BD Horizon RealYellow™ 703 Reagents

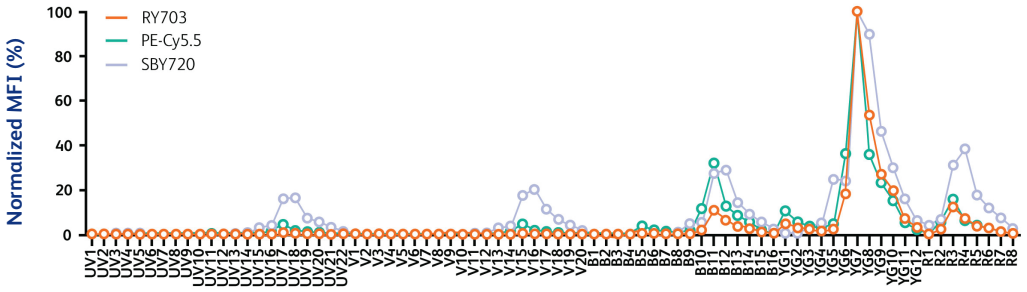
A bright and laser-specific fluorochrome for high-parameter and spectral flow cytometry panels

BD Horizon RealYellow™ 703 (RY703) Reagents join a family of reagents specially engineered to deliver reduced spillover and optimize resolution when used with other fluorochromes—helping enable flexible panel design and high-parameter research on both conventional and spectral flow cytometers. This fluorochrome is excited primarily by the 561-nm yellow-green laser. RY703 offers reduced cross-laser excitation off the blue laser and is very bright, supporting the detection of low-expression surface and intracellular markers.

Format	Laser line	Instrument	Cross-laser excitation	Relative brightness	Alternative to
RY703	561-nm yellow-green	spectral + conventional	reduced off the 488-nm blue	■■■■	PE-Cy5.5 or StarBright™ Yellow 720 when used with a yellow-green laser*

* On four- or five-laser configuration (B, V, R, YG or UV, V, B, YG, R)

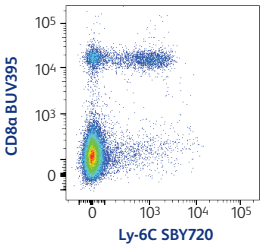
RY703 has reduced cross-laser excitation compared to PE-Cy5.5 or StarBright™ Yellow 720

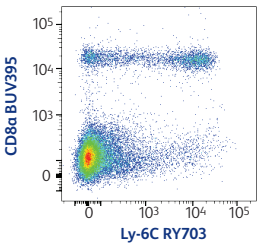


Normalized emission profiles of RY703, PE-Cy5.5 and SBY720 fluorochromes

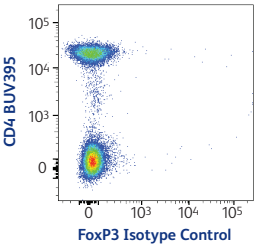
Samples run on a BD FACSDiscover™ S8 Cell Sorter and analyzed with FlowJo™ Software.

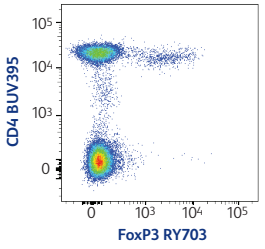
RY703 is a bright fluorochrome and compatible with a variety of fixation and permeabilization buffers





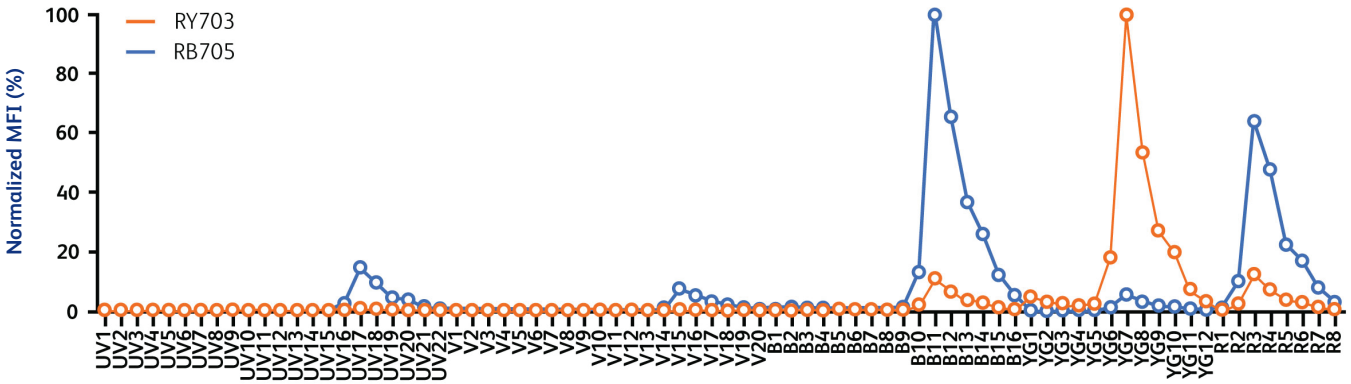
Mouse splenocytes were stained with SBY720 (left) or RY703 (right) Ly-6C (AL-21), co-stained with BUV395 CD8a (53-6.7) and acquired on a BD FACSymphony™ A5 SE Cell Analyzer with compensation.





Human PBMCs were fixed and permeabilized using the BD Pharmingen™ Transcription Factor Buffer Set. Cells were then stained with a matching isotype control (left) or with RY703 FoxP3 (259D/C7) (right) and co-stained with BUV395 CD4 (SK3) followed by acquisition on a BD FACSymphony™ A5 SE Cell Analyzer with compensation in FlowJo™ Software.

RB705 and RY703 can be used together in flow cytometry panels



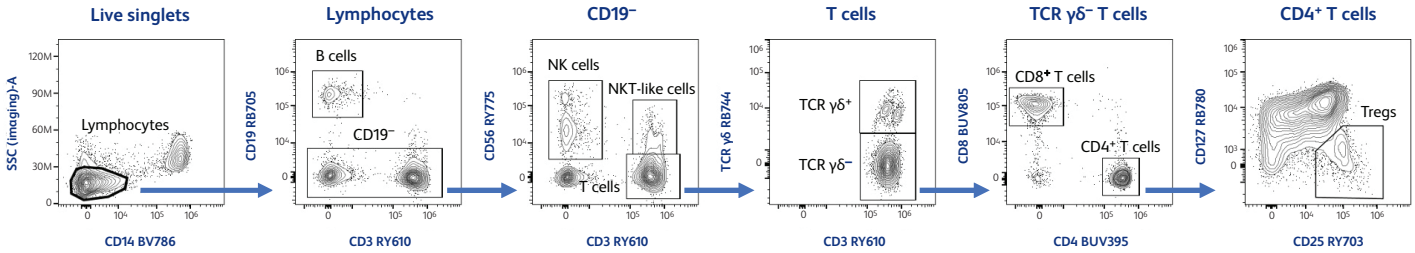
Normalized emission profiles for RB705 and RY703

RY703 and RB705 have distinct emission profiles and reduced cross-laser excitation. Samples run on a BD FACSDiscover™ S8 Cell Sorter.

To increase panel design flexibility and improve performance, RY703 can be paired with BD Horizon RealBlue™ 705 (RB705) Reagents on instruments with both blue and yellow-green lasers and the appropriate filters, such as the BD FACSymphony™ A5 and A5 SE Analyzers as well as the BD FACSDiscover™ S8 Cell Sorter.

Here we have demonstrated the use of RY703 and RB705 together in an 18-color spectral human immunophenotyping panel run on the BD FACSDiscover™ S8 Cell Sorter.

Pair RY703 with RB705 for more flexibility in panel design and improved performance



Human PBMCs were stained with a viability dye and antibodies against cell surface markers. Cells were analyzed on a BD FACSDiscover™ S8 Cell Sorter and data were analyzed with FlowJo™ Software v10.10. A gating strategy for detection of B-cells and NK and T-cell subsets, after exclusion of dead cells and doublets, is shown.

BD flow cytometers are Class 1 Laser Products.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

For more information, please visit **www.fishersci.com/us/en/brands/I9C8LSLG/bd-biosciences**