

Product Information Sheet

Ordering Information

Product Number: 20455

Product Name: Cal-670™, potassium salt

Unit Size: 10x50 ug

Storage Conditions: Freeze (<-15 °C), Desiccated, Avoid Light

Expiration Date: 12 months upon receiving

Chemical and Spectral Properties

Appearance: Solid

Molecular Weight: 1662.54

Soluble In: Water

Excitation Wavelength: 650

Emission Wavelength: 670

Application Notes

Calcium measurement is critical for numerous biological investigations. Fluorescent probes that show spectral responses upon binding calcium have enabled researchers to investigate changes in intracellular free calcium concentrations by using fluorescence microscopy, flow cytometry, fluorescence spectroscopy and fluorescence microplate readers. Cal-670™ is a near infrared (NIR) calcium indicator with maximum emission at ~675 nm. It can be well excited with the red lasers at 633 nm or 647 nm with a moderate calcium affinity of $K_d \sim 853$ nM. Cal-670™ is one of the very few calcium indicators that can be potentially used for in vivo imaging since it has a NIR fluorescence.