

Technical Data Sheet

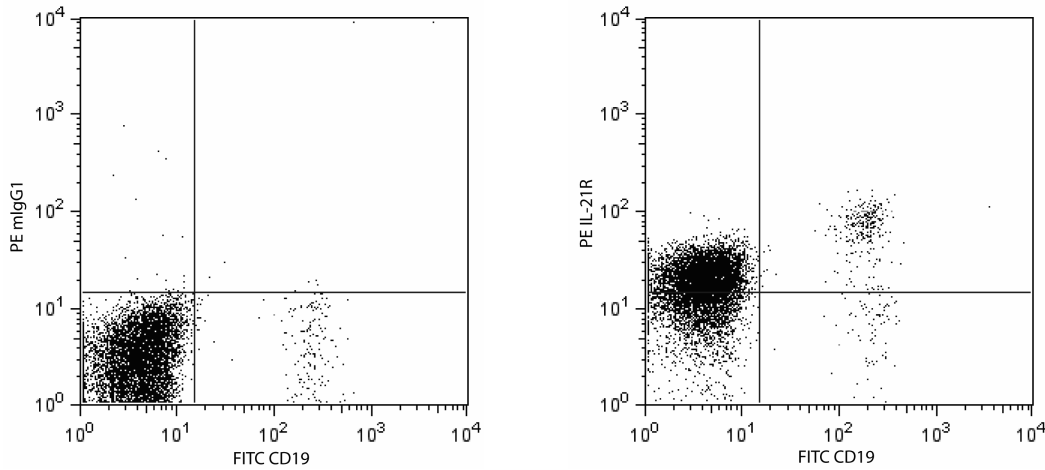
PE Mouse anti-Human IL-21R

Product Information

Material Number:	560264
Size:	100 tests
Vol. per Test:	20 µl
Clone:	17A12
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: 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 PE anti-human IL-21R in lymphocytes.** Whole blood was stained simultaneously with FITC anti-human CD19 (clone 17A12.1; Cat. No. 555412) and PE anti-human IL-21R (clone 17A12) or PE Mouse IgG1, κ (clone MOPC-21, Cat. No. 554680). The isotype control versus CD19 is represented in the left panel and the PE anti-human IL-21R versus CD19 in the right panel. Flow cytometry was performed on a BD FACSCalibur™ System and the histograms were derived from the gated events based on light scattering characteristics of viable cells.

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
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## Suggested Companion Products

Catalog Number	Name	Size	Clone
555412	FITC Mouse Anti-Human CD19	100 tests	HIB19
554680	PE Mouse IgG1, $\kappa$ Isotype Control	0.1 mg	MOPC-21

## 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- $\mu$ l experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to [www.bdbiosciences.com/pharming/en/protocols](http://www.bdbiosciences.com/pharming/en/protocols) for technical protocols.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
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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