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## Rhod 2

Item# Unit Size  
R001-10 1 mg

**Chemical Name:** 1-[2-Amino-5-(3-dimethylamino-6-dimethylammonio-9-xanthenyl)phenoxy]-2-(2-amino-5-methylphenoxy)ethane-N,N,N',N'-tetraacetic acid, chlorid

**CAS:** 132523-91-2

**Appearance:** Dark purple solid

**Purity:** ≥60.0 % (HPLC)

**MW:** 791.24, C<sub>40</sub>H<sub>43</sub>ClN<sub>4</sub>O<sub>11</sub>

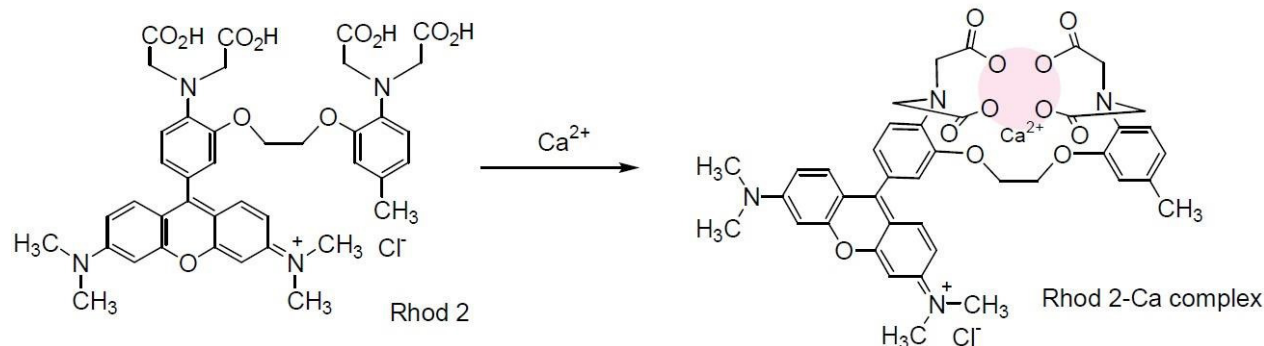
**Storage Condition:** -20°C, protect from light

**Shipping Condition:** ambient temperature

## Product Description

Rhod 2 has the longest fluorescent wavelength signal of all the calcium indicators. It has a rhodamine-like fluorophore whose excitation and emission maxima are 557 nm and 581 nm, respectively. This makes it a convenient excitation source for argon and krypton lasers. Although it was thought that the fluorescent signal of Rhod 2 only increases several times with the calcium complex, Dojindo's Rhod 2 increases its signal with calcium 80-100 times because of its high purity. Its signal intensity is the strongest of all the calcium probes. Rhod 2 is thus highly recommended as a probe for intracellular calcium monitoring using laser microscopes. Rhod 2 is reported to have a better loading profile at the point of localization, especially in neural slice cultures. The dissociation constant of Rhod 2 with calcium (K<sub>d</sub>=1.0 mM) is the highest of all the fluorescent calcium probes, providing a wider range for monitoring calcium concentration. Rhod 2-AM is an acetoxymethyl ester derivative of Rhod 2 that can be easily loaded into cells using the AM method.

## Calcium Chelation



CERTIFICATE NO. 3222

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