

LEAF™ Purified anti-mouse/human IL-5

Catalog # / Size: 504307 / 50 µg
504308 / 500 µg

Clone: TRFK5

Isotype: Rat IgG1, κ

Immunogen: Partially-Purified T cell clone supernatant

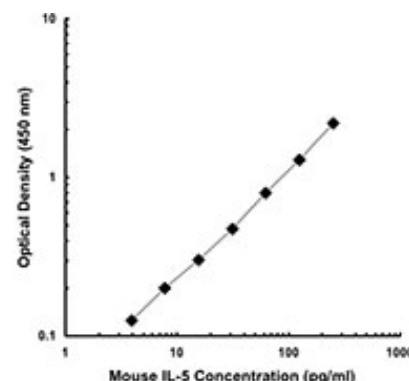
Reactivity: Mouse, Human, **Cross-Reactivity*:** Guinea Pig

Preparation: The LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.

Formulation: 0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.1 EU/µg of the protein (<0.01 ng/µg of the protein) as determined by the LAL test.

Concentration: 1.0 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C. This LEAF™ solution contains no preservative; handle under aseptic conditions.



Applications:

Applications: ELISA Capture - *Quality tested*
ELISPOT Capture, Neut, ICFC, IHC, WB - *Reported in the literature*
CyTOF® - *Validated*

Recommended Usage: Each lot of this antibody is quality control tested by ELISA assay. For ELISA capture applications, a concentration range of 1-4 µg/ml is recommended. To obtain a linear standard curve, serial dilutions of mouse IL-5 recombinant protein ranging from 250 to 1 pg/ml are recommended for each ELISA plate when paired with TRFK4 (Cat. # 504402). To obtain a linear standard curve, serial dilutions of human IL-5 recombinant protein ranging from 250 to 1 pg/ml are recommended for each ELISA plate when paired with JES1-5A10 (Cat. # 501002). It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: **ELISA^{1,3,4} or ELISPOT^{2,6} 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. For ELISPOT capture applications, a concentration range of 2-8 µg/ml is recommended.
Fluorochrome Cytometry⁵: 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 and click on the support section.
Neutralization^{1,9}: 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 sections⁸ and paraformaldehyde-fixed, saponin-treated frozen tissue sections⁷, 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:

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



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- 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	Clone	Application
	Biotin anti-mouse IL-5	TRFK4	ELISA Detection, ELISPOT
	Recombinant Mouse IL-5 HRP Avidin	Avidin	Detection BA, ELISA ELISA, ELISPOT, IHC, WB
	LEAF™ Purified Rat IgG1, κ Isotype Ctrl	RTK2071	FC, ICFC, WB, IP, ICC, IF, IHC, FA



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