Technical Data Sheet

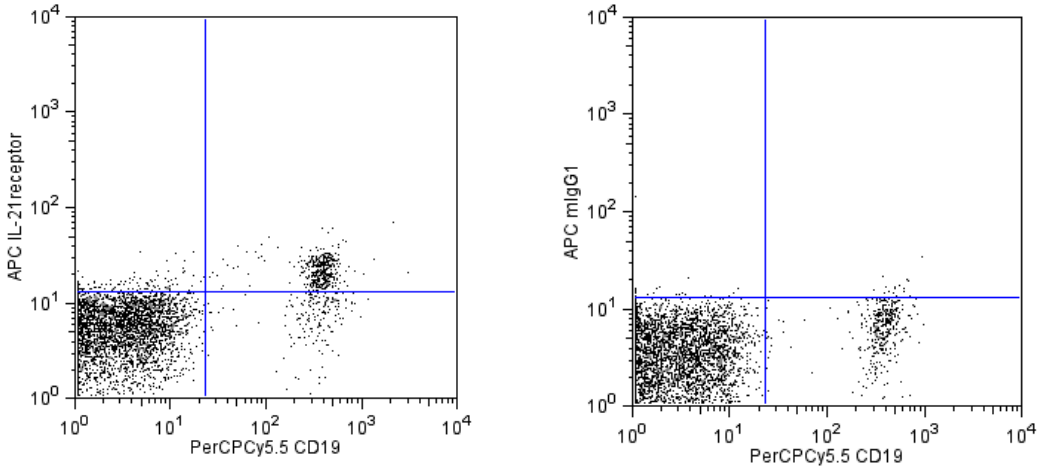
APC Mouse anti-Human IL-21R

Product Information

Material Number:	**560331**
Alternate Name:	NILR, MGC10967
Size:	100 tests
Vol. per Test:	20 µl
Clone:	17A12
Isotype:	Mouse IgG1, κ
Reactivity:	QC Tested: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

IL-21 receptor (IL-21R) encodes a 538 amino acid cytokine receptor with an extracellular domain consisting of one copy of the conserved WSXWS -containing cytokine-binding domain. The IL-21 receptor combines with the common cytokine-receptor γ-chain to form a functional receptor for IL-21. IL-21 is mainly produced by CD4+ T cells. IL-21R is preferentially expressed by B cells, T cells, NK cells, some populations of myeloid cells, keratinocytes, and dendritic cells. Binding of its ligand, IL-21, in these cells results in the activation of the Jak/Stat signal transduction pathway. The effects IL-21 ligand binding has pleiotropic actions such as augmenting the proliferation of T cells, driving of B cells into memory cells, terminally differentiating plasma cells and augmenting the activity of natural killer cells. IL-21 receptor has anti-tumor activity and might have a role in the development of autoimmunity; it has been reported that the IL-21 receptor affects the homeostasis of regulatory T cells and it could enhance T cell-activated responses in human immune-inflammatory diseases.



Analysis of IL-21R in human peripheral blood lymphocytes. *Human whole blood was stained simultaneously with PerCPCY5.5 CD19 (clone SJ25C1, Cat. No. 340951), APC Mouse anti-Human IL-21R (left panel), PerCPCY5.5 CD19 and APC Mouse IgG1, κ Isotype Control (clone MOPC-21, Cat. No. 555751, right panel). The dot plots were derived from gated events based on light scattering characteristics of lymphocytes. Flow cytometry was performed on a BD FACSCalibur™ system.*

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
The antibody was conjugated to APC under optimum conditions, and unconjugated antibody and free APC were removed.
Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested

Recommended Assay Procedure:

Materials Recommended but not Provided:

APC Mouse IgG1, κ Isotype Control, (clone MOPC-21): Cat. No. 555751
CD19 PerCP-Cy5.5, (clone SJ25C1): Cat. No. 340951

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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. This APC-conjugated reagent can be used in any flow cytometer equipped with a dye, HeNe, or red diode laser.
3. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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