

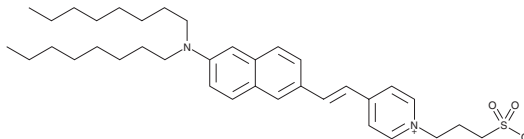
# PRODUCT INFORMATION



## Di-8-ANEPPS

Item No. 19541

**CAS Registry No.:** 157134-53-7  
**Formal Name:** 4-[2-[6-(dioctylamino)-2-naphthalenyl]ethenyl]-1-(3-sulfopropyl)-pyridinium, inner salt  
**MF:** C<sub>36</sub>H<sub>52</sub>N<sub>2</sub>O<sub>3</sub>S  
**FW:** 592.9  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 208, 253, 320, 501 nm  
**Supplied as:** A crystalline 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

Di-8-ANEPPS is supplied as a crystalline solid. A stock solution may be made by dissolving the Di-8-ANEPPS in the solvent of choice, which should be purged with an inert gas. Di-8-ANEPPS is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of Di-8-ANEPPS in DMSO and DMF is approximately 2 mg/ml and approximately 100 µg/ml in ethanol.

### Description

Di-8-ANEPPS is a potentiometric fluorescent dye that can be used to noninvasively measure transmembrane voltage.<sup>1</sup> It is not fluorescent in water, but when bound to the lipid bilayer, becomes strongly fluorescent (ex/em max = ~467/631 nm). The fluorescence intensity of di-8-ANEPPS varies proportionally to changes in transmembrane voltage. This dye is most suitable for measuring larger changes in membrane voltage, such as the onset of induced membrane voltage in nonexcitable cells exposed to external electric fields or action potentials in excitable cells.<sup>1</sup> Since di-8-ANEPPS stains the membrane, it can also be used simply as a cell membrane marker.

### Reference

1. Pucihar, G., Kotnik, T., and Miklavcic, D. Measuring the induced membrane voltage with Di-8-ANEPPS. *J. Vis. Exp.* **2009(33)**, (2016).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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