

Technical Data Sheet

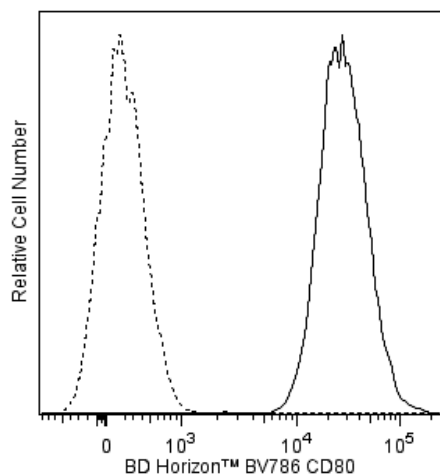
BV786 Mouse Anti-Human CD80**Product Information**

Material Number:	564159
Alternate Name:	B7.1; B7-1; Activation B7-1 antigen; B7; BB1; CD28LG; CD28LG1; LAB7; L307
Size:	100 Tests
Vol. per Test:	5 µl
Clone:	L307.4 (also known as L307)
Immunogen:	Human B7-transfected L cells
Isotype:	Mouse (C3H) IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	V B7.5
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The L307 monoclonal antibody specifically binds to B7/BB1, a 60 kDa transmembrane glycoprotein that was clustered as CD80 in the Fifth International Workshop on Human Leukocyte Differentiation Antigens. CD80, a member of the Ig supergene family, is expressed on activated B cells, T cells, macrophages, and dendritic cells. It is the ligand for two molecules expressed on T cells, CD28 and CD152 (CTLA-4). CD80 is also expressed on activated CD4-positive and CD8-positive T cells, appearing late after activation suggesting that activated T cells may be capable of autocrine costimulation via the CD28 activation pathway. The binding of CD28 by anti-CD28 or by CD80 results in T-cell activation and a signal for IL-2 production.

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 Cy™7-like dyes (eg, 780/60-nm filter).



Flow cytometric analysis of CD80 expression on human Raji cells. Cells from the human Raji (Burkitt's B cell lymphoma, ATCC CCL-86) cell line were stained with either BD Horizon™ BV786 Mouse IgG1, κ Isotype Control (Cat. No. 563330; dashed line histogram) or BD Horizon BV786 Mouse Anti-Human CD80 antibody (Cat. No. 564159; solid line histogram). The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable cells. Flow cytometric analysis 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

BD Biosciences

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564159 Rev. 2



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. 563794/566349) or the BD Horizon Brilliant Stain Buffer Plus (Cat. No. 566385).

Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)
563330	BV786 Mouse IgG1, k Isotype Control	50 µg	X40
563794	Brilliant Stain Buffer	100 Tests	(none)
566349	Brilliant Stain Buffer	1000 Tests	(none)
566385	Brilliant Stain Buffer Plus	1000 Tests	(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. 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.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
6. Cy is a trademark of GE Healthcare.
7. BD Horizon Brilliant Violet 786 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.
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. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Azuma M, Yssel H, Phillips JH, Spits H, Lanier LL. Functional expression of B7/BB1 on activated T lymphocytes. *J Exp Med.* 1993; 177(3):845-850. (Immunogen: Flow cytometry, Immunoprecipitation, Induction)

Koulova L, Clark EA, Shu G, Dupont B. The CD28 ligand B7/BB1 provides costimulatory signal for alloactivation of CD4+ T cells. *J Exp Med.* 1991; 173(3):759-762. (Biology)

Schlossman SF, Stuart F, Schlossman .. et al., ed. *Leucocyte typing V : white cell differentiation antigens : proceedings of the fifth international workshop and conference held in Boston, USA, 3-7 November, 1993.* Oxford: Oxford University Press; 1995(Clone-specific: Flow cytometry)

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