

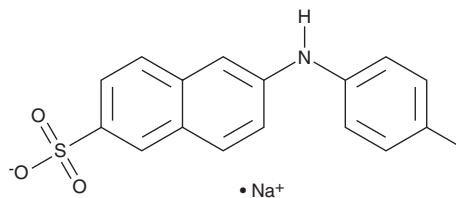
PRODUCT INFORMATION



2-p-Toluidinylnaphthylene-6-sulfonate (sodium salt)

Item No. 37140

CAS Registry No.: 53313-85-2
Formal Name: 6-[(4-methylphenyl)amino]-2-naphthalenesulfonic acid, monosodium salt
Synonyms: 6-(p-Toluidino)-2-naphthalenesulfonic Acid, TNS
MF: $C_{17}H_{14}NO_3S \cdot Na$
FW: 335.4
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 225, 274, 318 nm
Ex./Em. Max: 321/446 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-p-Toluidinylnaphthylene-6-sulfonate (TNS) (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the TNS (sodium salt) in the solvent of choice, which should be purged with an inert gas. TNS (sodium salt) is slightly soluble in ethanol.

Description

TNS is a fluorescent probe for the conformational state of proteins.^{1,2} Upon binding to the hydrophobic surface of proteins, TNS displays excitation and emission maxima of 321 and 446 nm, respectively. It has also been used to determine the pK_a values of lipid nanoparticles (LNPs).³

References

- McClure, W.O. and Edelman, G.M. Fluorescent probes for conformational states of proteins. II. The binding of 2-p-toluidinylnaphthalene-6-sulfonate to alpha-chymotrypsin. *Biochemistry* **6**(2), 559-566 (1967).
- Cócer, M., López, O., Estelrich, J., *et al.* Use of a fluorescence spectroscopy technique to study the adsorption of sodium dodecylsulfonate on liposomes. *Chem. Phys. Lipids* **110**(1), 19-26 (2001).
- Carrasco, M.J., Alishetta, S., Alameh, M.-G., *et al.* Ionization and structural properties of mRNA lipid nanoparticles influence expression in intramuscular and intravascular administration. *Commun. Biol.* **4**(1), 956 (2021).

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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