PRODUCT INFORMATION



Dansyl Amide

Item No. 36149

CAS Registry No.: 1431-39-6

Formal Name: 5-(dimethylamino)-1-naphthalenesulfonamide

Synonym: **DNSA**

MF: $C_{12}H_{14}N_2O_2S$

FW: 250.3 **Purity:** ≥98% Ex./Em. Max: 280/470 nm λ_{max} : 216, 249 nm UV/Vis.:

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.



Dansyl amide is supplied as a solid. A stock solution may be made by dissolving the dansyl amide in the solvent of choice, which should be purged with an inert gas. Dansyl amide is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of dansyl amide in these solvents is approximately 1 and 2 mg/ml, respectively.

Description

Dansyl amide is a fluorescent probe for albumin and CAII.^{1,2} It binds to serum albumin and carbonic anhydrase II (CAII; K_a s = 7.57 and 0.2 μ M, respectively) and has been used to determine ligand affinities for these proteins. Dansyl amide binding to CAII results in an increase in fluorescence due to FRET from nearby active site tryptophan residues and displays excitation/emission maxima of 280/470 nm, respectively, when bound to CAII and a decrease in fluorescence can be used to quantify CAII ligand binding.²

References

- 1. Epps, D.E., Raub, T.J., and Kézdy, F.J. A general, wide-rage spectrofluorometric method for measuring the site-specific affinities of drugs toward human serum albumin. Anal. Biochem. 227(2), 342-350 (1995).
- Wang, S.C. and Zamble, D.B. Fluorescence analysis of sulfonamide binding to carbonic anhydrase. Biochem. Mol. Biol. Educ. 34(5), 364-368 (2006).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 12/19/2022

 NH_{2}

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