



BD Horizon RealBlue™ 705 Reagents

The superior alternative to PerCP-Cy5.5 and BD Horizon Brilliant™ Blue 700 (BB700) Reagent

BD Horizon RealBlue™ 705 (RB705) Reagents are part of a comprehensive family of laser-specific reagents. The RB705 fluorochrome is specially designed to produce less spillover, which improves panel resolution, enabling high-parameter experiments for flow cytometry.

RB705 is a bright fluorochrome well suited for low/medium-expression surface and intracellular markers and works well for conventional and spectral flow cytometry.

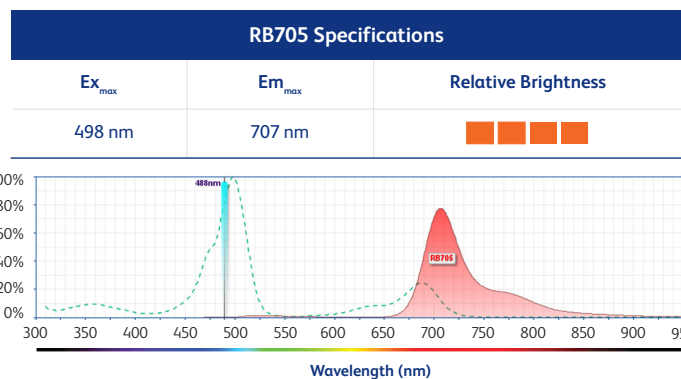


Figure 1. Excitation and emission spectra of the RB705 fluorochrome.



RB705 is brighter and has less spillover than PerCP-Cy5.5 and BB700

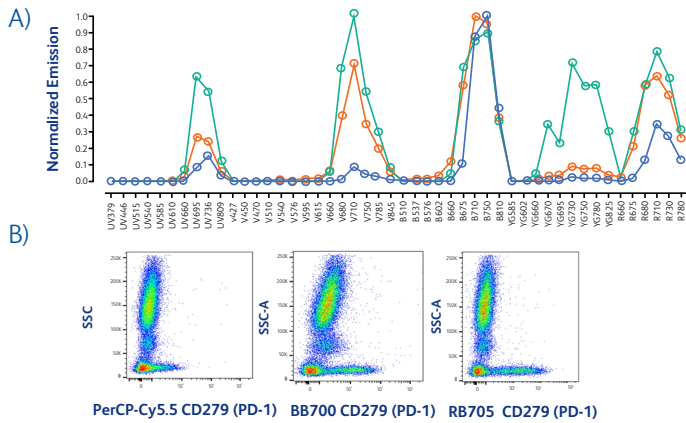


Figure 2. RB705 has minimal cross laser excitation from the 561 nm yellow-green laser and can easily resolve low-expression markers.

A) Normalised emission profile of RB705 compared to BB700 and PerCP-Cy5.5, demonstrating the lower emission into UV, Violet, Yellow-Green and Red channels. B) Human whole blood was stained with PerCP-Cy5.5, BB700 or BD Horizon™ RB705 Reagent (right) CD279 (EH12.1) and acquired on a BD FACSymphony™ A5 SE Cell Analyser with compensation.

RB705 can be used together with either BB700 or PerCP-Cy5.5 in a spectral flow cytometry panel to expand the number of parameters measured within a single sample

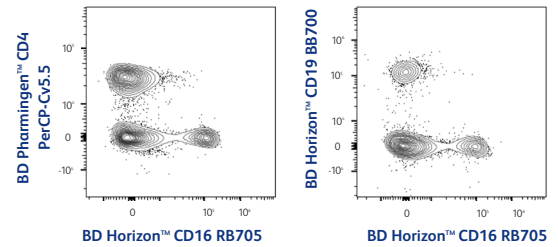


Figure 3. RB705 can be used with PerCP-Cy5.5 or BB700 for spectral flow cytometry.

Human whole blood was stained with CD16 RB705, CD3 BV711 and CD4 PerCP-Cy5.5 (left) or CD19 BB700 (right). The erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer. Two-colour flow cytometry contour plots were derived from lymphocytes. Flow cytometric analysis was performed using a BD FACSDiscover™ S8 Cell Sorter.

RB705 easily detects the T cell inhibitory molecule TIM-3 upon cell activation

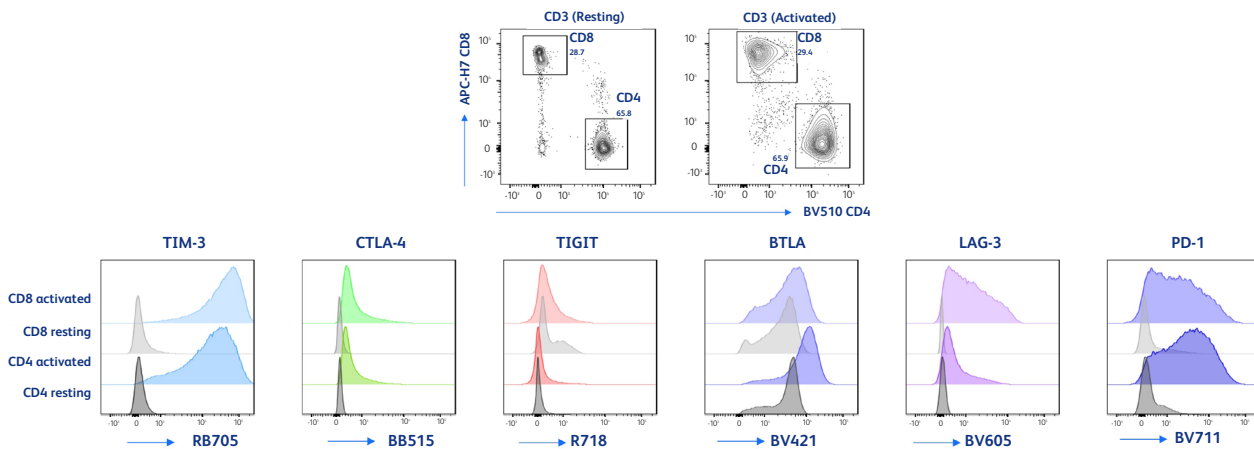


Figure 4. Expression of inhibitory markers on activated T cells as compared to resting T cells stained with 12-colour T cell panel containing RB705.

Upper row: Bivariate plots show CD4/CD8 T cell population derived from resting and activated T cells on Day 3 following immunostaining by 12-colour T cell inhibitory panel. Resting control T cells from the same donor were subjected to similar culture conditions without activation. Samples were analysed on a 3-laser BD FACSLytic™ Cell Analyser.

Bottom row: Histogram overlays show expression of T cell inhibitory markers derived from CD4+ resting T cells (deep gray shade), CD4+ activated T cells (deep coloured), CD8+ resting T cells (light gray) or CD8+ activated T cells (light coloured).



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