

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-19 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 152112
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human IL-19 Leu25-Ala177 Accession # AAN40906
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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 LPS-treated peripheral blood mononuclear cells 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

Human Interleukin 19 (IL-19) is a member of the IL-10 family of related cytokines. Its gene contains two alternate translation initiation sites, generating precursors of 215 amino acids (aa) and 177 aa, respectively. Both isoforms are processed to 17 kDa, 153 aa mature molecules. IL-19 contains seven helices and is secreted as a 35 kDa monomer. There are two potential N-linked glycosylation sites, and it is likely that the molecule is glycosylated. Mature human IL-19 shares 69% aa sequence identity with the mature mouse homologue. Although mouse IL-19 is active on human cells, human IL-19 is not active on mouse cells. IL-19 expression is limited to activated keratinocytes and monocytes. IL-19 binds a receptor complex consisting of the IL-20 receptor alpha (IL-20 R α , also known as IL-20 R1) and the IL-20 receptor beta (IL-20 R β or IL-20 R2). This receptor complex is also shared by IL-20 and IL-24. Functionally, IL-19 induces IL-6 and TNF- α production by monocytes, and drives T-helper cell differentiation towards a Th2 response (1-5).

References:

- Gallagher, G. *et al.* (2000) *Genes Immun.* 1:442.
- Gallagher, G. *et al.* (2004) *Int. Immunopharmacol.* 4:615.
- Laio, Y-C. *et al.* (2002) *J. Immunol.* 169:4288.
- Romer, J. *et al.* (2003) *J. Invest. Dermatol.* 121:1306.
- Pestka, S. *et al.* (2004) *Annu. Rev. Immunol.* 22:929.

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