

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
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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
Western Blot	1 µg/mL	Recombinant Human IL-12 (Catalog # 219-IL)
Intracellular Staining by Flow Cytometry	2.5 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

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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 EBI-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.