Technical Data Sheet PE Rat Anti-Human IL-13

| Product Information | |
|---------------------|---|
| Material Number: | 554571 |
| Size: | 0.1 mg |
| Concentration: | 0.2 mg/ml |
| Clone: | JES10-5A2 |
| Immunogen: | Human recombinant IL-13 |
| Isotype: | Rat IgG1 |
| Reactivity: | QC Testing: Human |
| Storage Buffer: | Aqueous buffered solution containing ≤0.09% sodium azide. |

Description

This antibody reacts with human IL-13. The immunogen used to produce the JES10-5A2 hybridoma was COS-expressed recombinant human IL-13. This is a neutralizing antibody.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed. Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

| A | pplication | |
|---|---|------------------|
| | Intracellular staining (flow cytometry) | Routinely Tested |

Recommended Assay Procedure:

Immunofluorescent Staining and Flow Cytometric Analysis: The PE-conjugated JES10-5A2 antibody (Cat. No. 554571) can be used for multicolor immunofluorescent staining and flow cytometric analysis to identify and enumerate IL-13 producing cells within mixed cell populations (see Figure). For optimal immunofluorescent staining and flow cytometric analysis, this anti-cytokine antibody should be titrated ($\leq 0.5 \,\mu$ g mAb/million cells). For specific methodology, please visit our website, www.bdbiosciences.com, and go to the protocols section or the chapter on intracellular staining in the Immune Function Handbook.

A useful control for demonstrating specificity of staining is either of the following: 1) pre-block the PE JES10-5A2 antibody with ligand (e.g., human IL-13) prior to staining, or 2) pre-block paraformaldehyde-fixed/saponin-permeabilized cells with unlabeled JES10-5A2 antibody (e.g., Cat. No. 554570) prior to staining. The intracellular staining technique and use of blocking controls are described in detail by C. Prussin and D. Metcalfe. A suitable rat IgG1 isotype control immunoglobulin for assessing the level of background staining on paraformaldehyde-fixed/saponin-permeabilized mouse or human cells is the R3-34 antibody (Cat. No. 554685); use at comparable concentrations to antibody of interest (e.g., $\leq 0.5 \ \mu g \ mAb/1 \ million \ cells$).

ELISA Capture: The purified JES10-5A2 (Cat. No. 554570) is useful as a capture antibody for a sandwich ELISA for specifically measuring human IL-13 protein levels. Purified JES10-5A2 antibody can be paired with the biotinylated B69-2 antibody (Cat. No. 555054), with recombinant human IL-13 protein as the standard.

Neutralization: The NA/LETM JES10-5A2 antibody (Cat. No. 554568) is useful for neutralization of human IL-13 bioactivity. A suitable NA/LE TM isotype control to match the JES10-5A2 antibody is the R3-34 antibody, (Cat. No. 554682).

WB: The JES10-5A2 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 | |
|----------------|---|-----------|-----------|--|
| 555725 | Purified NA/LE Mouse Anti-Human CD28 | 0.5 mg | CD28.2 | |
| 554603 | Recombinant Human IL-2 | 5 µg | (none) | |
| 554605 | Recombinant Human IL-4 | 5 µg | (none) | |
| 555329 | Purified NA/LE Mouse Anti-Human CD3 | 0.5 mg | UCHT1 | |
| 554685 | PE Rat IgG1, κ Isotype Control | 0.1 mg | R3-34 | |
| 554715 | BD Cytofix/Cytoperm Plus Kit (with BD GolgiStop) | 250 tests | (none) | |
| 554570 | Purified Rat Anti-Human IL-13 | 0.5 mg | JES10-5A2 | |
| 554724 | Protein Transport Inhibitor (Containing Monensin) | 0.7 ml | (none) | |

Product Notices

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 3. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/pharmingen/colors.
- 4. 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 J. Immunoenzymetric assay of mouse and human cytokines using NIP-labeled anti-cytokine antibodies. In: Coligan J, Kruisbeek A, Margulies D, Shevach E, Strober W, ed. *Current Protocols in Immunology*. New York: John Wiley and Sons; 1995:6.20-6.21.(Clone-specific: ELISA)

McKenzie A, Zurawski G. Measurement of IL-13. In: Coligan, Kruisbeek, Shevak, Strober, ed. *Current Protocols in Immunology*. New York: John Wiley & Sons; 1994:18-19. (Clone-specific: ELISA, Neutralization)

Prussin C, Metcalfe DD. Detection of intracytoplasmic cytokine using flow cytometry and directly conjugated anti-cytokine antibodies. J Immunol Methods. 1995; 188(1):117-128. (Methodology: IC/FCM Block)