

Equivalent Performance, Exceptional Value

# TECHNICAL DATA SHEET Ghost Dye<sup>TM</sup> Violet 450

Catalog Number: 13-0863

## PRODUCT INFORMATION

Contents: Ghost Dye Violet 450

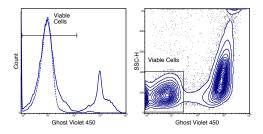
Excitation Laser Violet (405 nm)

Emission (nm): 450

Formulation: 1 uL/test in DMSO

Storage Conditions: -20°C protected from light and moisture

Use by: 6 months from date of receipt



LEFT: Mouse thymocytes were incubated overnight at 4°C (dashed) or 37°C (solid) and stained with Ghost Dye Violet 450. RIGHT: Mouse splenocytes were stimulated overnight with PMA and stained with Ghost Dye Violet 450. Viable gate is indicated.

#### **DESCRIPTION**

Ghost Dye Violet 450 is an amine reactive viability dye that can be used to discriminate viable from non-viable mammalian cells in flow cytometry applications. This dye irreversibly binds free amines available on the cell surface as well as intracellular free amines exposed in cells with compromised cell membranes. Necrotic cells with compromised membranes will react with significantly more Ghost Dye Violet 450 dye than viable cells in the same sample and therefore will exhibit much greater fluorescence intensity allowing exclusion of these cells from analysis.

### **PREPARATION & STORAGE**

Ghost Dye Violet 450 is provided in solution prepared in anhydrous DMSO and should be protected from light and moisture. Store vial at -20°C. Prior to use, allow vial to equilibrate to room temperature before opening. Ghost Dye Violet 450 dye is stable through 20 freeze/thaw cycles, if needed, aliquot smaller volumes and store at -20°C. Cells labeled with Ghost Dyes can be cryopreserved for later use or used in intracellular staining protocols without any loss of fluorescence intensity.

#### **APPLICATION NOTES**

Ghost Dye Violet 450 has been quality-tested for flow cytometry using mouse thymocytes and can be used at 1 uL/mL of cell suspension. The concentration required for optimal performance should be determined empirically by investigator. Ghost Dye Violet 450 is excited by the violet (405 nm) laser line and has a peak emission of 450 nm that can be detected using 440/40 or 440/50 band pass filters commonly used for detection of violetFluor™ 450, Pacific Blue, etc.

NOTE: Please choose the appropriate format for each application. Citations are provided as a convenience to you; please consult Materials and Methods sections for additional details about the use of any product in these publications.

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