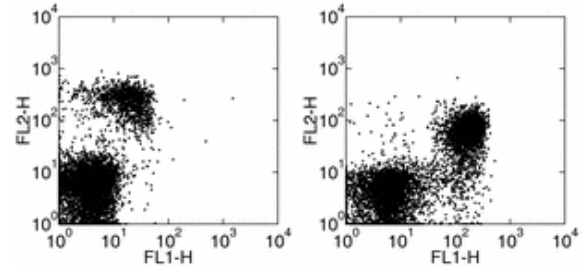


Product Information

Contents: Functional Grade Purified anti-mouse CD127 (IL-7 Receptor  $\alpha$ , IL-7Ra)  
Catalog Number: 16-1271  
Sizes: 50  $\mu$ g, 100  $\mu$ g, 500  $\mu$ g  
Formulation: Phosphate buffer pH 7.2, 150 mM NaCl, No NaN<sub>3</sub>  
Storage Conditions: Store at 4°C.  
Avoid repeated freeze/thaw cycles.  
KEEP CONTENT STERILE.  
Endotoxin Level: Less than 0.001 ng/ $\mu$ g antibody, as determined by the LAL assay.  
Clone: A7R34  
Isotype: Rat IgG2a,  $\kappa$



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)	Reported Applications
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

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

Description

The A7R34 monoclonal antibody reacts with mouse CD127, the high affinity  $\alpha$  subunit of the mouse IL-7 receptor. IL-7 receptor  $\alpha$  chain is expressed by immature B cells in the bone marrow, double-negative (CD4<sup>-</sup>/CD8<sup>-</sup>), single-positive (CD4<sup>+</sup> and CD8<sup>+</sup>), but not double-positive (CD4<sup>+</sup>/CD8<sup>+</sup>) 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. It has also been reported in blocking of IL-7 binding in functional studies.

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.

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#### Related Products

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- 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. 14-1271 Affinity Purified 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. 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. 16-4321 Functional Grade Purified Rat IgG2a Isotype Control
- Cat. 11-4811 FITC Anti-Rat IgG
- Cat. 13-4813 Biotin Anti-Rat IgG (clone Polyclonal)

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#### References

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- 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.