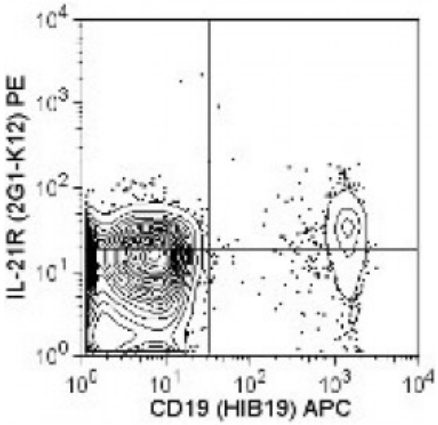
SONY

Product Data Sheet

Purified anti-human CD360 (IL-21R)

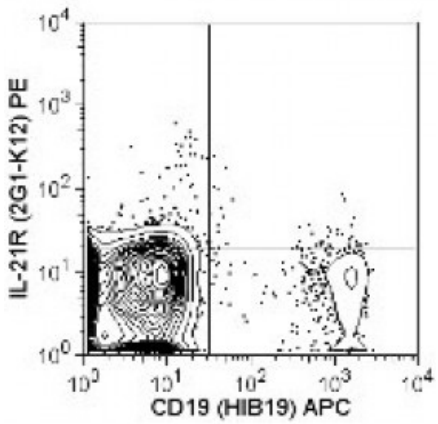
Catalog # / Size:	2339010 / 100 µg
Clone:	2G1-K12
Isotype:	Mouse IgG1, κ
Immunogen:	IL-21R transfected Ba/F3 cells
Reactivity:	Human
Preparation:	The antibody was purified by affinity chromatography.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration:	0.5



Human peripheral blood lymphocytes were cultured overnight with (bottom) or without (top) recombinant human IL-21, then surface stained with purified 2G1-K12 conjugated to PE and CD19 APC

Applications:

Applications:	Flow Cytometry
Recommended Usage:	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 2.0 microg per 10^6 cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.



Application References:	1. Rodrigues-Bayona B, *et al.* 2012. *J. Immunol.* 188:1578. PubMed

Description: The human interleukin 21 receptor (IL-21R), is a single pass type I membrane protein and a member of the type I cytokine receptor family. Of the type I cytokine receptors, IL-21R exhibits the greatest extracellular homology to the IL-2R β subunit, i.e., contains one copy of the WSXWS-containing cytokine-binding domain. Intracellular domains of IL-21R include the Box 1 and Box 2 elements which are similar to the IL-9R intracellular region. Upon binding IL-21, the IL-21R forms a heterodimer with the common gamma subunit (CD132) and induces Jak/Stat signaling. IL-21R is expressed on B cells and at various levels on NK and T cells. IL-21 is a potent immunomodulatory cytokine mainly produced by NKT and CD4 T-cells (particularly the inflammatory Th17 subset) and has pleiotropic effects on both innate and adaptive immune responses. These actions include positive effects such as enhanced proliferation of natural killer (NK) cells and cytotoxic T cells that can destroy virally infected or cancerous cells and direct inhibitory effects on the antigen-presenting function of dendritic cells. It can also

be proapoptotic for B cells and NK cells. Recent studies have shown that IL-21 is also an autocrine cytokine that potently induces Th17 differentiation and suppresses Foxp3 expression, and serves as a target for treating inflammatory diseases.

Antigen References:

1. Parish-Novak J, *et al.* 2000. *Nature* 408:57.
2. Ozaki K, *et al.* 2000. *Proc Natl. Acad. Sci. USA.* 97:11439.
3. Dumoutier L, *et al.* 2000. *Proc Natl. Acad. Sci. USA.* 97:10144.