Technical Data Sheet

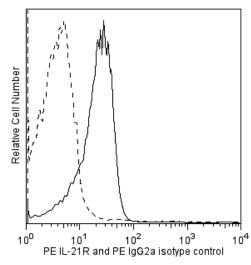
PE Rat anti-Mouse IL-21 Receptor

Product Information

Material Number:	558607	
Size:	0.1 mg	
Concentration:	0.2 mg/ml	
Clone:	4A9	
Isotype:	Rat IgG2a, ĸ	
Reactivity:	Mouse	
Storage Buffer:	ffer: Aqueous buffered solution containing ≤0.09% sodium azid	

Description

The rat monoclonal antibody 4A9 recognizes the mouse IL-21 receptor (IL-21R), a member of the cytokine receptor superfamily that closely resembles IL-2R β and IL-4R α . The functional IL-21R, consisting of the IL-21R subunit and the common γ -chain, activates Jak-1, Jak-3, STAT1, STAT3, and STAT5 by binding the ligand, IL-21. The cellular response to ligand binding is complex being dependent on co-stimulation with other molecules and can result in either positive or negative regulatory signals . IL-21R is detected on developing T and B lymphocytes after commitment to each of these lineages with highest expression on mature and activated T and B lymphocytes. It has also been found to be involved in NK cell expansion.



Flow cytometric analysis of PE-conjugated anti-mouse IL-21 receptor (IL-21R) on mouse splenocytes. Isolated murine splenocytes were stained with either PE anti-IL-21R (clone 4A9, Cat. No. 558607, solid line) or a PE rat IgG2a isotype control (catalog number 553930, dashed line) and analyzed by flow cytometry. 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 splenocytes.

Preparation and Storage

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. Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Flow cytometry	Routin	ely Tested	Tested				
Suggested Compa	nion Products						
Catalog Number	Name	Size	Clone				
553930	PE Rat IgG2a, κ Isotype Control	0.1 mg	R35-95				
Product Notices							
1. Please refer to ww	w.bdbiosciences.com/pharmingen/protocols for technical protocol	ls.					
2. For fluorochrome	spectra and suitable instrument settings, please refer to our Fluoro	chrome Web Page at www.bdbioscie	ences.com/colors.				
3. Caution: Sodium a	Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before						
discarding to avoi	d accumulation of potentially explosive deposits in plumbing.	-					

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References Jin H, Carrio R, Yu A, Malek TR. Distinct activation signals determine whether IL-21 induces B cell costimulation, growth arrest, or Bim-dependent apoptosis. *J Immunol.* 2004; 173(1):657-665. (Biology) Vosshenrich CA, Ranson T, Samson SI et al. Roles for common cytokine receptor gamma-chain-dependent cytokines in the generation, differentiation, and maturation of NK cell precursors and peripheral NK cells in vivo. *J Immunol.* 2005; 174(3):1213-1221. (Biology)