Dyes and Stains

GloCell™ Fixable Viability Dye Violet 450

Amine-labeling fluorescent dye for
live/dead staining of mammalian cells

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Catalog #	75009	5 x 100 Tests	1 µL/test
	75009.1	100 Tests	1 µL/test

Product Description

GloCell™ Fixable Viability Dye Violet 450 is a fluorescent cell viability dye for staining live/dead mammalian cells in applications such as flow cytometry. The dye irreversibly binds intracellular and cell surface amine groups and can be used prior to fixation, permeabilization, or cryopreservation. Cells with compromised plasma membranes become permeable to the GloCell™ dye, resulting in greater fluorescence compared to live cells in a cell viability assay.

GloCell™ Fixable Viability Dye Violet 450 is excited by the violet laser at 405 nm and it has a fluorescence emission maximum of 450 nm that can be detected using the 440/40 or 440/50 band pass filter used to detect Pacific Blue™.

Excitation Wavelength:	405 nm (violet)
Emission Wavelength:	450 nm

Properties

Storage:	Store at -20°C.
Shelf Life:	Product stable until expiry date (EXP) on label. Protect product from prolonged exposure to light.
Format/Formulation:	Anhydrous DMSO

This product is hazardous. Please refer to the Safety Data Sheet (SDS). This product contains components dissolved in dimethyl sulfoxide (DMSO). DMSO is a strong solvent and skin penetrant, and can transport many substances through the skin. DMSO can also penetrate some protective glove materials including latex and silicone. Extra caution should be utilized when handling this product.

Applications

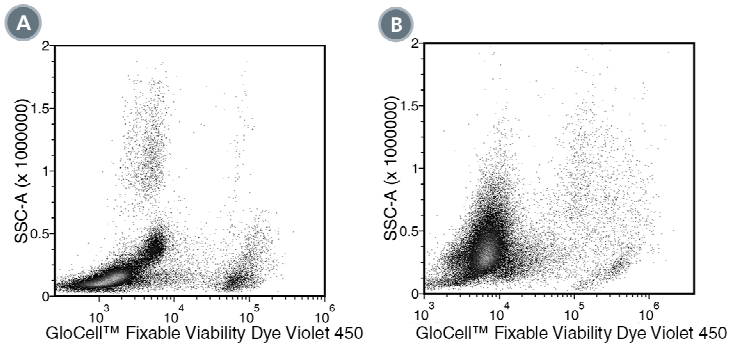
Verified:	FC
Reported:	IF
Special Applications:	This product has been verified for viability assessments of cells isolated with EasySep™ and RosetteSep™ kits.

Abbreviations: FC: Flow cytometry; IF: Immunofluorescence microscopy

Handling/Directions for Use

1. Bring dye to room temperature (15 - 25°C).
2. Centrifuge GloCell™ vial briefly to ensure the contents are at the bottom of the vial.
3. Wash cells twice with 1 - 2 mL of phosphate-buffered saline (azide- and protein/serum-free), e.g. D-PBS (Without Ca++ and Mg++) (Catalog #37350).
4. Centrifuge cells at 300 x *g* for 5 minutes at room temperature (15 - 25°C). Remove and discard supernatant.
5. Resuspend cells at a concentration of 1 - 10 x 10^6 cells/mL in D-PBS (Without Ca++ and Mg++).
6. Add 1 µL of GloCell™ dye per 1 mL of cell suspension. Vortex immediately.
   NOTE: Use caution when pipetting, as GloCell™ dye contains DMSO; please refer to the SDS for hazard information.
7. Incubate at 2 - 8°C for 30 minutes in the dark.
8. Wash cells twice with 1 - 2 mL of staining buffer (e.g. EasySep™ Buffer [Catalog #20144] or other protein-containing buffer).
   NOTE: This wash step using protein-containing buffer removes unreacted dye.
9. Cells are now ready for use in downstream applications such as antibody staining, fixation/permeabilization, or cryopreservation.

Data



(A) Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with GloCell™ Fixable Viability Dye Violet 450.
(B) Flow cytometry analysis of human multiple myeloma bone marrow mononuclear cells (BMMCs) labeled with GloCell™ Fixable Viability Dye Violet 450.

Related Products

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