

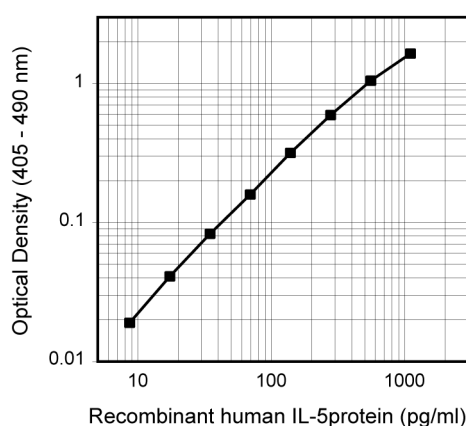
Technical Data Sheet

Purified Rat Anti-Mouse/Anti-Human IL-5**Product Information**

Material Number:	554393
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	TRFK5
Immunogen:	Mouse Semi-Purified T-Cell Clone Supernatant
Isotype:	Rat IgG1, κ
Reactivity:	QC Testing: Mouse Tested in Development: Human
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

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.



Human IL-5 ELISA Standard Curve. Purified TRFK5 antibody is used with the Biotin Rat Anti-Human IL-5 antibody (Cat. No. 554491) and Recombinant Human IL-5 (Cat. No. 554606) as the standard.

Preparation and Storage

Store undiluted at 4°C.

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

Application Notes**Application**

ELISA Capture	Routinely Tested
Intracellular block/flow cytometry	Tested During Development
Neutralization	Tested During Development
Western blot	Reported

Recommended Assay Procedure:

ELISA Capture: For a mouse IL-5 ELISA, purified TRFK5 antibody can be paired with the biotinylated TRFK4 anti-mouse IL-5 antibody (Cat. No. 554397) as the detecting 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 biotinylated JES1-5A10 anti-human IL-5 antibody (Cat. No. 554491) as the detecting antibody, with recombinant human IL-5 (Cat. No. 554606) as the standard. The purified TRFK5 antibody should be titrated 1.0 - 4.0 $\mu\text{g/ml}$ to determine optimal concentration for ELISA capture. To obtain linear standard curves, doubling dilutions of IL-5 protein ranging ~2000 to 15 pg/ml are recommended for inclusion in each ELISA plate. For specific methodology, please visit the protocols section on our website at http://www.bdbiosciences.com/support/resources/elisa_elispot/.

Note: For testing IL-5 in serum or plasma, the Mouse IL-5 OptEIA™ Set (Cat. No. 555236) and the Human IL-5 OptEIA™ Set (Cat. No. 555202) are recommended.

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.268.5430	32.2.400.98.95	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2014 BD



Immunofluorescent Staining and Flow Cytometric Analysis: The TRFK5 antibody is useful for immunofluorescent staining and flow cytometric analysis to identify and enumerate mouse IL-5 producing cells within mixed cell populations. PE- or APC-conjugated TRFK5 antibodies (Cat. No. 554395, Cat. No. 554396) are especially suitable for these experiments.

Neutralization: The BD Pharmingen™ NA/LE TRFK5 antibody (Cat. No. 554391) is useful for neutralization of mouse and human IL-5 bioactivity.

WB: The TRFK5 antibody has been found useful for Western blotting

Suggested Companion Products

Catalog Number	Name	Size	Clone
554397	Biotin Rat Anti-Mouse IL-5	0.5 mg	TRFK4
554581	Recombinant Mouse IL-5	5 µg	(none)
554491	Biotin Rat Anti-Human IL-5	0.5 mg	JES1-5A10
554606	Recombinant Human IL-5	5 µg	(none)
555236	Mouse IL-5 ELISA Set	20 plates	(none)
555202	Human IL-5 ELISA Set	20 plates	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
3. Please refer to wwwbdbiosciences.com/pharmingen/protocols for technical protocols.
4. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at wwwbdbiosciences.com/colors.

References

Abrams J. Immunoenzymatic assay 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: Neutralization)

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)

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, 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. (Clone-specific)

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: 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)

Taguchi T, McGhee JR, Coffman RL, et al. Analysis of Th1 and Th2 cells in murine gut-associated tissues. Frequencies of CD4+ and CD8+ T cells that secrete IFN-gamma and IL-5. *J Immunol.* 1990; 145(1):68-77. (Clone-specific: ELISA)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.268.5430	32.2.400.98.95	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2014 BD

