

## Technical Data Sheet

## Biotin Rat Anti-Human IL-5

## Product Information

<b>Material Number:</b>	554491
<b>Size:</b>	0.5 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Clone:</b>	JES1-5A10
<b>Immunogen:</b>	Recombinant Human IL-5
<b>Isotype:</b>	Rat IgG2a
<b>Reactivity:</b>	QC Testing: Human
<b>Storage Buffer:</b>	Aqueous buffered solution containing ≤0.09% sodium azide.

## Description

The JES1-5A10 antibody reacts with human interleukin-5 (IL-5). The immunogen used to generate the JES1-5A10 hybridoma was recombinant human IL-5. The JES1-5A10 antibody has been reported to cross react with IL-5 from rhesus monkey. This is a neutralizing antibody.

This antibody is routinely tested by ELISA Detection. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.

## Preparation and Storage

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

The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed.

Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

## Application Notes

## Application

ELISA Detection	Routinely Tested
-----------------	------------------

## Recommended Assay Procedure:

**ELISA Detection:** The biotinylated JES1-5A10 antibody (Cat. No. 554491) is useful as a detection antibody for a sandwich ELISA for measuring human IL-5 protein levels. Biotinylated JES1-5A10 anti-human IL-5 antibody can be paired with the purified TRFK5 antibody (Cat. No. 554393) or the purified JES1-39D10 antibody (Cat. No. 554488) as the capture antibody, with recombinant human IL-5 (Cat. No. 554606) as the standard. Biotinylated JES1-5A10 anti-human IL-5 antibody should be titrated 0.5 - 2.0 µg/ml to determine optimal concentration for ELISA detection. To obtain linear standard curves, doubling dilutions of human IL-5 ranging from ~2,000 to 15 pg/ml are recommended for inclusion in each ELISA plate. For specific methodology, please visit the protocols section or chapter on ELISA in the Immune Function Handbook, both of which are posted on our web site, [www.bdbiosciences.com](http://www.bdbiosciences.com).

**Note 1:** This ELISA pair shows no cross-reactivity with any of the cytokines tested (e.g., mouse IL-1β, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-9, IL-10, IL-12 p70, IL-15, GM-CSF, IFN-γ, MCP-1, TCA-3, TNF; human IL-1α, IL-1β, IL-2, IL-3, IL-4, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12 p70, IL-12 p40, IL-13, IL-15, G-CSF, GM-CSF, IFN-γ, lymphotactin, MCP-1, MCP-2, MIP-1α, MIP-1β, NT-3, PDGF-AA, sCD23, SCF, TNF, LT-α, VEGF; rat IL-2, IL-4, IL-6, IL-10, GM-CSF, IFN-γ, TNF).

**Note 2:** This ELISA pair is recommended primarily for measuring cytokine from experimental cell culture systems. These ELISA reagents are not recommended for measuring IL-5 in serum samples. BD OptEIA™ Human IL-5 ELISA Set (Cat. No. 555202) is specially-formulated for cytokine measurement in plasma and serum.

## Suggested Companion Products

Catalog Number	Name	Size	Clone
554606	Recombinant Human IL-5	5 µg	(none)
554488	Purified Mouse Anti-Human IL-5	0.5 mg	JES1-39D10
554393	Purified Rat Anti-Mouse/Anti-Human IL-5	0.5 mg	TRFK5

## BD Biosciences

[bdbiosciences.com](http://bdbiosciences.com)

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit [bdbiosciences.com/how\\_to\\_order/](http://bdbiosciences.com/how_to_order/)

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.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2006 BD



**BD**

**BD Biosciences**

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharming/en/protocols](http://www.bdbiosciences.com/pharming/en/protocols) for technical protocols.
3. 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.

## References

- 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)
- Abrams JS, Silver J, Van Dyke R, Gleich G. Eosinophil-active cytokines in human disease: development and use of monoclonal antibodies to IL-3, IL-5, GM-CSF. In: Kay A and Gleich G, ed. *Eosinophils in Allergy and Inflammation*. 1994:133-157.(Clone-specific: ELISA)
- Butterfield JH, Leiferman KM, Abrams J, et al. Elevated serum levels of interleukin-5 in patients with the syndrome of episodic angioedema and eosinophilia. *Blood.* 1992; 79(3):688-692.(Clone-specific: ELISA)
- Denburg JA, Silver JE, Abrams JS. Interleukin-5 is a human basophilopoietin: induction of histamine content and basophilic differentiation of HL-60 cells and of peripheral blood basophil-eosinophil progenitors. *Blood.* 1991; 77(7):1462-1468.(Biology)
- Limaye AP, Abrams JS, Silver JE, et al. Interleukin-5 and the posttreatment eosinophilia in patients with onchocerciasis. *J Clin Invest.* 1991; 88(4):1418-1421. (Clone-specific: ELISA)