



## BRUKER CELLULAR ANALYSIS

### VALIDATED REAGENTS AND CONSUMABLES FROM EXTERNAL SUPPLIERS

# Additional Reagents and Consumables for Immune Cell Profiling Workflows on the Beacon Optofluidic Platform

The following reagents and consumables from the listed vendors have been validated to perform in association with the assays below. For any questions regarding assays on the Beacon Optofluidic Platform please contact our support team at [support@brukercellularanalysis.com](mailto:support@brukercellularanalysis.com)

## Loading Viability Assay (Highly Recommended)

Performing an Annexin viability stain allows the Beacon to selectively pen for viable cells to improve your experimental results.

Item	Supplier	Ordering Info	Quantity per Workflow*	Purpose
<b>Annexin Binding Buffer (5X)</b>	ThermoFisher	309819	500 $\mu$ L	Viability Stain Buffer
<b>Brilliant™ Violet 421 Annexin V</b>	BioLegend	V13246	22 $\mu$ L	Viability Stain

## Cytokine Secretion Assay (Optional Functional Assay)

The Beacon can automatically analyze up to 3 cytokines secreted from individual single-cells using cytokine capture beads. The following beads have been validated for use to assess T cell activation functionality. Other beads may be substituted to assess different cytokine secretions.

Item	Supplier	Ordering Info	Quantity per Workflow*	Purpose
<b>LEGENDplex™ IFNg Human Capture Beads B9</b>	BioLegend	741280	50 $\mu$ L at 4.0–4.5 x 10 <sup>6</sup> beads/mL	Cytokine Capture
<b>LEGENDplex™ Human IL-2 Capture Beads A5</b>	BioLegend	740934	50 $\mu$ L at 4.5–5.0 x 10 <sup>6</sup> beads/mL	Cytokine Capture
<b>LEGENDplex™ Human TNF-<math>\alpha</math> Capture Beads B3</b>	BioLegend	740053	50 $\mu$ L at 4.0–4.5 x 10 <sup>6</sup> beads/mL	Cytokine Capture

\*Quantities listed are the maximum number/volume required for a 2-chip run. Quantities may be lower depending on which workflow you are running



<b>LEGENDplex™ SA-PE</b>	BioLegend	740452	20µL	Cytokine Detection
<b>LEGENDplex™ Human CD8/NK Panel Detection Abs V02c</b>	BioLegend	741188	190µL	Cytokine Detection

### Cytotoxicity Assay (Optional Functional Assay)

Cytotoxicity is assessed using Caspase-3 substrate to indicate when target cells experience apoptosis. The following reagents are needed to detect cytotoxicity.

Item	Supplier	Ordering Info	Quantity per Workflow*	Purpose
<b>NucView® 530 Caspase-3 Substrate</b>	Biotium	10406	175 µL at 1 mM	Cytotoxicity assay
CellTrace CFSE	Thermo Fisher Scientific	C34554	1 µL at 5 mM	Cytotoxicity assay

### Surface Phenotype Assay (Optional Functional Assay)

Surface staining can be performed on the Beacon using surface marker antibodies. The following surface marker stain has been validated for use to assess T cell activation functionality. Other surface marker stains may be substituted to assess different surface marker profiles.

Item	Supplier	Ordering Info	Quantity per Workflow*	Purpose
<b>Brilliant™ Violet 421 Anti Human CD137 (4-1BB) Antibody</b>	BioLegend	309819	10 µL	Surface Marker Stain

The Beacon is a versatile tool to assess single-cell functionality. For other assays or reagents, please contact our support team at [support@brukercellularanalysis.com](mailto:support@brukercellularanalysis.com) to design an experiment together.

\*Quantities listed are the maximum number/volume required for a 2-chip run. Quantities may be lower depending on which workflow you are running