

## Protonex™ Blue 450 Acid

Catalog Number: 21916

Unit Size: 1 mg

### Product Details

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

### Chemical Properties

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Appearance	Solid
Molecular Weight	339.39
Soluble In	DMSO

### Spectral Properties

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Excitation Wavelength	362 nm
Emission Wavelength	452 nm

### Applications

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Protonex™ Blue 450 dye demonstrated pH-dependent fluorescence. Unlike most of the existing fluorescent dyes that are more fluorescent at higher pH, acidic conditions enhance the fluorescence of Protonex™ Blue 450 dye. The fluorescence of Protonex™ Blue 450 dye increases as pH decreases from neutral to the acidic. The weak fluorescence outside the cell may potentially eliminate the wash steps. Protonex™ Blue 450 dye provides a powerful tool to monitor acidic cell compartments such as endosomes and lysosomes. Protonex™ Blue 450 dye is weakly fluorescent outside the cells, but its fluorescence is significantly enhanced in acidic compartments (such as phagosomes, lysosomes and endosomes). This Protonex™ Blue 450 enables the specific detection of cellular acidic compartments with reduced signal variability and improved accuracy for imaging or flow applications. It can be also used for multiplexing cellular functional analysis with green dyes such as GFP, Fluor-8, calcein, or FITC-labeled antibodies.