

VIV-ON Fixable Viability Dyes

for Flow Cytometry

Overview

Excluding dead cells from data is recommended for all staining protocols to ensure experimental accuracy. VIV-ON fixable viability dyes allow accurate discrimination between live and dead cells in flow cytometry analysis, based on cell membrane integrity. VIV-ON preserve the staining pattern after fixation and/or permeabilization.

VIV-ON fixable viability dyes are amine reactive and cell impermeable. Dead cells with compromised cell membranes are typically labelled to a higher extent due to reaction with intracellular amines resulting in highly fluorescent dead cells. Impermeable live cells, on the contrary, are labelled only on the cell surface and show dim fluorescence (Fig. 1).



Fig. 1: Principle of VIV-ON Fixable Viability Dyes

Features

- High brightness for optimal differentiation between live and dead cells
- Dry formulation to guarantee high stability
- Unlike 7-AAD and PI, labelled cells can be fixed, permeabilized, washed and stained
- Suitable for any cell species

VIV-ON fixable viability dyes are available for the 405 (violet), 488 (blue) and 633 (red) laser lines

Retained staining pattern after fixation and/or permeabilization.

VIV-ON fixable viability dyes are specifically optimized in order to preserve the discrimination between the live and dead cell populations following fixation and/or permeabilization (Fig. 2 and 3), as opposed to 7-AAD and propidium iodide.

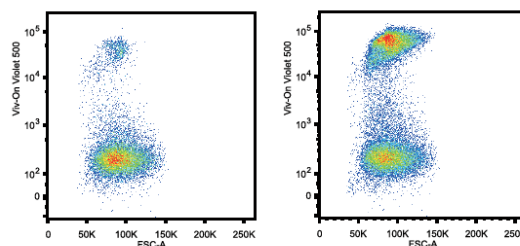
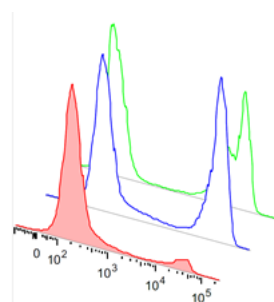


Fig. 2: EHB cells were untreated (left) or treated 10 min at 60°C (right), then stained with VIV-ON Violet 500 and fixed. Total cells were used for analysis



- EHEB cells untreated and stained
- EHEB cells, treated and stained
- EHEB cells, treated, stained and fixed

Fig. 3: EHB cells were untreated (red) or treated 10 min at 60°C (blue), then stained with VIV-ON Violet 500 and fixed (green). Total cells were used for analysis.

Selection guide

Product	Exc (em)	Em (nm)	Cat #	Size
VIV-ON Violet 500 FVD	405	515	FVA126N,0100	100 tests
VIV-ON Blue 520 FVD	488	523	FVA127N,0100	100 tests
VIV-ON Red 660 FVD	633	660	FVA128N,0100	100 tests
VIV-ON Red 780 FVD	633	780	FVA129N,0100	100 tests