Technical Data Sheet

BV421 Mouse Anti-Human CD203c

Product Information

Material Number: 563296
Alternate Name: ENPP3; E-NPP3; NPP3; PDPNP3; PD-1β; PD-1β; B10; NPPase; gp130RB13-
Size: 50 tests
Vol. per Test: 5 µl
Clone: NP4D6
Immunogen: Human CD203c Transfected Cell Line
Isotype: Mouse (BALB/c) IgG1, κ
Reactivity: QC Testing: Human
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The NP4D6 monoclonal antibody specifically binds to CD203c. CD203c is a type II transmembrane glycoprotein that is a member of the E-NNP family of ectoenzymes. CD203c is also known as ectonucleotide pyrophosphatase/phosphodiesterase 3 (E-NPP3, ENPP3) due to its capacity to hydrolyze phosphodiester and phosphosulfate bonds in a variety of molecules including deoxynucleotides, nucleoside phosphates, and nicotinamide adenine dinucleotide. CD203c is otherwise known as Phosphodiesterase-1β (PD-1β, PD-I beta), B10, or gpl30RB13-6.

CD203c is expressed by basophils and mast cells. Basophils increase CD203c expression following activation with allergens or antibodies that crosslink cytophilic IgE. Thus, CD203c serves as a useful flow cytometric marker for basophil activation and the detection and analysis of type 1 allergic responses. IgE-receptor cross-linking results in CD203c upregulation and overexpression on neoplastic mast cells in cases of systemic mastocytosis.

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

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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<tr>
<td>562438</td>
<td>BV421 Mouse IgG1, k Isotype Control</td>
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<td>Lysing Buffer</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 $1 \times 10^6$ 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. 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


