

# Product Data Sheet

## APC anti-mouse/human IL-5

**Catalog # / Size:** 504305 / 25 µg  
504306 / 100 µg

**Clone:** TRFK5

**Isotype:** Rat IgG1, κ

**Immunogen:** Partially-purified T cell clone supernatant

**Reactivity:** Mouse, Human, **Cross-Reactivity\*:** Guinea Pig

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

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.2 mg/ml

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

## Applications:

**Applications:** ICFC - *Quality tested*

**Recommended Usage:** Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** **ELISA<sup>1,3,4</sup> or ELISPOT<sup>2,6</sup> Capture:** The purified TRFK5 antibody is useful as a capture antibody for a sandwich ELISA or ELISPOT assay, when used in conjunction with biotinylated TRFK4 antibody (Cat. No. 504402) as the detection antibody for mouse IL-5, or used in conjunction with biotinylated JES1-5A10 antibody (Cat. No. 501002/501005) as the detection antibody for human IL-5. The LEAF™ purified antibody is suggested for ELISPOT capture.

**Flow Cytometry<sup>5</sup>:** The fluorochrome-labeled TRFK5 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify IL-5-producing cells within mixed cell populations. For intracellular cytokine staining protocol, please visit [www.biolegend.com](http://www.biolegend.com) and click on the support section.

**Neutralization<sup>1,9</sup>:** The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for neutralization of mouse and human IL-5 bioactivity (Cat. No. 504308).

**Additional reported applications (for the relevant formats) include:** Western blotting, immunohistochemical staining of formalin-fixed paraffin-embedded tissue sections<sup>8</sup> and paraformaldehyde-fixed, saponin-treated frozen tissue sections<sup>7</sup>, and immunocytochemistry.

**Note:** For testing human IL-5 in serum or plasma, BioLegend's ELISA Max™ Sets (Cat. No. 430401 to 430406) are specially developed and recommended. For testing mouse IL-5 in serum, plasma or supernatant, BioLegend's ELISA Max™ Sets (Cat. No. 431201 to 431206) are specially developed and recommended.

**Application References:**

1. Abrams, J. 1995. *Curr. Prot. Immunol.* John Wiley and Sons, New York. Unit 6.20.
2. Klinman, D., et al. 1994. *Curr. Prot. Immunol.* John Wiley and Sons, New York. Unit 6.19.
3. Swain, S., et al. 1990. *J. Immunol.* 145:3796.
4. Abrams, J., et al. 1992. *Immunol. Rev.* 127:5.
5. Assenmacher, M., et al. 1994. *Eur. J. Immunol.* 24:1097.
6. Karulin, A., et al. 2000. *J. Immunol.* 164:1862.
7. Andersson, U., et al. 1999. *Detection and quantification of gene expression.* New York:Springer-Verlag.
8. Fan, W. Y., et al. 2001. *Exp. Biol. Med.* 226:1045.
9. Sitkauskienė, B., et al. 2005. *Respir Res.* 6:33.

**Description:** IL-5 is a homodimeric, disulphide-linked protein produced by T-cells. Monomeric human IL-5 is a 126 amino acid protein with a reported molecular weight of 26 kD for the homodimeric protein. Mouse and human IL-5 are approximately 70% identical. IL-5 has been shown to promote the growth of immature hematopoietic BFU-E progenitors, stimulate the activation and differentiation of eosinophils, and promote the generation of cytotoxic lymphocytes. Mouse IL-5 induces the differentiation and proliferation of pre-activated B-cells and stimulates the production and secretion of IgM and IgA by B-cells stimulated with bacterial endotoxin. The TRFK5 antibody can neutralize the bioactivity of natural or recombinant IL-5.

**Antigen References:**

1. Fitzgerald, K., et al. Eds. 2001. *The Cytokine FactsBook.* Academic Press, San Diego.
2. Takatsu, K., et al. 1988. *Immunol. Rev.* 102:107.
3. Takatsu, K. 1992. *Curr. Opin. Immunol.* 4:299.
4. Takatsu, K. 1991. *Microbiol. Immunol.* 35:593.

**Related Products:** Product  
Cell Staining Buffer

**Clone**

**Application**  
FC, ICC, ICFC



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Fixation Buffer  
Permeabilization Wash Buffer (10X)  
Brefeldin A Solution (1,000X)  
Monensin Solution (1,000X)  
RBC Lysis Buffer (10X)  
APC Rat IgG1,  $\kappa$  Isotype Ctrl

RTK2071

ICC, ICFC  
ICC, ICFC, IHC  
ICFC  
ICFC  
FC, ICFC  
FC, ICFC



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