

DESCRIPTION

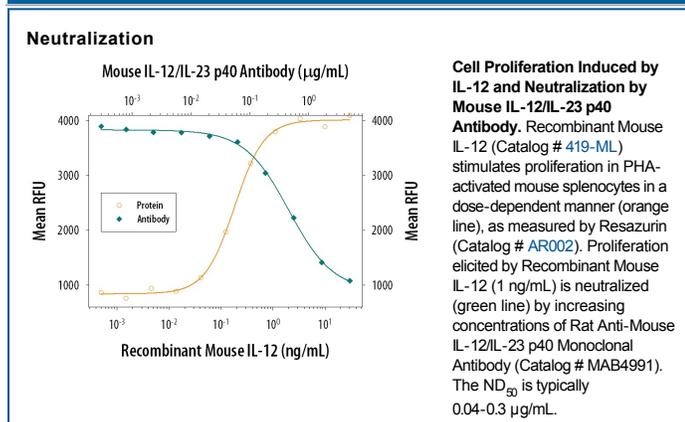
Species Reactivity	Mouse
Specificity	Detects the mouse IL-12/IL-23 p40 subunit. Polymorphisms exist in the mouse p40 sequences [Ymer, S. <i>et al.</i> (2002) <i>Genes and Immunity</i> 3:151.].
Source	Monoclonal Rat IgG _{2A} Clone # C17.8
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Recombinant mouse IL-12 p70 heterodimer
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
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 Mouse IL-12/IL-23 p40 Homodimer (Catalog # 499-ML) under non-reducing conditions only
Mouse IL-12/IL-23 p40 Nonallele-specific Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Mouse IL-12/IL-23 p40 Antibody (Catalog # MAB4991)
ELISA Detection	0.1-0.4 µg/mL	Mouse IL-12/IL-23 p40 Biotinylated Antibody (Catalog # BAF499)
Standard		Recombinant Mouse IL-12/IL-23 p40 Homodimer (Catalog # 499-ML)
Neutralization	Measured by its ability to neutralize IL-12-induced proliferation in PHA-activated mouse splenocytes. The Neutralization Dose (ND ₅₀) is typically 0.04-0.3 µg/mL in the presence of 1 ng/mL Recombinant Mouse IL-12.	

DATA



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, 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.