

Technical Data Sheet

BV711 Mouse Anti-Human CXCR6 (CD186)

Product Information

Material Number:	743601
Size:	50 µg
Clone:	13B 1E5
Alternative Name:	C-X-C chemokine receptor type 6; BONZO; STRL33; TYMSTR
Reactivity:	Human (Tested in Development)
Isotype:	Mouse BALB/c IgG2a, κ
Immunogen:	Human CXCR6
Application:	Flow cytometry (Qualified)
Concentration:	0.2 mg/ml
Entrez Gene ID:	10663
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.
Regulatory Status:	RUO

Description

The 13B 1E5 monoclonal antibody specifically binds to C-X-C chemokine receptor type 6 (CXCR6), which is also known as CD186, BONZO, T-lymphocyte-expressed seven-transmembrane domain receptor (TYMSTR), and Seven transmembrane receptor-like from clone 33 (STRL33). CXCR6 is a G-protein coupled chemokine receptor that is expressed on subsets of activated and memory T cells and NKT cells. CXCR6 binds to soluble CXCL16 and membrane-anchored CXCL16 expressed by dendritic cells and macrophages. The CXCL16 and CXCR6 interaction activates Akt and mTor signaling. This regulates cellular migration including the recruitment of tumor-infiltrating lymphocytes and may contribute to the progression and metastasis of various cancers. CXCR6 also can serve as a coreceptor for certain strains of HIV-1 and HIV-2.

The antibody was conjugated to BD Horizon™ BV711 which is part of the BD Horizon Brilliant™ Violet family of dyes. This dye is a tandem fluorochrome of BD Horizon BV421 with an Ex Max of 405-nm and an acceptor dye with an Em Max at 711-nm. BD Horizon BV711 can be excited by the violet laser and detected in a filter used to detect Cy™5.5 / Alexa Fluor® 700-like dyes (eg, 712/20-nm filter). Due to the excitation and emission characteristics of the acceptor dye, there may be moderate spillover into the Alexa Fluor® 700 and PerCP-Cy5.5 detectors. However, the spillover can be corrected through compensation as with any other dye combination.

Preparation and Storage Section

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with BD Horizon BV711 under optimal conditions that minimize unconjugated dye and antibody.

Recommended Assay Procedure

For optimal and reproducible results, BD Horizon Brilliant Stain Buffer should be used anytime two or more BD Horizon Brilliant dyes (including BD OptiBuild Brilliant reagents) are used in the same experiment. Fluorescent dye interactions may cause staining artifacts which may affect data interpretation. The BD Horizon Brilliant Stain Buffer was designed to minimize these interactions. More information can be found in the Technical Data Sheet of the BD Horizon Brilliant Stain Buffer (Cat. No. 563794).

Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS) RUO	500 mL	
554657	Stain Buffer (BSA) RUO	500 mL	
563794	Brilliant Stain Buffer RUO	100 Tests	
555899	Lysing Buffer RUO	100 mL	
349202	Lysing Solution 10X Concentrate CE/IVD	100 NA	
564219	Human BD Fc Block™ RUO	50 mg	
563345	BV711 Mouse IgG2a, κ Isotype Control RUO	50 µg	

Product Notices

1. This antibody was developed for use in flow cytometry.
2. The production process underwent stringent testing and validation to assure that it generates a high-quality conjugate with consistent performance and specific binding activity. However, verification testing has not been performed on all conjugate lots.
3. Researchers should determine the optimal concentration of this reagent for their individual applications.
4. An isotype control should be used at the same concentration as the antibody of interest.
5. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. Please refer to www.bdbiosciences.com/us/s/resources for technical protocols.
8. BD Horizon Brilliant Stain Buffer is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,575,303; 8,354,239.
9. BD Horizon Brilliant Violet 711 is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,227,187; 8,455,613; 8,575,303; 8,354,239.
10. Cy is a trademark of GE Healthcare.
11. Alexa Fluor® is a registered trademark of Life Technologies Corporation.

References

La Porta CA. CXCR6: the role of environment in tumor progression. Challenges for therapy.. Stem Cell Rev. 2012; 8(4):1282-5.

Xiao G, Wang X, Wang J, et al. CXCL16/CXCR6 chemokine signaling mediates breast cancer progression by pERK1/2-dependent mechanisms.. Oncotarget. 2015; 6(16):14165-78.

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