Sellex,Inc.
www.sellex.com

Corantes para discriminação de células vivas/ mortas fixadas

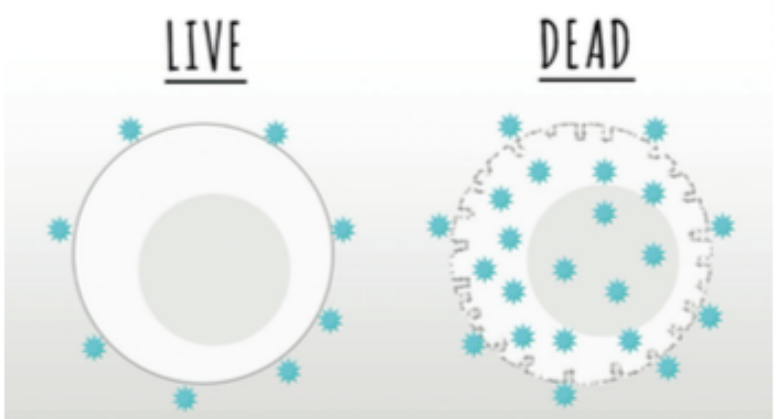
Zombie Fixable Viability Dyes

Live Cell/Dead Cell Discrimination

It is critical to understand the degree of cell death in any flow cytometry assay to account for non-specific antibody binding by dead cells. Viability dyes allow for the exclusion of dead cells from analysis. The advantage of Zombie dyes over DNA-binding dyes is that they are fixable, allowing delayed analysis or downstream staining of intracellular targets.

Each Zombie Fixable Viability Kit comes with lyophilized Zombie dye and anhydrous DMSO for reconstitution. BioLegend offers Zombie dyes for detection in seven different channels, providing flexibility in your panel: Zombie UV™, Zombie Violet™, Zombie Green™, Zombie Red™, Zombie Aqua™, Zombie NIR™, and Zombie Yellow™.

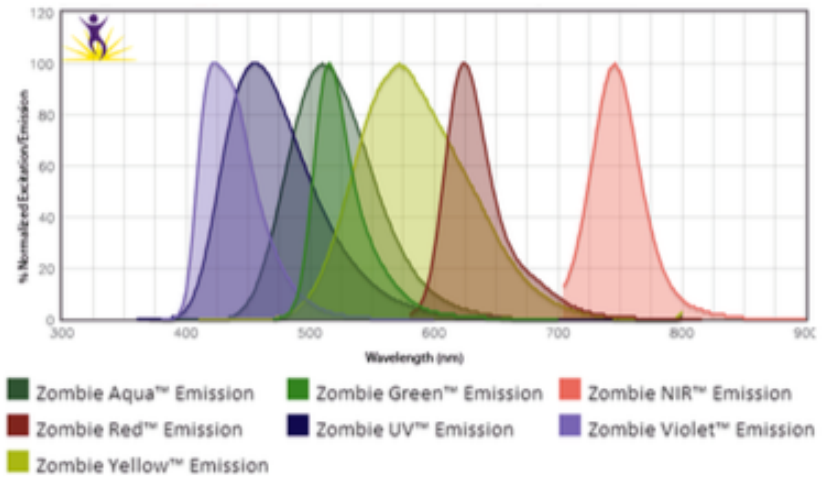
Zombie Dyes



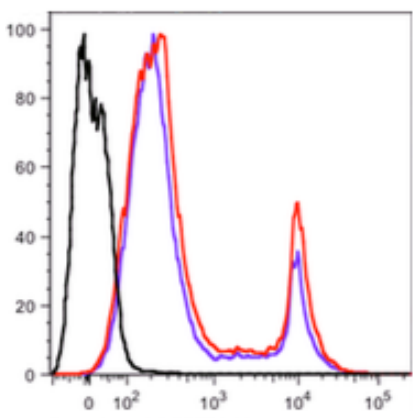
Zombie dyes are fixable dyes that react with primary amine groups on proteins. Live cells exclude the dyes, so that only cell surface proteins will be labeled, while dead cells allow entry of the dyes into the cytoplasm, increasing the amount of total protein labeling. Thus, dead cells will be significantly brighter for Zombie fluorescence than live cells.

Emission Spectra of Zombie Dyes

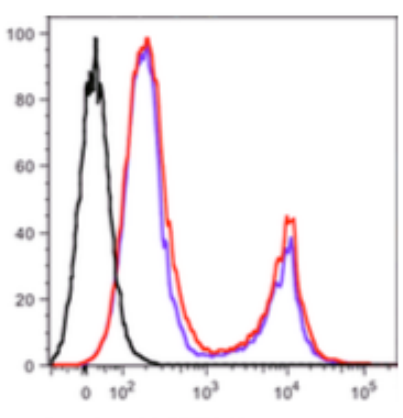
To view the complete excitation and emission spectra for each Zombie dye and compare them to other fluorophores for flow cytometry, visit our Fluorescence Spectra Analyzer page at: **biolegend.com/spectraanalyzer.**



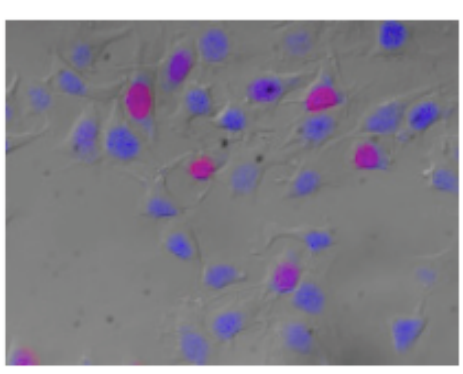
Example Data:



One day old C57BL/6 mouse splenocytes were stained with Zombie Red™ and analyzed before fixation (purple) or after fixation and permeabilization (red). Cells alone, without Zombie Red™ staining, are indicated in black.



One day old C57BL/6 mouse splenocytes were stained with Zombie Violet™ and analyzed before fixation (purple) or after fixation and permeabilization (red). Cells alone, without Zombie Violet™ staining, are indicated in black.



HeLa cells were treated with 20% EtOH for 20 seconds, washed twice with PBS, and then were left to recover for five minutes with cell culture media at 37°C. The cells were stained with Zombie Violet™ (1:1000) (red) for 15 minutes and then fixed with 1% PFA. Nuclei were counterstained with DRAQ5 (blue). The image was captured with a 40X objective.

Learn more about the Zombie dyes at: **biolegend.com/live_dead.**

BioLegend is ISO 9001:2008 and ISO 13485:2003 Certified

Product List

Name	Common Detection Channel	Excitation (max)	Emission (max)	Size	Cat. No.
Zombie Aqua™ Fixable Viability Kit	BV510™	382 nm	510 nm	100 tests/500 tests	423101/423102
Zombie Green™ Fixable Viability Kit	FITC	491 nm	515 nm	100 tests/500 tests	423111/423212
Zombie NIR™ Fixable Viability Kit	APC/Cy7	719 nm	746 nm	100 tests/500 tests	423105/423106
Zombie Red™ Fixable Viability Kit	PE/Dazzle™ 594	600 nm	624 nm	100 tests/500 tests	423109/423110
Zombie UV™ Fixable Viability Kit	DAPI	362 nm	459 nm	100 tests/500 tests	423107/423108
Zombie Violet™ Fixable Viability Kit	BV421™	400 nm	423 nm	100 tests/500 tests	423113/423114
Zombie Yellow™ Fixable Viability Kit	BV570™	396 nm	572 nm	100 tests/500 tests	423103/423104

Strategy Guide

Plan	Options
* I plan to run my cells live through the flow cytometer without any fixation. (Sorting live cells) →	Propidium Iodide, 7-AAD, or Zombie dyes
* I plan to fix my cells before I do any staining with antibodies. →	Zombie dyes prior to fixation.
* I plan to stain my cells with antibodies and then fix my cells →	Zombie dyes prior antibody staining and fixation.
* I plan to fix and permeabilize my cells for intracellular antibody staining. →	Zombie dyes prior to fixation.
* My cells are already fixed →	No Live/Dead option available.