Technical Data Sheet

BV421 Rat Anti-Mouse CD125

Product Information

Material Number: 565015
Alternate Name: Il5r; Il5ra; IL-5RA; IL-5Rα; IL-5R subunit alpha
Size: 0.1 mg
Concentration: 0.2 mg/ml
Clone: T21
Immunogen: Mouse T88-M Cell Line
Isotype: Rat (W) IgG1, λ
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The T21 monoclonal antibody specifically binds to CD125 which is also known as the alpha subunit of the IL-5 Receptor (IL5RA/IL-5Rα). CD125 is a type I transmembrane protein that belongs to the hemopoietin receptor and Ig gene superfamilies. It is expressed on B cells and eosinophils. CD125 associates with the Common β chain (βc/Bc) subunit, also known as CD131, to form the functional IL-5 Receptor complex. Mouse IL-5 belongs to the hematopoietic growth factor family of cytokines and promotes the growth and differentiation of B cells and eosinophils. Upon binding, the T21 antibody blocks IL-5 binding to its receptor and can inhibit IL-5 induced B-cell proliferation and antibody production.

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 to BD Horizon BV421 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV421 were removed.
### Application Notes

**Application**

<table>
<thead>
<tr>
<th>Suggested Companion Products</th>
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<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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</thead>
<tbody>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 mL</td>
<td>(none)</td>
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<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
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<tr>
<td>562868</td>
<td>BV421 Rat IgG1, κ Isotype Control</td>
<td>50 µg</td>
<td>R3-34</td>
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<td>Brilliant Stain Buffer</td>
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<td>553141</td>
<td>Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)</td>
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<td>Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)</td>
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<td>553312</td>
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<td>561690</td>
<td>APC Rat Anti-Mouse CD11b</td>
<td>25 µg</td>
<td>M1/70</td>
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</tbody>
</table>

**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. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
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](http://www.bdbiosciences.com/colors).

**References**


