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## **Product Information**

Contents: Affinity Purified anti-mouse CD127 (IL-7 Receptor a,

IL-7Ra)

Catalog Number: 14-1271 Sizes: 50 ug, 100 ug, 500 ug

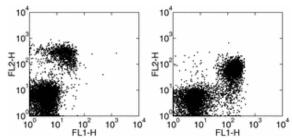
Formulation: Phosphate buffer pH 7.2,

150 mM NaCl, 0.09% NaN<sub>3</sub>

Storage Conditions: Store at 4°C. Avoid repeated freeze/thaw cycles.

Clone: A7R34

Isotype: Rat IgG2a, κ



Two-color surface staining of mouse splenocytes with anti-mouse CD127 (A7R34), FITC (left) and PE (right), and anti-mouse CD3e (145-2C11) PE and FITC respectively. Total viable cells were used for analysis.

Available	Formats of This Product			
Cat. No.	Format	Excite (nm)	Emit (nm)	•
10-1271	Allophycocyanin-Cy7 (APC-Cy7) anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra)	633	760	FC
11-1271	FITC anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra)	488	518	FC
12-1271	PE anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra)	488	575	FC
13-1271	Biotin anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra)	N/A	N/A	FC
14-1271	Affinity Purified anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra)	N/A	N/A	FA FC IHC IP
15-1271	PE-Cy5 anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra)	488	670	FC
16-1271	Functional Grade* Purified anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra)	N/A	N/A	FA FC
17-1271	APC anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra)	633	660	FC
25-1271	PE-Cy7 anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra)	488	760	FC

<sup>\*</sup>Functional Grade™ (FG™): Azide-free, sterile-filtered, and endotoxin < 0.001 ng/µg. Purified: Contains azide, not sterile-filtered, and not endotoxin tested.

## Description

The A7R34 monoclonal antibody reacts with mouse CD127, the high affinity a subunit of the mouse IL-7 receptor. IL-7 receptor a chain is expressed by immature B cells in the bone marrow, double-negative  $(CD4^{-}/CD8^{-})$ , single-positive  $(CD4^{+}$  and  $CD8^{+})$ , but not double-positive  $(CD4^{+}/CD8^{+})$  thymocytes. In the periphery, mature T cells express CD127 at low level. A7R34 inhibits binding of IL-7 to its receptor and has been used in *in vivo* and *in vitro* studies to elucidate the role of IL-7 in T and B cell development and activation.

# Usage

For research use only, not for diagnostic or therapeutic use. The A7R34 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, and immunohistochemical staining. It has also been reported in blocking of IL-7 binding in functional studies. (Please use Functional Grade purified A7R34, cat. 16-1271, in functional assays.)

## **Applications Tested**

The A7R34 antibody has been tested by flow cytometric analysis of mouse thymocyte and splenocyte suspensions. This can be used at less than or equal to 0.5 µg per million cells in a 100 µl total staining volume. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

#### **Related Products**

Cat. 10-1271	Allophycocyanin-Cy7 (APC-Cy7) anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra) (clone
A7R34)	
Cat. 11-1271	FITC anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra) (clone A7R34)
Cat. 12-1271	PE anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra) (clone A7R34)
Cat. 13-1271	Biotin anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra) (clone A7R34)
Cat. 15-1271	PE-Cy5 anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra) (clone A7R34)
Cat. 16-1271	Functional Grade Purified anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra) (clone A7R34)
Cat. 17-1271	APC anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra) (clone A7R34)
Cat. 25-1271	PE-Cy7 anti-mouse CD127 (Interleukin-7 Receptor alpha, IL-7 Receptor alpha, IL-7Ra) (clone A7R34)
Cat. 11-4317	Streptavidin-FITC (Fluorescein isothiocyanate)
Cat. 12-4317	Streptavidin-PE (Phycoerythrin)
Cat. 17-4317	Streptavidin Allophycocyanin (SA-APC)
Cat. 14-4321	Affinity Purified Rat IgG2a Isotype Control
Cat. 11-4811	FITC Anti-Rat IgG
Cat. 13-4813	Biotin Anti-Rat IgG (clone Polyclonal)

#### References

Sudo, T., S. Nishikawa, et al. 1993. Expression and function of the interleukin 7 receptor in murine lymphocytes. Proc Natl Acad Sci U S A 90(19): 9125-9.

Ohana M, Okazaki K, Oshima C, et al. 2001. A critical role for IL-7R signaling in the development of Helicobacter felis-induced gastritis in mice. Gastroenterology. Aug;121(2):329-36.

Okuno Y, Iwasaki H, Huettner CS, Radomska HS, Gonzalez DA, Tenen DG, Akashi K. 2002. Differential regulation of the human and murine CD34 genes in hematopoietic stem cells. Proc Natl Acad Sci U S A. Apr 30;99(9):6246-51.

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