Technical Data Sheet

BV421 Rat Anti-Mouse CD278

Product Information

Material Number: 564070
Alternate Name: ICOS; Ailim; CCLP; CRP-1; Ly115; Inducible T-cell costimulator
Size: 50 µg
Concentration: 0.2 mg/ml
Clone: 7E.17G9
Immunogen: Mouse Icos cDNA and ICOS hexahistidine fusion protein
Isotype: Rat IgG2b, κ
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The 7E.17G9 antibody reacts with CD278, the Inducible Costimulatory molecule (ICOS), a 47-57 kDa homodimeric glycoprotein of the CD28 family of costimulatory molecules. ICOS is expressed on subpopulations of CD4-CD8- and CD4+CD8- (but not CD4-CD8+ or CD4+CD8+) thymocytes, and on small numbers of peripheral leukocytes. It is upregulated on T lymphocytes following activation via the T-cell receptor. The T-cell activation marker H4 is the same molecule as ICOS. ICOS is a costimulatory receptor, and its ligand on antigen-presenting cells has been called B7RP-1, GL50, B7h, B7-H2, or LICOS. There is considerable evidence that the interaction of ICOS with its ligand is involved in the regulation of many, but not all, T-cell-mediated immune responses.

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 (e.g., 450/50-nm filter). BD Horizon BV421 conjugates are very bright, often exhibiting a 10 fold improvement in brightness compared to Pacific Blue™ conjugates.

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

Suggested Companion Products

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<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<td>Stain Buffer (FBS)</td>
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<td>BV421 Rat IgG2b, κ Isotype Control</td>
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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
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. 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.
5. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
6. Brilliant Violet™ 421 is a trademark of Sirigen.
7. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

References

Schwartz RH. Immunology. It takes more than two to tango. Nature. 2001; 409(6816):31-32. (Biology)