

Technical Data Sheet

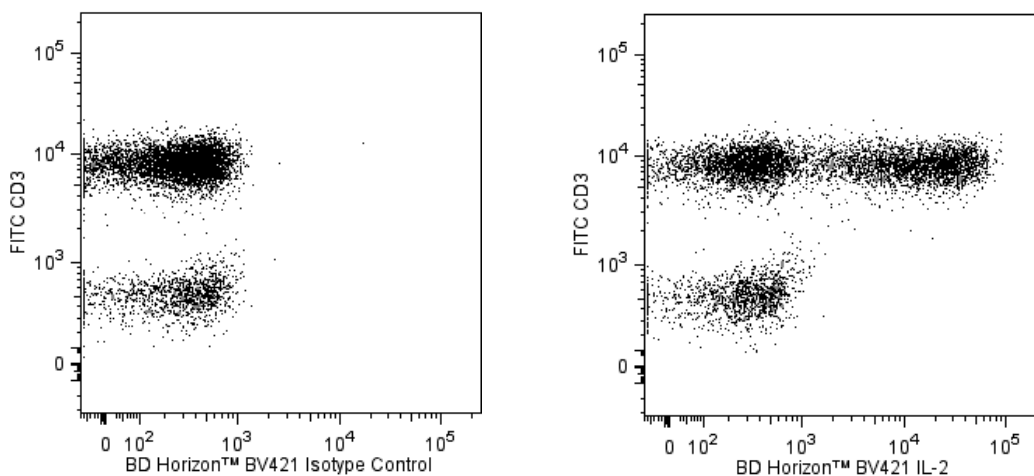
BV421 Mouse Anti-Human IL-2**Product Information**

Material Number:	562914
Alternate Name:	IL2; Interleukin-2; T-cell growth factor; TCGF
Size:	50 tests
Vol. per Test:	5 µl
Clone:	5344.111
Immunogen:	Human IL-2 protein
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The 5344.111 antibody specifically binds to the multifunctional cytokine, human interleukin-2 (IL-2). IL-2 is produced by activated T cells and has multiple functions that can affect the growth, proliferation and differentiation of many different target cell types including T cells, B cells, NK cells, monocytes and macrophages. The immunogen used to generate the 5344.111 hybridoma was affinity-purified, recombinant human IL-2 protein.

The antibody was conjugated to BD Horizon™ BV421 which is part of the BD Horizon™ Brilliant Violet™ family of dyes. With an Ex Max of 407-nm and Em Max at 421-nm, BD Horizon™ BV421 can be excited by the violet laser and detected in the standard Pacific Blue™ filter set (eg, 450/50-nm filter). BD Horizon™ BV421 conjugates are very bright, often exhibiting a 10 fold improvement in brightness compared to Pacific Blue™ conjugates.



Multicolor flow cytometric analysis of IL-2 expressed in stimulated human peripheral blood mononuclear cells. HiCK-1 Human Cytokine Positive Control Cells (Cat. No. 555061) were permeabilized with BD Perm/Wash™ Buffer (Cat. No. 554723). The cells were then stained with FITC Mouse Anti-Human CD3 antibody (Cat. No. 555916) and either BD Horizon™ BV421 Mouse IgG1, κ Isotype Control (Cat No. 562438, Left Panel) or with BD Horizon™ BV421 Mouse Anti-Human IL-2 antibody (Cat No. 562914, Right Panel). Two-color flow cytometric dot plots show IL-2 expression (or Ig Isotype control staining) versus CD3 derived from gated events with the forward and side light-scatter characteristics of intact 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™ BV421 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV421 were removed.

Application Notes**Application**

Intracellular staining (flow cytometry)	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
562438	BV421 Mouse IgG1, k Isotype Control	50 µg	X40
555061	HiCK-1 Human Cytokine Positive Control Cells	1.0 ml	(none)
554723	Perm/Wash Buffer	100 ml	(none)
555916	FITC Mouse Anti-Human CD3	100 tests	UCHT1

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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. Please refer to www.bdbiosciences.com/pharming/en/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. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
8. Brilliant Violet™ 421 is a trademark of Sirigen.
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References

Liao W, Lin JX, Leonard WJ. IL-2 family cytokines: new insights into the complex roles of IL-2 as a broad regulator of T helper cell differentiation. *Curr Protoc Immunol.* 2011; 23(5):598-604. (Biology)

Malek TR. The biology of interleukin-2. *Annu Rev Immunol.* 2008; 26:453-479. (Biology)

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