Di-8-ANEPPS

MedChemExpress

| Cat. No.: | HY-101891 |
|--------------------|---|
| CAS No.: | 157134-53-7 |
| Molecular Formula: | C ₃₆ H ₅₂ N ₂ O ₃ S |
| Molecular Weight: | 592.87 |
| Target: | Fluorescent Dye |
| Pathway: | Others |
| Storage: | -20°C, protect from light * The compound is unstable in solutions, freshly prepared is recommended. |

SOLVENT & SOLUBILITY

In Vitro

DMSO: 1 mg/mL (1.69 mM; ultrasonic and warming and heat to 60°C)

| Preparing Stock Solutions | Solvent Mass Concentration | 1 mg | 5 mg | 10 mg |
|------------------------------|-------------------------------|-----------|-----------|-----------|
| | 1 mM | 1.6867 mL | 8.4336 mL | 16.8671 m |
| | 5 mM | | | |
| | 10 mM | | | |

Please refer to the solubility information to select the appropriate solvent.

| Description | Di-8-ANEPPS is a naphthylstyryl voltage-sensitive dye, shifting both their fluorescence excitation and emission spectra upon changes in V _m . | | | |
|-------------|--|--|--|--|
| In Vitro | A mouse cell staining with Di-8-ANEPPS is applied voltage clamp pulses and immersed in Na ⁺ -containing solution. The Di-8-ANEPPS signal, which largely reflects t system voltage, has an asymmetrical positive component upon application of depolarizing pulses. This is interpreted as reflecting a propagating action potential, escaping from the voltage-clamped plasma membrane. Its temporal properties are not unlike those of the "center" signal. Notably, the peak of the signal occurrs 0.3 ms after the leading edge of the depolarizing pulse ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. | | | |

PROTOCOL

| Cell Assay ^[1] | To implement the technique, cells enzymatically isolated from mouse flexor digitorum brevis (FDB) muscle are stained by |
|---------------------------|---|
| | brief exposure to a saline with Di-8-ANEPPS and then washed in solution ^[1] . |
| | MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

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REFERENCES

[1]. Manno C, et al. Confocal imaging of transmembrane voltage by SEER of di-8-ANEPPS. J Gen Physiol. 2013 Mar;141(3):371-87.

Caution: Product has not been fully validated for medical applications. For research use only.

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