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InnoGate™ Fixable NIR Viability Kit

Catalog Number:	710101, 710102
Size:	100 Tests, 500 Tests
Target Name:	Live/Deard NIR dye, Fixable Dye, Fixable Viability Dye
Regulatory Status:	RUO

PRODUCT DETAILS

Application:	Flow Cytometry
Format:	780
Formulation:	Lyophilized
Protein Concentration:	Add 100 µl of DMSO to one vial of InnoGate™ NIR dye until fully dissolved.
Storage&Handling:	Store the dye and DMSO at −20°C upon receipt. Keep the vials tightly sealed and do not open them until ready for use. Once DMSO has been added to the InnoGate™ NIR Dye, use the reconstituted dye immediately. Alternatively, aliquot the reconstituted dye into appropriate storage vials and store at −20°C in a dry environment protected from light. Avoid repeated freeze-thaw cycles.
Recommended Usage:	For flow cytometry, the suggested dilution is 1:1000 per 1 million cells and 1:100 per 10 million cells. Users should titrate the dye for their specific experimental setup, as optimal staining depends on cell type. This NIR dye has excitation/emission maxima at 629/767 nm and is suitable for both live and fixed cell samples.
Excitation Laser:	Red Laser (633 nm)

BACKGROUND INFORMATION

Background Information: The Live/Dead Fixable NIR Viability Kit is designed for rapid and reliable discrimination of live and dead mammalian cells by flow cytometry. The kit contains an amine-reactive fluorescent dye that is non-permeant to cells with intact plasma membranes but enters cells with compromised membranes. In viable cells, the dye primarily labels accessible surface amines, resulting in relatively low fluorescence, whereas membrane-compromised cells accumulate substantially more dye through intracellular amines and exhibit strong fluorescence. Because the dye forms stable covalent bonds with cellular amines, the viability signal is retained following fixation, making the kit suitable for applications involving subsequent fixation and intracellular staining. The dye has excitation and emission maxima of 629 nm and 767 nm, respectively, enabling detection in the near-infrared region and compatibility with red-light excitation systems. It is particularly useful for multicolor flow cytometry panels where minimizing spectral overlap with visible fluorophores is important.