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## **Di-4-ANEPPS**

Di-4-ANEPPS is a fast-responding membrane potential dye. Changes in the membrane potential of the cell correlate with changes in the fluorescence excitation intensity of the dye.



## Product attributes

Call us: 800-304-5357

CAS number	90134-00-2
For live or fixed cells	For live/intact cells
Potential dependence	Fast-response membrane potential dye
Colors	Far-red
Excitation/Emission	496/705 nm (see product description)

## **Product Description**

Di-4-ANEPPS is a fast-responding membrane potential dye (1). Changes in the membrane potential of the cell correlate with changes in the fluorescence excitation intensity of the dye. Di-4-ANEPPS is internalized in cells rapidly, so it is mainly used for short-term experiments. We also offer Di-8-ANEPPS (catalog number 61012), which is more lipophilic and better retained in the outer leaflet of the plasma membrane.

- $\lambda_{Ex}/\lambda_{Em}$  (MeOH) = 496/705 nm\*
- Orange red solid soluble in DMF, ethanol or DMSO
- Store at 4°C and protect from light, especially in solution
- C28H36N2O3S
- MW: 481
- [90134-00-2]
- \* Note that the spectra of styryl dyes generally undergo a large blue shift in lipids compared to organic solvent. See the spectra for styryl dyes in liposomes under product images.

$$O_3S(H_2C)_3-N$$
 —  $CH=CH$  —  $N[(CH_2)_3CH_3]_2$ 

## References

- 1. Nature, 355, 349(1992),  $\underline{DOI: 10.1038/355349a0}$  2. Biochim Biophys Acta, 1068(2), 149(1991),  $\underline{DOI: 10.1016/0005-2736(91)90203-K}$  3. PLoS ONE 8(10), e75678 (2013),  $\underline{DOI: 10.1371/journal.pone.0075678}$
- 4. Am J Phys Heart, 0(0), (2021), <u>DOI: 10.1152/ajpheart.00185.2021</u>

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