approximately 5 and 15 mg/ml, respectively.

Description

2,5-Dioxopyrrolidin-1-yl 4-(pyren-1-yl)butanoate is an amine-reactive ester.^{1,2} It has been used to coat carbon nanotube-based biosensors for the capture of antibodies and proteins.

References

1. Kim, J.P., Lee, B.Y., Hong, S., *et al.* Ultrasensitive carbon nanotube-based biosensors using antibody-binding fragments. *Anal. Biochem.* **381(2)**, 193-198 (2008).
2. Karachevtsev, V.A., Stepanian, S.G., Glamazda, A.Y., *et al.* Noncovalent interaction of single-walled carbon nanotubes with 1-pyrenebutanoic acid succinimide ester and glucoseoxidase. *J. Phys. Chem.* **115(43)**, 21072-21082 (2011).

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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