

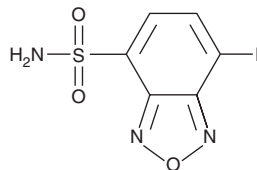
PRODUCT INFORMATION



ABD-F

Item No. 38892

CAS Registry No.: 91366-65-3
Formal Name: 7-fluoro-2,1,3-benzoxadiazole-4-sulfonamide
MF: C₆H₄FN₃O₃S
FW: 217.2
Purity: ≥98%
Ex./Em. Max: 389/513 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

ABD-F is supplied as a solid. A stock solution may be made by dissolving the ABD-F in the solvent of choice, which should be purged with an inert gas. ABD-F is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ABD-F in ethanol and DMF is approximately 30 mg/ml and approximately 20 mg/ml in DMSO.

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 ABD-F can be prepared by directly dissolving the solid in aqueous buffers. ABD-F is slightly soluble in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

ABD-F is a thiol-reactive fluorogenic reagent.¹ It has been used to detect and quantify thiol-containing amino acids, protein and tissue thiols, and disulfide bridges between proteins.¹⁻³ ABD-F displays excitation/emission maxima of 389 and 513 nm, respectively.¹

References

1. Toyo'oka, T. and Imai, K. New fluorogenic reagent having halogenobenzofurazan structure for thiols: 4-(Aminosulfonyl)-7-fluoro-2,1,3-benzoxadiazole. *Anal. Chem.* **56(13)**, 2461-2464 (1984).
2. Takeda, M., Makita, H., Ohno, K., *et al.* Structural analysis of the sheath of a sheathed bacterium, *Leptothrix cholodnii*. *Int. J. Biol. Macromol.* **37(1-2)**, 92-98 (2005).
3. Toyo'oka, T., Furukawa, F., Suzuki, T., *et al.* Determination of thiols and disulfides in normal rat tissues and hamster pancreas treated with *N*-nitrosobis(2-oxopropyl)amine using 4-(aminosulfonyl)-7-fluoro-2,1,3-benzoxadiazole and ammonium 7-fluoro-2,1,3-benzoxadiazole-4-sulfonate. *Biomed. Chromatogr.* **3(4)**, 166-172 (1989).

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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