

Technical Data Sheet

Purified Rat Anti-Human IL-5

Product Information

Material Number:	554488
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	JES1-39D10
Immunogen:	Recombinant human IL-5
Isotype:	Rat IgG2a
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The JES1-39D10 antibody reacts with human interleukin-5 (IL-5). The immunogen used to generate the JES1-39D10 hybridoma was COS-expressed recombinant human IL-5. This is a neutralizing antibody.

This antibody is routinely tested by ELISA. 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.

Store undiluted at 4° C.

Application Notes

Application

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

Recommended Assay Procedure:

ELISA Capture: The purified JES1-39D10 antibody (Cat. No. 554488) is useful as a capture antibody for a sandwich ELISA for measuring human IL-5 protein levels. Purified JES1-39D10 antibody can be paired with the biotinylated JES1-5A10 antibody (Cat. No. 554491) as the detection antibody, with recombinant human IL-5 (Cat. No. 554606) as the standard. The purified JES1-39D10 antibody should be titrated 1.0 - 4.0 µg/ml to determine optimal concentration for ELISA capture. To obtain linear standard curves, doubling dilutions of human IL-5 protein ranging from ~2,000 to 15 pg/ml are recommended for inclusion in each ELISA plate. For specific methodology, please visit our web site, www.bdbiosciences.com, and go to the protocols section or the chapter on ELISA in the Immune Function Handbook.

Note 1: This ELISA pair shows no cross-reactivity with any of the cytokines tested (e.g., mouseIL-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 assay of serum samples. For testing human IL-5 in complex biological fluids like serum or plasma, our human IL-5 OptEIA™ sandwich ELISA set (Cat. No. 555202) is recommended.

IC/Flow: Directly conjugated- JES1-39D10 is useful for intracellular cytokine flow cytometry. Purified JES1-39D10 and recombinant human IL-5 (Cat. No. 554606) are useful specificity controls for this application.

WB: The JES1-39D10 antibody has been reported to be useful for Western blotting. Please note that this application is not routinely tested at BD Biosciences Pharmingen.

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Suggested Companion Products

Catalog Number	Name	Size	Clone
554491	Biotin Rat Anti-Human IL-5	0.5 mg	JES1-5A10
554606	Recombinant Human IL-5	5 µg	(none)
555202	Human IL-5 OptEIA™ ELISA Set	20 tests	(none)

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 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)

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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)

Elson LH, Nutman TB, Metcalfe DD, Prussin C. Flow cytometric analysis for cytokine production identifies T helper 1, T helper 2, and T helper 0 cells within the human CD4+CD27- lymphocyte subpopulation. *J Immunol.* 1995; 154(9):4294-4301.(Clone-specific: Flow cytometry)

Jung T, Schauer U, Rieger C, et al. Interleukin-4 and interleukin-5 are rarely co-expressed by human T cells. *Eur J Immunol.* 1995; 25(8):2413-2416. (Clone-specific: Flow cytometry)

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