

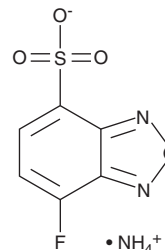
PRODUCT INFORMATION



7-Fluoro-2,1,3-benzoxadiazole-4-sulfonate (ammonium salt)

Item No. 34564

CAS Registry No.: 84806-27-9
Formal Name: 7-fluoro-2,1,3-benzoxadiazole-4-sulfonic acid, monoammonium salt
Synonyms: Ammonium 7-fluorobenzo-2-oxa-1,3-diazole-4-sulfonate, 7-Fluorobenzofurazan-4-Sulfonic Acid, SBD-F
MF: C₆H₂FN₂O₄S • NH₄
FW: 235.2
Purity: ≥98%
UV/Vis.: λ_{max}: 316 nm
Ex./Em. Max: 380/515 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

7-Fluoro-2,1,3-benzoxadiazole-4-sulfonate (SBD-F) (ammonium salt) is supplied as a solid. A stock solution may be made by dissolving the SBD-F (ammonium salt) in the solvent of choice, which should be purged with an inert gas. SBD-F (ammonium salt) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of SBD-F (ammonium salt) in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of SBD-F (ammonium salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of SBD-F (ammonium salt) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

SBD-F is a thiol-reactive fluorogenic probe.¹ It has been used to quantify the levels of homocysteine, cysteine, and cysteamine in human plasma.² SBD-F displays excitation/emission maxima of 380/515 nm, respectively.¹

References

1. Imai, K., Toyo'oka, T., and Watanabe, Y. A novel fluorogenic reagent for thiols: Ammonium 7-fluorobenzo-2-oxa-1,3-diazole-4-sulfonate. *Anal. Biochem.* **128(2)**, 471-473 (1983).
2. Ichinose, S., Nakamura, M., Maeda, M., et al. A validated HPLC-fluorescence method with a semi-micro column for routine determination of homocysteine, cysteine and cysteamine, and the relation between the thiol derivatives in normal human plasma. *Biomed. Chromatogr.* **23(9)**, 935-939 (2009).

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