

# Product Data Sheet

## PE anti-human CD129 (IL-9 R)

**Catalog # / Size:** 310403 / 25 tests  
310404 / 100 tests

**Clone:** AH9R7

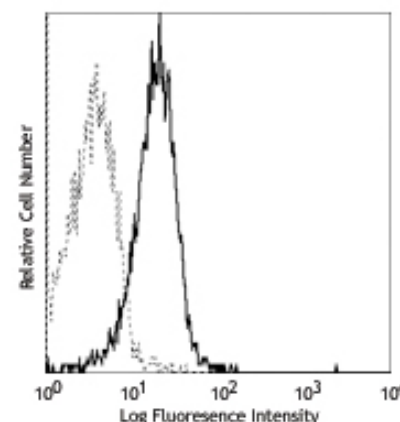
**Isotype:** Mouse IgG2b,  $\kappa$

**Reactivity:** Human

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

**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.**



Human T lymphoblastic leukemia cell line HuT-78 stained with AH9R7 PE

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20  $\mu$ l to 5  $\mu$ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100  $\mu$ l staining volume or per 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at [www.biolegend.com/testsize](http://www.biolegend.com/testsize) regarding the test size change.

**Application Notes:** Additional reported applications (for the relevant formats) include: inhibition the binding of IL-9 to the high affinity  $\alpha$ -chain of the human IL-9 receptor<sup>1,2</sup>, and ELISA for detection of soluble IL-9R. For most successful immunofluorescent staining results, it may be important to maximize signal over background by using a relatively bright fluorochrome-antibody conjugate (Cat. No. 310404) or by using a high sensitivity, three-layer staining technique (e.g., including a biotinylated anti-mouse IgG second step (Cat. No. 405303), followed by SAV-PE (Cat. No. 405204)). The LEAF™ purified antibody (Endotoxin <0.1 EU/ $\mu$ g, Azide-Free, 0.2  $\mu$ m filtered) is recommended for functional assays (Cat. No. 310408).

**Application References:** 1. De Smedt M, *et al.* 2000. *J. Immunol.* 164:1761.  
2. Pilette C, *et al.* 2002. *J. Immunol.* 168:4103.  
3. Demoulin JB, *et al.* 1996. *Mol. Cell. Biol.* 16 (9):4710.

**Description:** CD129 is known as the 57 kD IL-9 receptor. It is a member of the hematopoietin receptor superfamily. Although the  $\alpha$ -chain of the receptor binds IL-9 with high affinity, interaction with the  $\gamma$ -chain (CD132) of the IL-2 receptor is required for signaling. The IL-9 receptor is expressed at low levels on eosinophils, mast cells, macrophages, B lymphocytes, T lymphocytes, and erythroid progenitors. IL-9 receptor binding initiates STAT activation required for the proliferative and anti-apoptotic effects of this cytokine. In humans, signals from the IL-9 receptor appear to be critical for intrathymic T cell development. IL-9 binding has been shown to increase IL-5 receptor expression and promote survival in human eosinophils.

**Antigen References:** 1. Demoulin JB, *et al.* 1996. *Mol. Cell. Biol.* 16:4710.

### Related Products:

**Product**  
PE Mouse IgG2b,  $\kappa$  Isotype Ctrl  
Cell Staining Buffer  
RBC Lysis Buffer (10X)  
Human TruStain FcX™ (Fc Receptor Blocking Solution)

**Clone**  
MPC-11

**Application**  
FC, ICFC  
FC, ICC, ICFC  
FC, ICFC  
FC, ICC, ICFC



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