



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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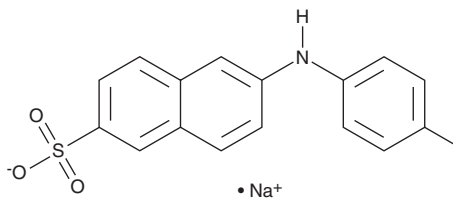
# PRODUCT INFORMATION



## 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<sub>17</sub>H<sub>14</sub>NO<sub>3</sub>S • Na  
**FW:** 335.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 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.<sup>1,2</sup> 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<sub>a</sub> values of lipid nanoparticles (LNPs).<sup>3</sup>

### References

1. 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).
2. Cócera, 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).
3. 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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