

DESCRIPTION

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|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human IL-10 in direct ELISAs. |
| Source | Recombinant Monoclonal Rabbit IgG _{2B} Clone # 2050B |
| Purification | Protein A or G purified from cell culture supernatant |
| Immunogen | <i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human IL-10 Met1-Asn178 Accession # P22301 |
| Conjugate | Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm |
| Formulation | Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the Technical Information section on our website.

| | Recommended Concentration | Sample |
|---|---------------------------------|--|
| Intracellular Staining by Flow Cytometry | 0.25-1 µg/10 ⁶ cells | Human peripheral blood mononuclear cells (PBMCs) stimulated to induce Th2 cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with methanol |

PREPARATION AND STORAGE

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| Shipping | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| Stability & Storage | Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied. |

BACKGROUND

Interleukin 10, also known as cytokine synthesis inhibitory factor (CSIF), is the charter member of the IL-10 family of α-helical cytokines that also includes IL-19, IL-20, IL-22, IL-24, and IL-26/AK155 (1, 2). IL-10 is secreted by many activated hematopoietic cell types as well as hepatic stellate cells, keratinocytes, and placental cytotrophoblasts (2-5). Mature human IL-10 shares 72%-86% amino acid sequence identity with bovine, canine, equine, feline, mouse, ovine, porcine, and rat IL-10. Whereas human IL-10 is active on mouse cells, mouse IL-10 does not act on human cells (6, 7). IL-10 is a 178 amino acid molecule that contains two intrachain disulfide bridges and is expressed as a 36 kDa noncovalently associated homodimer (6, 8, 9). The IL-10 dimer binds to two IL-10 Rα/IL-10 R1 chains, resulting in recruitment of two IL-10 Rβ/IL-10 R2 chains and activation of a signaling cascade involving JAK1, TYK2, and STAT3 (10). IL-10 Rβ does not bind IL-10 by itself but is required for signal transduction (1). IL-10 Rβ also associates with IL-20 Rα, IL-22 Rα, or IL-28 Rα to form the receptor complexes for IL-22, IL-26, IL-28, and IL-29 (11-13). IL-10 is a critical molecule in the control of viral infections and allergic and autoimmune inflammation (14-16). It promotes phagocytic uptake and Th2 responses but suppresses antigen presentation and Th1 proinflammatory responses (2).

References:

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Human IL-10 Alexa Fluor® 750-conjugated Antibody

Recombinant Monoclonal Rabbit IgG_{2B} Clone # 2050B

Catalog Number: IC9210S

100 µg

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