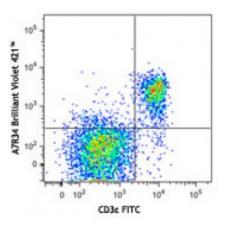
## **Product Data Sheet**

## Brilliant Violet 421<sup>™</sup> anti-mouse CD127 (IL-7Rα)

Catalog # / Size:	1275135 / 50 μg 1275115 / 125 μl
	1275120 / 500 μl
Clone:	A7R34
Isotype:	Rat IgG2a, к
Immunogen:	IL-7Ra-IgG1 fusion protein
<b>Reactivity:</b>	Mouse
Preparation:	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421 <sup>™</sup> under optimal conditions. The solution is free of unconjugated Brilliant Violet 421 <sup>™</sup> and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Concentration:	microg sizes: 0.2 mg/ml microL sizes: lot-specific



C57BL/6 mouse splenocytes were stained with CD3ε FITC and CD127 (clone A7R34) Brilliant Violet 421<sup>™</sup> (top) or rat IgG2a, κ Brilliant Violet 421<sup>™</sup> isotype control (bottom).

## **Applications:**

ow Cytometry

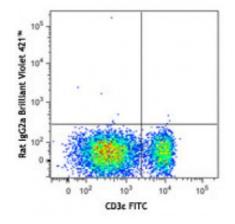
Recommended Usage:

Each lot of this antibody is guality

control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining using the microg size, the suggested use of this reagent is  $\leq 0.5$  microg per million cells in 100 microL volume. For immunofluorescent staining using microL sizes, the suggested use of this reagent is  $\leq 5$  microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421<sup>™</sup> excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421<sup>™</sup> is a trademark of Sirigen Group Ltd.

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Application Notes:	into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents. A7R34 is able to block clone SB/199 binding to IL-7R.
Application References:	<ol> <li>Sudo T, <i>et al.</i> 1993. <i>P. Natl. Acad. Sci. USA</i> 90:9125.</li> <li>Hashi H, <i>et al.</i> 2001. <i>J. Immunol.</i> 166:3702.</li> <li>Taylor R, <i>et al.</i> 2007. <i>J. Immunol.</i> 178:5659.</li> <li>Mazzon C, <i>et al.</i> 2011. <i>Blood.</i> 118:2733. PubMed</li> <li>Jin J, et al. 2011. <i>J. Immunol.</i> doi:10.4049/jimmunol.1001238. PubMed</li> <li>Siegemund S, <i>et al.</i> 2015. <i>PLoS One.</i> 10:124661. PubMed</li> </ol>
Description:	CD127 is a 60-90 kD type I transmembrane glycoprotein also known as IL-7 receptor $\alpha$ chain or IL-7R $\alpha$ . It forms a heterodimer with the common $\gamma$ chain ( $\gamma$ c or CD132) which is shared with the receptors for IL-2, IL-4, IL-9, IL-13, IL-15, and IL-21. CD127 is expressed on immature B cells through early pre-B stage, thymocytes (except CD4/CD8 double positive thymocytes), peripheral T cells, and bone marrow stromal cells. CD127 has been reported to be an useful marker for identifying memory and effector T cells. The ligation of IL-7 with its receptor is important for stimulation of mature and immature T cells as well as immature B cells proliferation and development.
Antigen	1. Sudo T, <i>et al.</i> 1993. <i>P. Natl. Acad. Sci. USA</i> 90:9125.

**References:** 2. Okuno Y, *et al.* 2001. *P. Natl. Acad. Sci. USA* 99:6246. 3. Pillai M, *et al.* 2004. *Leukemia Lymphoma* 45:2403.