



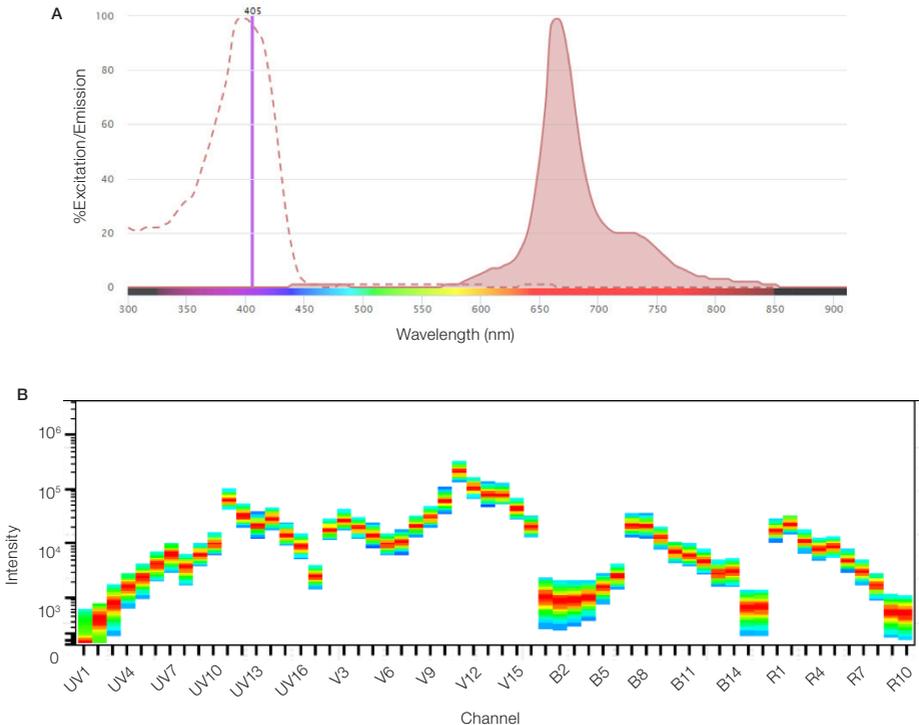
STARBRIGHT DYES

## StarBright Violet 670 Dye

StarBright Dyes are unique, fluorescent nanoparticles conjugated to Bio-Rad's highly validated antibodies. Developed specifically for flow cytometry to give you exceptional brightness with exacting excitation and emission.

The brightness allows easy resolution of rare populations and low density antigens while maintaining the flexibility to fit into any multicolor panel.

StarBright Violet 670 (SBV670) is excitable by the violet 405 nm laser and has a maximal emission at 667 nm, without being a traditional tandem dye. Minimal excitation by other lasers and a narrow, unique emission profile make SBV670 (Figure 1) perfect for inclusion in multicolor panels in conventional and spectral flow cytometry.

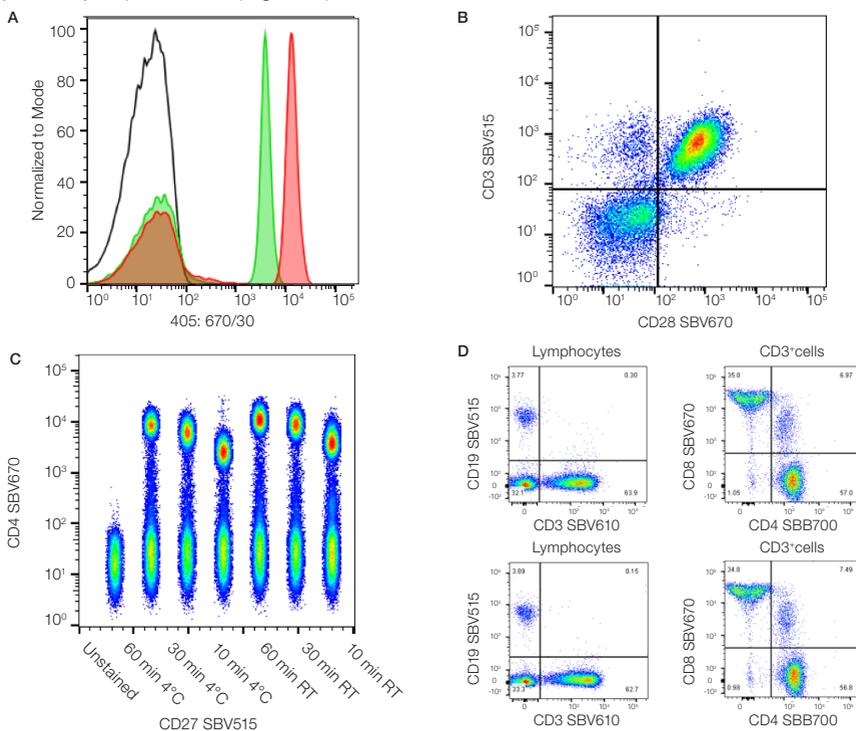


**Fig 1.** Excitation and emission spectra for SBV670. **A**, excitation and emission profile; **B**, full spectral profile.

**BIO-RAD**

Due to its unrivaled brightness with reduced spillover, StarBright Violet 670 Dye is the ideal replacement for fluorophores such as Brilliant Violet 650 (BV650) and Super Bright 645, which can be detected with a 670/30 filter on the ZE5 Cell Analyzer (or similar on other instruments), when building multicolor panels. This brightness allows resolution of lower density antigens like CD28.

StarBright Dyes are flexible enough to fit into any experiment. They can be used at 4°C and at room temperature with optimal staining obtained after one hour, perform equally well in all buffers, and do not require a special buffer. Unlike polymer dyes with similar excitation and emission, they can even be premixed to be used at a later date. In addition, high lot-to-lot reproducibility, resistance to photobleaching, and long-term stability make SBV670 an excellent choice for your conventional and spectral flow cytometry experiments (Figure 2).



**Fig. 2. StarBright Violet 670 Dye features.** **A**, human peripheral blood was stained with CD4 SBV670 and CD4 BV650. SBV670 was over three times as bright. **B**, SBV670 brightness leads to good separation for lower antigen density markers such as CD28 on T cells. **C**, similar staining can be obtained at both 4°C and room temperature with optimal results at one hour. **D**, similar staining can be obtained with StarBright Dyes even after premixing and storing at 4°C for 28 days.

See how the features of these new StarBright Dyes can enhance your flow cytometry experiments:

[bio-rad-antibodies.com/SBV670](http://bio-rad-antibodies.com/SBV670)

**StarBright Antibodies – Discover more with Bio-Rad StarBright Dyes.**

Human Marker	Catalog #	Formats	Applications
CD2	MCA1194	A647, biotin, FITC, pur., SBV515, SBB700, SBV440, SBV610	FC, FN, IHC-F, IP
CD3	MCA463	A488, A647, A700, APC, FITC, PB, pur., PE, PE-A647, PE-A750, PE-Cy5, PE-Cy5.5, SBV515, SBB700, SBV440, SBV610	FC, FN, IHC-F
CD4	MCA1267	A488, A647, A700, AMO, FITC, PB, pur., PE, PE-A647, SBV515, SBB700, SBV440, SBV610	FC, FN, IHC-F
CD8	MCA1226	A488, A647, A700, AMO, APC, FITC, PB, pur., PE, PE-A647, SBV515, SBB700, SBV440, SBV610	FC, IP, IHC-F
CD10	MCA1556	A488, A647, A700, AMO, APC, FITC, pur., SBV515, SBB700, SBV440, SBV610	FC, IHC-F, IP, WB
CD14	MCA1568	A488, A647, A700, AMO, APC, FITC, pur., SBV515, SBB700, SBV440, SBV610	E, FC, FN, IF, WB
CD16	MCA2537	A488, A647, A700, biotin, PB, PE, pur., SBV515, SBB700, SBV440, SBV610	FC, IHC-F, IHC-P
CD19	MCA1940	A488, A647, A700, AMO, APC, biotin, FITC, PB, pur., PE, PE-A647, SBV515, SBB700, SBV440, SBV610	FC, IHC-F, IP
CD20	MCA1710	A488, A647, A700, AMO, APC, FITC, PB, pur., PE, PE-Cy5, SBV515, SBB700, SBV440, SBV610	FC, IHC-F
CD25	MCA2127	A488, A647, FITC, pur., PE, SBV515, SBB700, SBV440, SBV610	FC
CD27	MCA755	A647, FITC, pur., PE, SBV515, SBB700, SBV440, SBV610	FC, IP
CD28	MCA709	A488, A647, FITC, PB, pur., PE, SBV515, SBB700, SBV440, SBV610	FC, FN, IHC-F
CD31	MCA1738	A647, A700, biotin, FITC, PB, pur., PE, SBV515, SBB700, SBV440, SBV610	FC, IF, IP
CD33	MCA1271	A488, A647, A700, AMO, APC, FITC, pur., PE, SBV515, SBB700, SBV440, SBV610	FC, IP, WB
CD38	MCA1019	A488, A647, AMO, biotin, pur., PE, PE-A750, SBV515, SBB700, SBV440, SBV610	FC, IP, IHC-F
CD45	MCA87	A488, A647, A700, AMO, APC, biotin, FITC, PB, PerCP, pur., PE, PE-A657, PE-A750, PE-Cy5.5, SBV515, SBB700, SBV440, SBV610	FC, IHC-F, IHC-P, IP
CD45RA	MCA88	A488, A647, A700, AMO, FITC, PB, pur., PE, PE-A647, SBV515, SBB700, SBV440, SBV610	FC, IHC-F, IHC-P
CD45RO	MCA461	FITC, pur., PE, PE-Cy5, SBV515, SBB700, SBV440, SBV610	FC, IHC-F, IHC-P, IP
CD62L	MCA1076	A647, A700, FITC, PB, pur., PE, SBV515, SBB700, SBV440, SBV610	FC, IHC-F, IHC-P, IP
CD69	MCA2806	A647, FITC, pur., PE, PE-Cy5, SBV515, SBB700, SBV440, SBV610	FC, IF, IHC-F
CD105	MCA1557	A488, A647, FITC, PE, PE-A647, pur., SBV515, SBB700, SBV440, SBV610	FC, IHC-F, IP, WB

HLA-ABC	MCA81	A488, A647, A700, AMO, biotin, FITC, PB, pur., PE, PE-A647, PE-A750, SBV515, SBB700, SBV440, SBV610	E, FC, FN, IHC-F, IF, IP
HLADP/DQ/DR	MCA477	AMO, FITC, pur., PE, SBV515, SBB700, SBV440, SBV610	FC, FN, IHC-P

Mouse Marker	Catalog #	Formats	Applications
CD3	MCA500	A488, A647, A700, APC, FITC, PB, pur., PE, PE-A750, SBV515, SBB700, SBV440, SBV610	FC, IHC-F
CD4	MCA2691	A488, A647, A700, AMO, Biotin, FITC, PB, pur., PE, PE-A750, SBV515, SBB700, SBV440, SBV610	FC, IHC-F
CD8	MCA609	A488, A647, A700, AMO, APC, FITC, PB, pur., PE, PE-A647, PE-A750, SBV515, SBB700, SBV440, SBV610	FC, IF, IHC-F
CD11b	MCA711	A647, A700, FITC, PB, pur., PE, PE-A647, PE-A750, SBV515, SBB700, SBV440, SBV610	FC, FN, IF, IHC-F, IP
CD19	MCA1439	A488, A647, A700, biotin, PB, pur., PE, PE-A647, PE-Cy5, SBV515, SBB700, SBV440, SBV610	FC, IHC-F, IP
CD25	MCA1260	A488, A647, A700, FITC, pur., PE, SBV515, SBB700, SBV440, SBV610	FC, IHC-F, IP
CD45R	MCA1258	A488, A647, A700, AMO, FITC, pur., PE, PE-A647, PE-A750, PE-Cy7, SBV515, SBB700, SBV440, SBV610	FC, IF, IHC-F, IHC-P, IP
CD117	MCA1365	A488, A647, pur., PE, SBV515, SBB700, SBV440, SBV610	FC
CD161	MCA1266	A647, FITC, pur., SBV515, SBB700, SBV440, SBV610	CT, FC, FN, IP
F4/80	MCA497	A488, A647, A700, AMO, APC, biotin, FITC, PB, pur., PE, PE-A647, PE-A750, SBV515, SBB700, SBV440, SBV610	IHC-F, EM, FC, IF, IP, IHC-P, IHC-R, R, WB
Ly-6C	MCA2389	A488, A647, A700, biotin, FITC, PB, pur., PE, SBV515, SBB700, SBV440, SBV610	FC, IHC-F, IP

**Also available:**

	Catalog #	Formats	Applications
<b>Streptavidin</b>	STAR210	SBV515, SBB700, SBV440, SBV610	FC

**Abbreviations:** CT, cytotoxic assay; E, ELISA; EM, immunoelectron microscopy; FC, flow cytometry; FN, functional assay; IF, immunofluorescence; IHC-F, immunohistology – frozen sections; IHC-P, immunohistology – paraffin sections; IP, immunoprecipitation; IHC-R, resin immunohistological sections; R, radioimmunoassay; WB, western blotting.

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