

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-12 p40 in ELISAs. Polymorphisms exist in the mouse IL-12 p40 sequence. This antibody recognizes an allelic epitope found in the p40 subunit of several mouse strains including BALB/c, C57BL/6, CBA, C3H, DBA/1, NOR, I29/J, and A.SW. This an
Source	Monoclonal Rat IgG _{2B} Clone # 30517
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse IL-12 p40
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% 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.

ELISA Capture (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
ELISA Detection (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.

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. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Interleukin 12, also known as natural killer cell stimulatory factor (NKSF) or cytotoxic lymphocyte maturation factor (CLMF), is a pleiotropic cytokine originally identified in the medium of activated human B lymphoblastoid cell lines. IL-12 has multiple effects on T cells and NK cells and is a key mediator in the development of Th1 cells.

IL-12 is a heterodimeric cytokine containing two disulfide-linked subunits, p35 and p40. Human and mouse IL-12 share 70% and 60% amino acid sequence identity in their p40 and p35 subunits, respectively. Although mouse IL-12 is active on human or mouse IL-12 responsive cells, human IL-12 is not active on mouse cells.

The disulfide-linked mouse p40 homodimer can bind to IL-12 receptors and is an antagonist of IL-12 activities *in vitro*. The mouse p40 monomer is at least ten times less active than the homodimer as an IL-12 antagonist. At the present time, the existence and the physiological role of mouse p40 homodimer *in vivo* remains to be determined.

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