

## Alexa Fluor® 647 anti-mouse CD218a (IL-18R $\alpha$ )

**Catalog # / Size:** 132903 / 25 tests

**Clone:** BG/IL18RA

**Isotype:** Rat IgG1

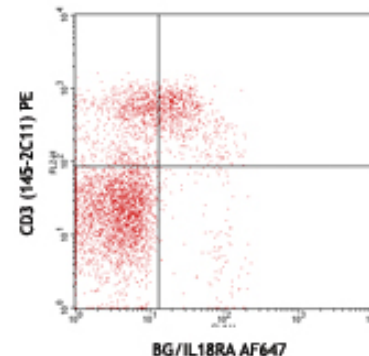
**Immunogen:** Mouse NS0-derived rmlL-18R $\alpha$  extracellular domain

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 647.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



C57BL/6 splenocytes stained with CD3 (145-2C11) PE and BG/IL18RA Alexa Fluor® 647

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is  $\leq 5 \mu\text{l}$  per million cells or  $5 \mu\text{l}$  per  $100 \mu\text{l}$  of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.

\*\* Alexa Fluor® is a registered trademark of Molecular Probes, Inc. Alexa Fluor® dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

**Application References:**

1. Yu Q, *et al.* 2008. *J. Immunol.* 181:3346
2. Pham D, *et al.* 2012. *J. Immunol.* 189:832. PubMed.

**Description:** The IL-18 receptor (IL-18R) complex is composed of two known chains, IL-18 receptor  $\alpha$  (IL-18R $\alpha$ ) and IL-18 receptor  $\beta$  (IL-18R $\beta$ ). IL-18R $\alpha$  (IL-1R5) is an IL-1 receptor super family member. It was originally described as IL-1 receptor-related protein (IL-1Rrp) because of its homology with the IL-1/Toll receptor family. IL-18R $\alpha$  is the extracellular binding domain of the IL-18 receptor complex. It is expressed on the majority of peripheral CD4+ T cells, Th1 cells, and reciprocally repressed during Th2 development. The expression of IL-18R $\alpha$  is induced by an IL-12/Stat4 pathway and inhibited by IL-4/Stat6 pathway. Binding of IL-18R $\alpha$  together with IL-18 $\beta$  to proinflammatory cytokine IL-18 plays an important role in innate and autoimmune responses.

**Antigen References:**

1. Parnet P, *et al.* 1996. *J. Biol. Chem.* 271 :3967
2. Thomassen E, *et al.* 1998. *J. Interferon Cytokine Res.* 18:1077
3. Debets R, *et al.* 2000. *J. Immunol.* 165:4950
4. Smeltz RB, *et al.* 2001. *J. Exp. Med.* 194:143

Related Products:	Product	Clone	Application
	Alexa Fluor® 647 Rat IgG1, $\kappa$ Isotype Ctrl	RTK2071	FC, ICFC
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC
	TruStain fcX™ (anti-mouse CD16/32)	93	FC



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