ViaPlex™ 2-Color Cell Barcoding Kits

A unique kit for flexible fluorescent cellular barcoding for flow cytometry analysis of cell surface or intracellular targets. ViaPlex™ allows analysis of 15 cell populations in a single tube for high-throughput analysis.

Product attributes

Apoptosis/viability marker	All cell stain
Probe cellular localization	Cytoplasmic
For live or fixed cells	Covalent & fixable stains, For live/intact cells
Detection method/readout	Flow cytometry
Assay type/options	Cell barcoding
Cell permeability	Membrane permeant
Colors	Blue, Green
Fixation options	Fix after staining (formaldehyde), Fix after staining (methanol), Permeabilize after staining
Storage Conditions	Store at -10 to -35 °C, Protect from light, Desiccate

Product Description

The ViaPlex™ Cell Barcoding Kit enables convenient and flexible cell barcoding for flow cytometry. Cells are labeled using covalently bound fluorescent dyes with up to three concentrations per dye. This allows up to 15 distinct cell populations to be pooled and analyzed together in a single tube. A 16th sample can be added with additional compensation. By combining samples into one staining and acquisition workflow, ViaPlex™ dramatically reduces reagent consumption, hands-on time, and instrument run time. The result is a streamlined, cost-effective solution for high-throughput flow cytometry without compromising data quality.

The ViaPlex™ Cell Barcoding Kit offers exceptional experimental flexibility. Because barcoding is performed on live cells, it is fully compatible with both surface and intracellular antibody staining, supporting a wide range of flow cytometry applications. Barcoding can be performed either before or after cell treatment, giving researchers added freedom in experimental design. ViaPlex™ does not require fixation or permeabilization, enabling assays on live cell populations. The kit is also fully compatible with downstream fixation and permeabilization workflows when needed.

The kit uses two reactive fluorescent dyes, ViaPlex™ 405 Barcoding Dye for the 405 nm laser/Pacific Blue® filter, and ViaPlex™ 488 Barcoding Dye for the 488 nm laser/FITC filter. Each dye is cell permeant and covalently stains proteins in the cytoplasm of live cells for stable labeling of different cell populations. Cell staining can be analyzed in live cells, or cells can fixed after barcoding for detection of intracellular targets.

The ViaPlex™ kit comes with instructions for staining cells with combinations of the two dyes in a 15-plex matrix using standard cytometer settings. The stained cells can then be combined in a single tube, allowing up to 15 distinct cell populations to be gated and deconvoluted during flow analysis. An optional 16th barcode can be added if compensation is performed.

Maximize Each Run by Analyzing Up to 15 Distinct Populations in a Single Tube

Experimental Flexibility

ViaPlex™ staining can be done before or after cell treatment, enabling flexible workflows that fit your experiment needs.

ViaPlex™ 2-Color Cell Barcoding Kit (405 and 488)

Component Name	Abs/Em (nm)	Detection Channel	30148 10 assays (150 samples)	30148-T 3 assays (45 samples)
ViaPlex™ 405 Cell Barcoding Dye	387/446	Pacific Blue®, V450	30148A 10 vials	30148A 3 vials
ViaPlex™ 488 Cell Barcoding Dye	495/524	FITC, B525	30148B 10 vials	30148B 3 vials
DMSO, anhydrous	N/A		99938 3 X 0.5 mL	99938 1 X 0.5 mL

Pacific Blue is a registered trademark of Thermo Fisher Scientific.