

Technical Data Sheet

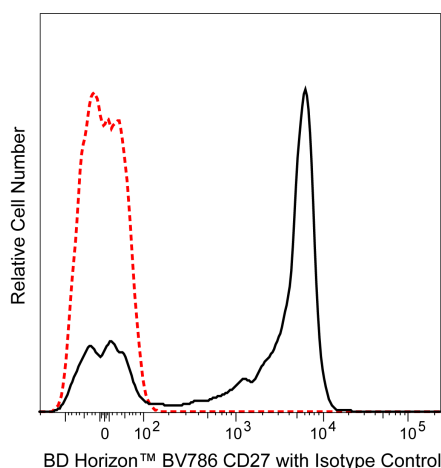
BV786 Mouse Anti-Human CD27**Product Information**

Material Number:	563328
Alternate Name:	TNFRSF7; Tumor necrosis factor receptor superfamily, member 7; Tp55; S152
Size:	25 tests
Vol. per Test:	5 µl
Clone:	L128
Immunogen:	Human Activated Peripheral Blood Cells
Isotype:	Mouse (BALB/c) IgG1
Reactivity:	QC Testing: Human
Workshop:	VI T6T037
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The L128 monoclonal antibody specifically binds to human CD27. CD27 is a 55-kDa disulfide-linked dimer that is a member of the nerve growth factor (NGF) super family. This family also includes CD40, rat OX40, tumor necrosis factor (TNF) receptors and CD95 (Fas). With its ligand CD70, CD27 acts in a co-stimulatory fashion on T lymphocytes. Present on most peripheral blood T lymphocytes and medullary thymocytes, the CD27 antigen is upregulated upon activation with the release of a soluble form, 28 to 32 kDa. It is also detected on a subpopulation of approximately 33% of circulating B lymphocytes. Following exposure to antigens, CD45RA+ T lymphocytes respond by upregulating the CD27 antigen. After maximal stimulation, the CD27 antigen cannot be re-expressed on long-term cultures or on CD45RA-CD27+ T lymphocytes. The CD4+CD27- population is contained within the memory CD45RO+ subset that proliferates after exposure to allergens. Two subpopulations of B lymphocytes bearing the CD27 antigen secrete IgM (δ+) and IgG (δ-).

The antibody was conjugated to BD Horizon™ BV786 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 786-nm. BD Horizon™ BV786 can be excited by the violet laser and detected in a filter used to detect Cy7™-like dyes (eg, 780/60-nm filter).



Flow cytometric analysis of BV786 CD27 on human peripheral blood lymphocytes. Human whole blood was stained with the BD Horizon™ BV786 Mouse Anti-Human CD27 antibody (Cat. No. 563327/563328, solid line histogram) or with a BD Horizon™ BV786 Mouse IgG1, κ Isotype Control (Cat. No. 563330, dashed line histogram). The erythrocytes were lysed with BD FACS™ Lysing Solution (Cat. No. 349202). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

Preparation and Storage

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™ BV786 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV786 were removed.

Application Notes**Application**

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
563327	BV786 Mouse Anti-Human CD27	100 tests	L128
563330	BV786 Mouse IgG1, k Isotype Control	50 µg	X40
349202	FACS Lysing Solution		(none)

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100-µl experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Brilliant Violet™ 786 is a trademark of Sirigen.
4. Brilliant Violet™ 421 is a trademark of Sirigen.
5. Cy is a trademark of Amersham Biosciences Limited.
6. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
7. 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.
8. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
9. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.

References

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