

TECHNICAL DATA SHEET

# Ghost Dye™ Red 710

Catalog Number: 13-0871

# **PRODUCT INFORMATION**

Contents:	Ghost Dye™ Red 710
Excitation Laser:	Red (633-647 nm)
Emission (nm):	710
Use By:	6 months from date of receipt
Storage Conditions:	-20°C protected from light and moisture
Formulation:	1 µL/test in DMSO



Mouse splenocytes were stimulated overnight with PMA and ionomycin and stained with Ghost Dye  $^{\rm TM}$  Red 710. Viable gate is indicated.

## DESCRIPTION

Ghost Dye<sup>™</sup> Red 710 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<sup>™</sup> Red 710 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<sup>™</sup> Red 710 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<sup>™</sup> Red 710 dye is stable through 20 freeze/thaw cycles, if needed, aliquot smaller volumes and store at -20°C. Cells labeled with Ghost Dye<sup>™</sup> can be cryopreserved for later use or used in intracellular staining protocols without any loss of fluorescence intensity.

#### **APPLICATION NOTES**

Ghost Dye<sup>™</sup> Red 710 has been quality-tested for flow cytometry using mouse thymocytes and can be used at 1 µL/mL of cell suspension. This is a very bright dye. To reduce excess spillover the concentration required for optimal performance should be determined empirically by the investigator.

Ghost Dye<sup>™</sup> Red 710 is excited by the red (633-647 nm) laser line and has a peak emission of 710 nm that can be detected using the recommended 710/50 band pass filter commonly used for detection of Alexa Fluor® 700.

## REFERENCES

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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