Technical Data Sheet

BV421 Hamster Anti-Mouse γδ T-Cell Receptor

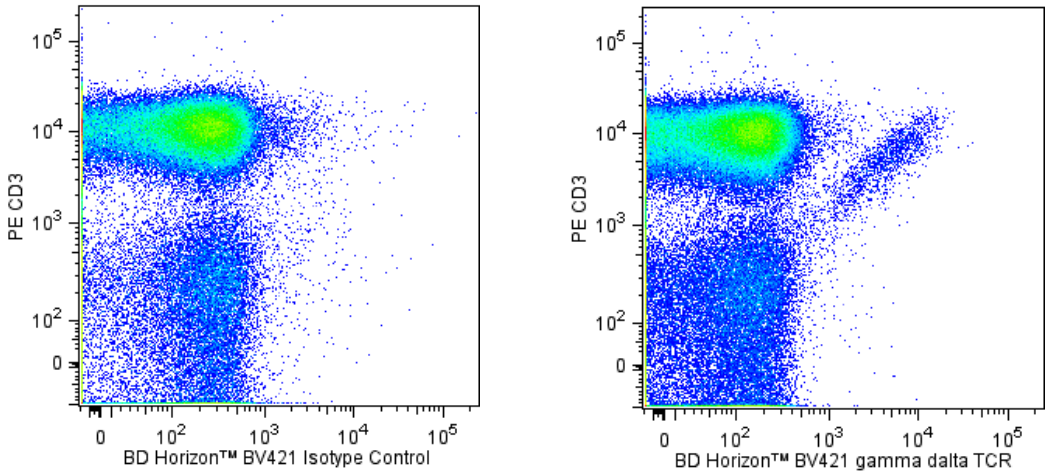
Product Information

Material Number:	**562892**
Alternate Name:	Tcrd; T-cell receptor delta chain; Tcr delta
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	GL3
Immunogen:	C57BL/6 Mouse Intestinal Intraepithelial Lymphocytes
Isotype:	Armenian Hamster IgG2, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The GL3 monoclonal antibody specifically binds to a common epitope of the δ chain of the T-cell Receptor (TCR) complex on γδ TCR-expressing T lymphocytes and NK-T cells of all mouse strains tested. It does not react with αβ TCR-bearing T cells. In the mouse, cells expressing the γδ TCR are found in the thymus, intestinal epithelium, epidermis, dermis, pulmonsry epithelium, peritoneum, liver, and peripheral lymphoid organs.

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 γδ TCR expression on mouse peripheral T lymphocytes. *C57BL/6 lymph node cells were incubated simultaneously with PE Rat anti-Mouse CD3 Molecular Complex (Cat. No. 555275/561799) and with either BD Horizon™ BV421 Hamster IgG2, κ Isotype Control (Cat. No. 562612) or BD Horizon™ BV421 Hamster Anti-Mouse γδ T-Cell Receptor antibody (Cat. No. 562892, Right Panel). Two-color flow cytometric dot plots showing the correlated expression of γδ T-Cell Receptor (or Ig Isotype control staining) versus CD3 were derived from gated events with the forward and light scattering characteristics of viable cells. 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

Flow cytometry	Routinely Tested

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Recommended Assay Procedure:

For flow cytometry of cell suspensions from peripheral lymphoid tissues, it is recommended that multicolor staining be performed to distinguish T lymphocytes from non-T cells.

Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
562612	Brilliant Violet™ 421 Hamster IgG2, κ Isotype Control	50 µg	B81-3
555275	PE Rat Anti-Mouse CD3 Molecular Complex	0.2 mg	17A2
561799	PE Rat Anti-Mouse CD3 Molecular Complex	25 µg	17A2

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/pharmingen/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.
9. Although hamster immunoglobulin isotypes have not been well defined, BD Biosciences Pharmingen has grouped Armenian and Syrian hamster IgG monoclonal antibodies according to their reactivity with a panel of mouse anti-hamster IgG mAbs. A table of the hamster IgG groups, Reactivity of Mouse Anti-Hamster Ig mAbs, may be viewed at http://www.bdbiosciences.com/documents/hamster_chart_11x17.pdf.

References

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