

Catalog # 10-2847 Dansylcadaverine

10121-91-2

N-(5-Amino-pentyl)-5-dimethylaminonaphthalene-1-sulfonamide Monodansyl cadaverine; MDC Lot # X106219

MDC preferentially accumulates in autophagic vacuoles due to a combination of ion trapping and specific interactions with membrane lipids making it a very useful probe for monitoring autophagy. ^{1,2} Inhibits EGF internalization. ³ Competes with certain trans-aminases and can be used with antibody/affinity procedures to isolate resulting conjugates. ⁴ Abs: 335 nm, Em: 510 nm

- 1) Munafo and Colombo (2001), A novel assay to study autophagy: regulation of autophagosome vacuole size by amino acid deprivation; Int. J.Cell Sci. **114** 3619
- 2) Jiang et al. (2012), Targeting androgen receptor leads to suppression of prostate cancer via induction of autophagy; J.Urol. **188** 1361
- 3) Haigler et al. (1980), Dansylcadaverine inhibits internalization of 125I-epidermal growth factor in BALB 3T3 cells; J.Biol.Chem. **255** 1239
- 4) Murthy et al. (1994), Residue Gln-30 of human erythrocyte anion transporter is a prime site for reaction with intrinsic transglutaminase; J.Biol.Chem. **269** 22907

PHYSICAL DATA

 $\begin{tabular}{lll} Molecular Weight: & 335.46 \\ Molecular Formula: & $C_{17}H_{25}N_3O_2S$ \\ Purity: & $>97\%$ by TLC \\ \end{tabular}$

NMR: (Conforms)

Solubility: DMSO (up to 10 mg/ml with warming), methanol (up to 10 mg/ml)

Physical Description: Off-white solid

Storage and Stability: Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO or methanol may be stored at -20°C for up to 1 month.

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