

# **Product Information**

## **Di-4-ANEPPDHQ**

Catalog Number: D4024

Product Size: 1 mg

Application Scope: Membrane potential staining

## **Parameters**

Appearance: Red-brown solid soluble in DMSO, DMF or

**EtOH** 

Ex/Em (MeOH) = 512/712 nm

Molecular Formula: C<sub>32</sub>H<sub>47</sub>Br<sub>2</sub>N<sub>3</sub>O<sub>2</sub>

Molecular Weight: 665.55

Molecular Structure:

## **Storage**

Store at -20°C and protect from light. When stored as directed, product is stable for at least 12 months.

# **Description**

Di-4-ANEPPDHQ is a fast responding membrane potential dye. It does not have fluorescence activity itself, and only emits fluorescence after binding to the cell membrane. Di-4-ANEPPDHQ optical response is sufficiently fast to detect transient potential changes in excitable cells, including single neurons, cardiac cells, and intact brains. It has a fairly uniform

10% per 100 mV change in fluorescence intensity.

#### **Protocol**

1. Storage solution preparation: Use DMSO to prepare a storage solution of 1-10 mM.

Note: It is recommended to store the storage solution at -20  $\,^{\circ}$ C, and aliquot it in small quantities to avoid repeated freeze-thaw cycles.

2. Preparation of working solution: Dilute the storage solution with a suitable buffer (such as serum-free medium, PBS, etc.) to prepare a working solution with a concentration of 10-15  $\mu M$ .

Note: You may need to optimize the staining procedure for each particular cell type by varying the dye concentration, staining volume, labeling time, or wash steps.

#### **Notes**

- 1. There are quenching problems with fluorescent dyes. Please avoid light to slow down the fluorescence quenching.
- 2. For your safety and health, please wear lab coats and disposable gloves.