BD Pharmingen™

Technical Data Sheet

PE Mouse Anti-Human CD124

Product Information

Material Number: 552178
Alternate Name: IL-4 Receptor α Chain, CD124
Size: 100 Tests
Vol. per Test: 20 µl
Clone: hIL4R-M57
Immunogen: Soluble Human IL-4 Receptor
Isotype: Mouse IgG1, κ

QC Testing: Human
Workshop: V C004, BP169; VI BP205, C81
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description
The hIL4R-M57 antibody specifically binds to the α subunit (IL-4Ra) of the human Interleukin-4 Receptor complex which is also known as CD124. The human IL-4Ra, also known as B cell stimulatory factor 1 receptor (BSF-1 receptor), is a 140 kDa transmembrane glycoprotein that is expressed by B and T lymphocytes and a variety of other hematopoietic and non-hematopoietic cells and cell lines. The cell surface IL-4Ra chain binds IL-4 with high affinity and associates with either the common γ chain (IL-4Ra/γc; aka, type I IL-4R complex) or the IL-13 receptor alpha-1 subunit (IL-4Ra/IL-13Ra1; aka, type II IL-4R complex) to form two distinct types of signal-transducing IL-4R complexes.

The type I IL-4 receptor complex specifically binds IL-4 whereas the type II IL-4R complex binds and transduces signals from either IL-4 or IL-13. A truncated form of the IL-4Ra exists in soluble form in biological fluids. In contrast to mice, in humans no distinct mRNA coding for sIL-4Ra has been described, suggested that human sIL-4-R is exclusively produced by proteolytic cleavage of the cell surface receptor. The serum levels of soluble IL-4Ra appear to elevate in pathological situations such as allergy and parasitic infections. Depending on the ratios of IL-4 and sIL-4Ra present in the local milieu, the sIL-4Ra may augment or antagonize the activities of IL-4. The immunogen used to generate the hIL4R-M57 hybridoma was soluble human IL-4.

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 R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application
Flow cytometry Routinely Tested

Recommended Assay Procedure:
Immunofluorescent Staining and Flow Cytometric Analysis: The PE Mouse Anti-Human CD124 (Cat. No. 554178) antibody can be used for the immunofluorescent staining (20 µl/10^6 cells) and flow cytometric analysis of human nucleated cells to measure their expressed levels of surface hIL-4Ra. An appropriate purified immunoglobulin isotype control is PE Mouse IgG1, κ Isotype Control (Cat. No. 555749).

BD Biosciences

bdbiosciences.com

United States 877.232.8995 866.979.9408
Canada 322.200.98.95 0120.8555.90
Europe 65.8681.0633
Japan 55.11.5185.9995
Asia Pacific Latin America/Caribbean

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of BD, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.
© 2017 BD, the BD Logo and all other trademarks are property of Becton, Dickinson and Company.
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. 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 www.bdbiosciences.com/colors.
6. Ficoll-Paque is a trademark of Amersham Biosciences Limited.

References


