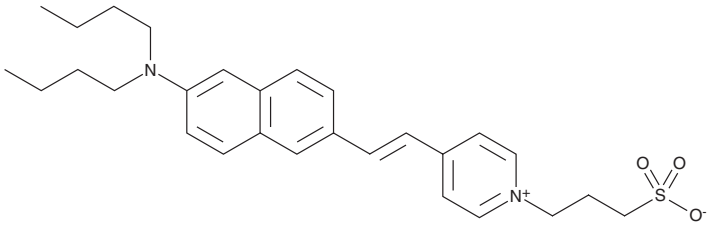
PRODUCT INFORMATION

Di-4-ANEPPS

Item No. 26801

CAS Registry No.:	90134-00-2
Formal Name:	4-[2-[6-(dibutylamino)-2-naphthalenyl]ethenyl]-1-(3-sulfopropyl)-pyridinium, inner salt
MF:	$C_{28}H_{36}N_2O_3S$
FW:	480.7
Purity:	≥98%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Di-4-ANEPPS is supplied as a solid. A stock solution may be made by dissolving the Di-4-ANEPPS in the solvent of choice. Di-4-ANEPPS is soluble in the organic solvent DMSO, which should be purged with an inert gas.

Description

Di-4-ANEPPS is a potentiometric fluorescent dye that can be used to measure membrane potential.[1] It displays absorption/emission maxima of 495/705 nm, respectively.[2] The relative fluorescence changes proportionally to membrane potential at a rate of approximately 10% per 100 mV.[1] Di-4-ANEPPS has been used to measure membrane potential in a variety of tissue and cell types as well as artificial membranes.[1,2]

References

1. Loew, L.M., Cohen, L.B., Dix, J., *et al*. A naphthyl analog of the aminostyryl pyridinium class of potentiometric membrane dyes shows consistent sensitivity in a variety of tissue, cell, and model membrane preparations. *J. Membr. Biol.* **130(1)**, 1-10 (1992).
2. Sabnis, R.W. Handbook of biological dyes and stains: Synthesis and industrial applications. John Wiley & Sons, Inc., Madison, NJ (2010).

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