

RatioWorks™ PH165

Catalog Number: 21213

Unit Size: 10x50 ug

Product Details

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|--------------------|---|
| Storage Conditions | Freeze (< -15 °C), Minimize light exposure, |
| Expiration Date | 12 months upon receiving |

Chemical Properties

| | |
|------------------|--------|
| Appearance | Solid |
| Molecular Weight | 517.54 |
| Soluble In | DMSO |

Spectral Properties

| | |
|-----------------------|--------|
| Excitation Wavelength | 463 nm |
| Emission Wavelength | 641 nm |

Applications

RatioWorks™ PH165 is a novel fluorescent probe designed for pH measurement in solution, featuring pH-dependent fluorescence spectra and unique dual excitation and dual emission properties. At low pH, RatioWorks™ PH165 is weakly fluorescent in the far-red spectrum region and highly fluorescent in the red spectrum region. As pH increases, it shows higher fluorescence in the far-red spectrum and lower fluorescence in the red spectrum. This probe quantifies pH in the 4 to 9 range, utilizing dual excitation/emission at 497/594 nm and 578/654 nm, respectively, and has a pKa of ~7.1. The red fluorescence spectrum of RatioWorks™ PH165 makes it suitable for multiplexing tests with green fluorophores like GFP. RatioWorks™ PH165 AM is cell-permeable and compatible with platforms such as fluorescence microscopy and microplate readers.