BV421 Mouse Anti-Human CD337 (NKp30)

Product Information

Material Number: 563385
Alternate Name: NCR3; Natural cytotoxicity triggering receptor 3; NKp30; MALS; LY117; 1C7
Size: 100 Tests
Vol. per Test: 5 µl
Clone: p30-15
Immunogen: Horse NKp30 extracellular domain
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Human
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The p30-15 monoclonal antibody specifically binds to CD337, also known as NKp30, a receptor found on the surface of natural killer (NK) cells. NK cells are large lymphoid cells discovered because of their ability to recognize and kill abnormal cells such as tumor and virally infected cells. NK cell immune responses are regulated by a balance of activating and inhibitory signals generated by cell surface receptors. Inhibitory receptors recognize MHC class I molecules on normal cells producing a negative signal to the NK cell. Loss of MHC class I expression in infected or transformed cells results in the loss of this negative signal leading to NK cell activation. In concert with the loss of inhibitory signals, activation signals via NK receptors such as NKp30, NKp44, NKp46, NKG2D, and NKp80 mediate the activation of NK cells. NKp30 cooperates with NKp46 and/or NKp44 in the induction of NK cell-mediated cytotoxicity against the majority of target cells.

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.

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

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

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<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<td>Stain Buffer (BSA)</td>
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<td>BV421 Mouse IgG1, k Isotype Control</td>
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<td>X40</td>
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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. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. BD Horizon Brilliant Violet 421 is covered by one or more of the following US patents: 8,158,444; 8,362,193; 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.

References