Flow Post-its
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Staining Buffer for Polymer Dyes

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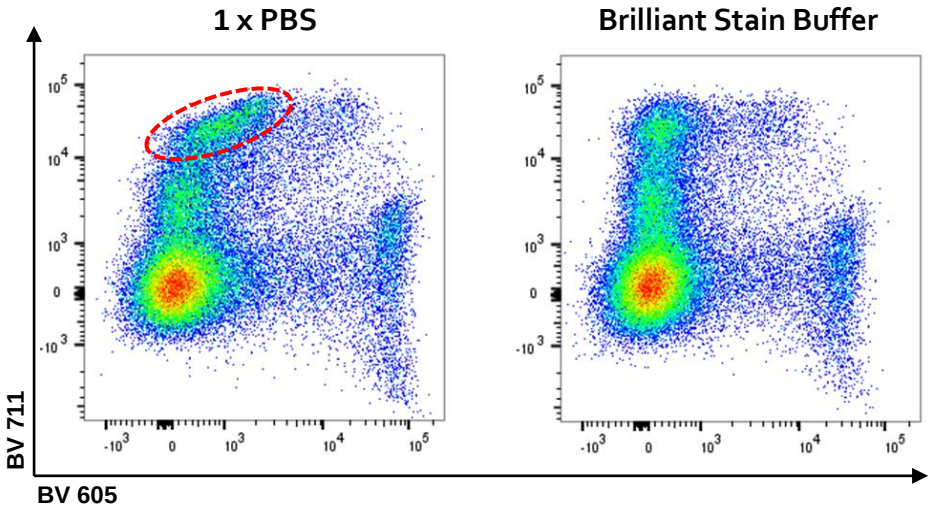
The use of organic polymers that can be more stable and brighter than conventional fluorescent probes has allowed the increase of the complexity of multicolor flow cytometry experiments. When using more than one polymer dye in an antibody panel, a special **staining buffer for polymer dyes must be added in order to prevent polymer-polymer interactions**.



TO KEEP IN MIND

- The commercially available staining buffers for polymer dyes are compatible with the use of other conventional fluorochromes as FITC, PE, or AlexaFluor™, among others.
- When using beads as single stained controls, make sure they are compatible with the polymer dye staining buffer, otherwise use PBS.

The Experiment

- Cells were stained with the same 10 color panel antibodies, 4 of them were conjugated to polymer dyes (BUV395, BUV737, BV605 and BV711).
- **On the left,** cells were incubated with antibodies in 1 x PBS. **On the right,** cells were incubated in Brilliant Staining Buffer (BD Biosciences).
- The same PMT voltages and compensation matrix were used for both analysis.
- Compensation was checked with single color controls and was correct.
- Using PBS to stain the cells with different polymer dyes led to **incorrect data** with a possible **overestimation of double positives**.

The use of **Brilliant Stain Buffer** prevented polymer dye interactions.

Using Brilliant Staining Buffer (BD Biosciences) or Super Bright Complete Staining Buffer (ThermoFisher) in a panel that has multiple polymer dye-conjugated antibodies is important to avoid polymer dye aggregation and inaccurate staining results.