

# **Product Information**

#### **RH414**

Catalog Number: R4026

Product Size: 5 mg

Application Scope: Membrane potential staining

#### **Parameters**

Appearance: Orange-red solid soluble in DMSO or water

Ex/Em (MeOH): 532/716 nm

CAS No.: 161433-30-3

Molecular Formula: C28H43Br2N3

Molecular Weight: 581.48

Molecular Structure:

2Br (CH<sub>3</sub>CH<sub>2</sub>)<sub>2</sub>N-(CH=CH)<sub>2</sub>-\(\bigcup \text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)<sub>3</sub>\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub>2</sub>CH<sub>3</sub>)\(\text{N'}(CH<sub></sub>

### **Storage**

Store at  $-20^{\circ}$ C and protect from light. When stored as directed, product is stable for at least 12 months.

## **Description**

RH414 is a fast-responding potentiometric probe that is primarily used for functional imaging of neurons. It is also used to monitor cell membrane potential, synaptic activity and neuron ion channel activity. In cell membranes, the spectra of styryl dyes are typically blue-shifted by as much as 20 nm for absorption or excitation and 80 nm for emission.

### **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.

