

Technical Data Sheet

Purified NA/LE Rat Anti-Mouse/Anti-Human IL-5

Product Information

| | |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material Number: | 554391 |
| Size: | 0.5 mg |
| Concentration: | 1.0 mg/ml |
| Clone: | TRFK5 |
| Immunogen: | Mouse Semi-Purified T-Cell Clone Supernatant |
| Isotype: | Rat IgG1, κ |
| Reactivity: | QC Testing: Mouse |
| Storage Buffer: | No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2 μ m sterile filtered. Endotoxin level is ≤ 0.01 EU/ μ g (≤ 0.001 ng/ μ g) of protein as determined by the LAL assay. |

Description

The TRFK5 antibody reacts with mouse interleukin-5 (IL-5) and cross-reacts with human IL-5. The TRFK5 antibody has been reported to cross react with IL-5 from rhesus monkey. This is a neutralizing antibody.

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

Application Notes

Application

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|-----------------------------------------|---------------------------|
| ELISA | Routinely Tested |
| Neutralization | Tested During Development |
| Intracellular staining (flow cytometry) | Reported |

Neutralization Activity:

This antibody has been reported to be useful for the neutralization of recombinant human IL-5. Neutralization activity may be measured with a proliferation assay using 1.5 ng/mL recombinant human IL-5 (Cat. No. 554606) to stimulate TF-1 cells at 1×10^5 cells/mL as indicator cells (i.e. preincubation of the antibody with recombinant human IL-5 for 60 minutes).

50% Neutralization (ND50) at 5 - 50 ng/mL

$\geq 95\%$ Neutralization at 50 - 100 ng/mL

Recommended Assay Procedure:

ELISA: Purified Rat Anti-Mouse/Anti-Human IL-5 (Cat. No. 554393, clone TRFK5) has been reported to be useful as a capture antibody for sandwich ELISA for measuring mouse or human IL-5. For a mouse IL-5 ELISA, purified TRFK5 antibody can be paired with Biotin Rat Anti-Mouse IL-5 antibody (Cat. No. 554397, clone TRFK4) as the detection antibody, with recombinant mouse IL-5 (Cat. No. 554581) as the standard. For a human IL-5 ELISA, purified TRFK5 antibody can be paired with the Biotin Rat Anti-Human IL-5 antibody (Cat. No. 554491, clone JES1-5A10) as the detecting antibody, with recombinant human IL-5 (Cat. No. 554606) as the standard. For measuring mouse or human IL-5 in complex biological samples, such as serum or plasma, investigators are highly encouraged to use the BD OptEIA™ Mouse IL-5 ELISA Set (Cat. No. 555236) or the BD OptEIA™ Human IL-5 ELISA Set (Cat. No. 555202), respectively.

Suggested Companion Products

| Catalog Number | Name | Size | Clone |
|----------------|--------------------------------------------------|-----------|--------|
| 554682 | Purified NA/LE Rat IgG1 κ Isotype Control | 0.5 mg | R3-34 |
| 554581 | Recombinant Mouse IL-5 | 5 μ g | (none) |
| 555236 | Mouse IL-5 ELISA Set | 20 plates | (none) |
| 554606 | Recombinant Human IL-5 | 5 μ g | (none) |
| 555202 | Human IL-5 ELISA Set | 20 plates | (none) |
| 554393 | Purified Rat Anti-Mouse/Anti-Human IL-5 | 0.5 mg | TRFK5 |

Product Notices

- Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

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References

- Abrams J. Immunoassay of mouse and human cytokines using NIP-labeled anti-cytokine antibodies. *Curr Protoc Immunol*. 2001; 1:6.20-6.21. (Clone-specific: ELISA)
- Abrams JS, Roncarolo MG, Yssel H, Andersson U, Gleich GJ, Silver JE. Strategies of anti-cytokine monoclonal antibody development: immunoassay of IL-10 and IL-5 in clinical samples. *Immunol Rev*. 1992; 127:5-24. (Clone-specific: ELISA, Neutralization)
- Andersson U, Andersson J. Immunolabeling of cytokine-producing cells in tissues and in suspension. In: Fradelizie D, Emelie D, ed. *Cytokine Producing Cells*. Paris: Inserm; 1994:32-49. (Biology)
- Assenmacher M, Schmitz J, Radbruch A. Flow cytometric determination of cytokines in activated murine T helper lymphocytes: expression of interleukin-10 in interferon-gamma and in interleukin-4-expressing cells. *Eur J Immunol*. 1994; 24(5):1097-1101. (Clone-specific: Flow cytometry)
- Kitamura T, Takaku F, Miyajima A. IL-1 up-regulates the expression of cytokine receptors on a factor-dependent human hemopoietic cell line, TF-1. *Int Immunol*. 1991; 3(6):571-577. (Clone-specific)
- Litton MJ, Sander B, Murphy E, O'Garra A, Abrams JS. Early expression of cytokines in lymph nodes after treatment in vivo with Staphylococcus enterotoxin B. *J Immunol Methods*. 1994; 175(1):47-58. (Biology)
- Mo XY, Sarawar SR, Doherty PC. Induction of cytokines in mice with parainfluenza pneumonia. *J Virol*. 1995; 69(2):1288-1291. (Clone-specific: ELISA)
- Sander B, Andersson J, Andersson U. Assessment of cytokines by immunofluorescence and the paraformaldehyde-saponin procedure. *Immunol Rev*. 1991; 119:65-93. (Biology: ELISA)
- Sander B, Hoiden I, Andersson U, Moller E, Abrams JS. Similar frequencies and kinetics of cytokine producing cells in murine peripheral blood and spleen. Cytokine detection by immunoassay and intracellular immunostaining. *J Immunol Methods*. 1993; 166(2):201-214. (Biology: ELISA)
- Sarawar SR, Sangster M, Coffman RL, Doherty PC. Administration of anti-IFN-gamma antibody to beta 2-microglobulin-deficient mice delays influenza virus clearance but does not switch the response to a T helper cell 2 phenotype. *J Immunol*. 1994; 153(3):1246-1253. (Clone-specific: ELISA)
- Schumacher JH, O'Garra A, Shrader B, et al. The characterization of four monoclonal antibodies specific for mouse IL-5 and development of mouse and human IL-5 enzyme-linked immunosorbent. *J Immunol*. 1988; 141(5):1576-1581. (Clone-specific: ELISA, Neutralization)
- Swain SL, Weinberg AD, English M, Huston G. IL-4 directs the development of Th2-like helper effectors. *J Immunol*. 1990; 145(11):3796-3806. (Clone-specific: Neutralization)

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