Technical Data Sheet

PE Mouse Anti-Human CD271

Product Information

Material Number: 560927
Alternate Name: NGFR; NGF Receptor; TNFRSF16
Size: 25 Tests
Vol. per Test: 20 µl
Clone: C40-1457
Immunogen: Human NGFR Recombinant Protein
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Human
Workshop: VIII 80150
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The C40-1457 monoclonal antibody specifically recognizes CD271 that is also known as the nerve growth factor receptor (NGFR). CD271 is a 75 kDa type I transmembrane glycoprotein likewise known as TNFRSF16 that belongs to the tumor necrosis factor receptor (TNFR) superfamily. CD271 has been found localized to neuronal axons, Schwann cells, and perineural cells of peripheral nerves. It is also expressed by some epithelial, mesenchymal and lymphoid tissues. NGFR is the receptor for nerve growth factor (NGF), a polypeptide that is essential for normal development of the nervous system. NGF promotes survival and differentiation of sympathetic and sensory neurons during embryological development of the peripheral nervous system. NGF binds to two distinctive surface receptors, the p140[prototrk] and p75[NGFR]. High affinity binding of NGF requires that both receptor molecules be expressed. NGFR is expressed on human and rat lymphocytes. A subset of lymphoid cells in the spleen, lymph nodes, and follicular dendritic cells in germinal centers of reactive lymph nodes were found to express CD271. It has been reported that NGFR interaction with its ligand, NGF, may play a role in immunoregulation. NGF may also function as a B-cell growth factor.

Flow cytometric analysis of CD271 expression on the REH cell line. REH cells were stained with either PE Mouse Anti-Human CD271 (Cat. No. 560927/557196; solid line histogram) or PE Mouse IgG1, κ Isotype Control (Cat. No. 555749; dashed line histogram). Fluorescence histograms depicting CD271 (or Ig isotype) expression were derived from gated events with the forward and side light-scatter characteristics of viable cells.

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>555749</td>
<td>PE Mouse IgG1, κ Isotype Control</td>
<td>100 Tests</td>
<td>MOPC-21</td>
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<tr>
<td>557196</td>
<td>PE Mouse Anti-Human CD271</td>
<td>100 Tests</td>
<td>C40-1457</td>
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<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</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. 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. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at [wwwbdbiosciencescom/colors](http://wwwbdbiosciencescom/colors).
6. Please refer to [wwwbdbiosciencescom/pharmingen/protocols](http://wwwbdbiosciencescom/pharmingen/protocols) for technical protocols.

References