
Product Information Sheet

Ordering Information

Product Number: 20410

Product Name: Cal-500™, 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: 850.05

Soluble In: Water

Excitation Wavelength: 390

Emission Wavelength: 500

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-500™ is an UV-excitable calcium indicator with maximum emission at ~500 nm. It has a Stokes Shift larger than 100 nm. It can also be well excited with the 405 nm violet laser with a moderate calcium affinity of K_d ~303 nM. In CHO and HEK cells Cal-500™ AM has great cellular calcium response. The excitation spectra of Cal-500 is well separated from those of FITC, Alexa Fluor® 488 and GFP, making it an ideal calcium probe for multiplexing intracellular assays with GFP cell lines, FITC/Alexa Fluor® 488 labeled antibodies or other red fluorescent probes.