

Technical Data Sheet

BV510 Rat Anti-Mouse IgD

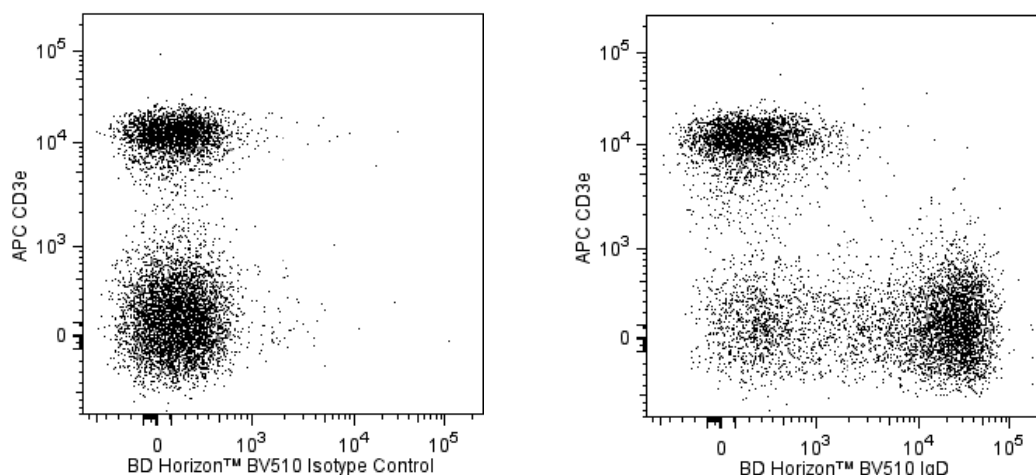
Product Information

Material Number:	563110
Alternate Name:	IGHD; Igh-5; Immunoglobulin heavy chain 5; Ig delta chain C region
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	11-26c.2a
Isotype:	Rat IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The 11-26c.2a monoclonal antibody specifically binds to mouse immunoglobulin D of all *Igh-C* haplotypes (e.g., IgDa, IgDb, IgDe), and it does not react with other immunoglobulin isotypes. Although 11-26c.2a mAb binds membrane IgD expressed on the splenic B-cell surface with high affinity, it does not induce proliferation of splenic B cells *in vitro*. *In vivo* injection of 11-26c.2a antibody does not have any effect on activation of mature B cells, as determined by MHC class II antigen expression.

The antibody was conjugated to BD Horizon™ BV510 which is part of the BD Horizon™ Brilliant Violet™ family of dyes. With an Ex Max of 405-nm and Em Max at 510-nm, BD Horizon™ BV510 can be excited by the violet laser and detected in the BD Horizon™ V500 (525/50-nm) filter set. BD Horizon™ BV510 conjugates are useful for the detection of dim markers off the violet laser.



Two-color flow cytometric analysis of IgD expression on mouse splenocytes. Mouse splenic leucocytes were stained with APC Hamster Anti-Mouse CD3e antibody (Cat. No. 553066/561826) and either BD Horizon™ BV510 Rat IgG2a, κ Isotype Control (Cat. No. 562952; Left Panel) or BD Horizon™ BV510 Rat anti-Mouse IgD antibody (Cat. No. 563110; Right Panel). Two-color flow cytometric dot plots showing the correlated expression patterns of IgD (or Ig Isotype control staining) versus CD3 were derived from gated events with the forward and side light-scatter characteristics of viable splenocytes. 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™ BV510 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV510 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)
562952	BV510 Rat IgG2a, κ Isotype Control	50 μ g	R35-95
555899	Lysing Buffer	100 ml	(none)
553066	APC Hamster Anti-Mouse CD3e	0.1 mg	145-2C11
561826	APC Hamster Anti-Mouse CD3e	25 μ g	145-2C11

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.
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. Brilliant Violet™ 510 is a trademark of Sirigen.

References

Campbell KS, Cambier JC. B lymphocyte antigen receptors (mIg) are non-covalently associated with a disulfide linked, inducibly phosphorylated glycoprotein complex. *EMBO J.* 1990; 9(2):441-448. (Clone-specific: Immunoprecipitation)

Hamilton AM, Lehen A, Kearney JF. Immunofluorescence analysis of B-1 cell ontogeny in the mouse. *Int Immunol.* 1994; 6(3):355-361. (Clone-specific: Immunofluorescence)

Ishihara K, Wood WJ Jr, Wall R, et al. Multiple B29 containing complexes on murine B lymphocytes. Common and stage-restricted Ig-associated polypeptide chains. *J Immunol.* 1993; 150(6):2253-2262. (Clone-specific: Flow cytometry)

Nitschke L, Kosco MH, Kohler G, Lamers MC. Immunoglobulin D-deficient mice can mount normal immune responses to thymus-independent and -dependent antigens. *Proc Natl Acad Sci U S A.* 1993; 90(5):1887-1891. (Clone-specific: Flow cytometry)

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