

Datasheet: MCA6195B

Description:	MOUSE ANTI HUMAN INTERLEUKIN-12 p40:Biotin
Specificity:	IL-12 p40
Other names:	IL-12B
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	M18
Isotype:	IgG2a
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
ELISA	▪			1.0 ug/ml

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Human
Product Form	Purified IgG conjugated to Biotin - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	<i>E. coli</i> derived recombinant human full length interleukin-12 p40 (Ile23-Ser328)

**External Database
Links**

UniProt:

[P29460](#) [Related reagents](#)

Entrez Gene:

[3593](#) IL12B [Related reagents](#)

Synonyms

NKSF2

Fusion Partners

Cell fusion between immunized BALB/c mouse spleen cells and mouse myeloma SP2/0

Specificity

Mouse anti Human Interleukin-12 p40 antibody, clone M18, recognizes interleukin-12 p40 (IL-12 p40) also known as interleukin-12 subunit beta and cytotoxic lymphocyte maturation factor 40 kDa subunit. IL-12 is a heterodimeric cytokine composed of 2 subunits, a 35 kDa subunit (p35) and a 40 kDa subunit (p40). The IL-12 p40 subunit is largely expressed by dendritic cells, monocytes, macrophages, neutrophils, B-lymphocytes and keratinocytes ([Airoidi et al. 2002](#)). It is able to form a homodimer, which was believed to be inactive. However it has subsequently been demonstrated to have proinflammatory properties through its induction of inducible nitric oxide synthase in microglia ([Pahan et al. 2001](#), [Jana et al. 2009](#)). IL-12 p40 coupled to the protein p19 forms the heterodimer IL-23 (p19-p40), when this formation takes place in activated dendritic cells the p19-p40 binds to its receptor IL-12R β 1 to activate the STAT4 signaling pathway. This results in the stimulation of IFN γ production along with proliferation of PHA blast T cells ([Airoidi et al. 2002](#)).

The biotinylated Mouse anti Human interleukin-12 p40 antibody, clone M18 (MCA6195B) can be used as a detection antibody in a sandwich ELISA with the purified Mouse anti Human interleukin-12 p40 antibody, clone D14-5G11 ([MCA6194GA](#)) as the capture antibody.

Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee

12 months from date of despatch

**Health And Safety
Information**

Material Safety Datasheet documentation #10041 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA6195B>
10041

Regulatory

For research purposes only

Related Products

Recommended Useful Reagents

[MOUSE ANTI HUMAN INTERLEUKIN-12 p40 \(MCA6194GA\)](#)

ELISA Matched Pair - Capture Antibody

[MOUSE ANTI HUMAN INTERLEUKIN-12 p40 \(MCA6194GA\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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