**Lumiprobe Corporation**
201 International Circle, Suite 135
Hunt Valley, Maryland 21030
USA
Phone: +1 888 973 6353
Fax: +1 888 973 6354
Email: order@lumiprobe.com

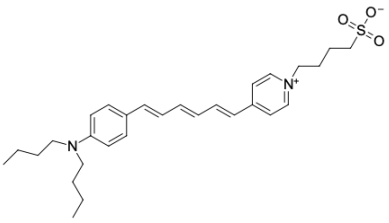
# RH 237, potentiometric probe

http://www.lumiprobe.com/p/rh-237-potentiometric-probe

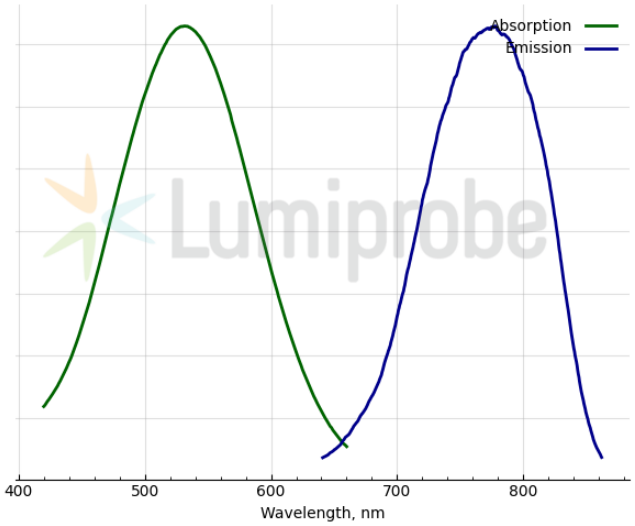
RH 237, also called N-(4-sulfobutyl)-4-(6-(4-(dibutylamino)phenyl)hexatrienyl)pyridinium, is a fast-response potential-sensitive probe. RH 237 is primarily used for imaging membrane potential, synaptic activity, and ion channel activity of neurons. However, the dye is also suitable for imaging the functional activity of mitochondria and heart cells.

Excitation/emission maxima of RH 237 in methanol are 550/786 nm, respectively. In cell membranes, the spectra of the dye are typically blue-shifted by approximately 20 nm for excitation and 80 nm for emission peaks.

Use 1-5 µM working concentration as a starting point. The exact dye concentration should be defined experimentally.



**Structure of RH 237, potentiometric probe**




**Absorption and emission spectra of RH 237**

**General properties**

| | |
|---|---|
| Appearance: | dark violet powder |
| Molecular weight: | 496.72 |
| CAS number: | 83668-91-1 |
| Molecular formula: | $C_{29}H_{40}N_2O_3S$ |
| IUPAC name: | N-(4-Sulfobutyl)-4-(6-(4-(dibutylamino)phenyl)hexatrienyl)pyridinium, inner salt |
| Solubility: | water, methanol, DMSO |
| Quality control: | NMR $^1H$ and HPLC-MS (95+%) |
| Storage conditions: | 24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. |
| Legal statement: | Product is offered and sold for research purposes only. Product is not tested for safety and efficacy in food, drug, medical device, cosmetic, no express or implied authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, for humans or animals or for commercial purposes. |