

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human IL-12/IL-35 p35 in direct ELISAs and Western blots. Detects the p35 subunit either as part of a p40/p35 heterodimer or as a free subunit after reduction of the heterodimer. This antibody does not recognize IL-12 p40 homodimers but shows strong cross-reactivity with the p35 subunits from porcine and mouse systems.
Source	Monoclonal Mouse IgG ₁ Clone # 27537
Purification	Protein A or G purified from ascites
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human IL-12/IL-35 p35 Arg23-Ser219 Accession # P29459
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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 or mouse splenocytes treated with LPS, fixed with paraformaldehyde, and permeabilized with saponin

PREPARATION AND STORAGE

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 12 (IL-12) and interleukin 35 (IL-35) are heterodimeric cytokines composed of α and β chains. IL-12 is composed of p35 and p40 subunits, while IL-35 is comprised of p35 paired with EB1-3 (1). In mice, IL-35 is produced by FoxP3⁺ regulatory T cells and may function as an inhibitory cytokine to suppress T cell proliferation (2). Human FoxP3⁺ Tregs do not constitutively express IL-35 (3), but expression may be induced by activated dendritic cells (4).

References:

1. Collison, L.W. and D.A.A. Vignali (2008) *Immunol. Rev.* **226**:248.
2. Collison, L.W. *et al.* (2007) *Nature* **450**:566.
3. Bardel, E. *et al.* (2008) *J. Immunol.* **181**:6898.
4. Seyerl, M. *et al.* (2010) *Eur. J. Immunol.* **40**:321.

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