

For Research Use Only

# NeutraKine® IL-12/IL-23 p40 Mouse McAb

Catalog Number: 69006-1-Ig



## Basic Information

<b>Catalog Number:</b> 69006-1-Ig	<b>GenBank Accession Number:</b> BC067498	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug	<b>GeneID (NCBI):</b> 51561,3593	<b>CloneNo.:</b> 2A9H6
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P29460	
<b>Isotype:</b> IgG1	<b>Full Name:</b> interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40)	
<b>Immunogen Catalog Number:</b> HZ-1254	<b>Calculated MW:</b> 328 aa, 37 kDa	

## Applications

**Tested Applications:**  
Neutralization, ELISA

**Species Specificity:**  
human

## Background Information

IL-12 and IL-23 are heterodimeric cytokines that share a common p40 subunit (PMID: 11114383). IL-12 is composed of the IL-12 p40 subunit linked to the IL-12 p35 subunit, and the heterodimer signals through the IL-12 receptor (IL-12R), which comprises the IL-12R $\beta$ 1 and IL-12R $\beta$ 2 subunits. IL-23 is composed of the IL-23 p19 subunit and the IL-12 p40 (IL-12/23p40) subunit, which signals through IL-23R and IL-12R $\beta$ 1 (PMID: 11114383; 26121196). IL-12/IL-23 p40 also exists as a monomer and as a homodimer which can act as a potent IL-12 antagonist (PMID: 8958912; 18783467). IL-12/IL-23 p40 is produced by antigen-presenting cells, such as dendritic cells (DCs), monocytes, macrophages, neutrophils and, to a lesser extent, B cells (PMID: 20476918).

This antibody can be used to neutralize the bioactivity of IL-12/IL-23 p40.

## Storage

**Storage:**  
Lyophilized antibodies are stable for 1 year from the date of receipt if stored between (-20°C) and (-80°C). Upon reconstitution we recommend that the solution can be stored at (4°C) for short term or at (-20°C) to (-80°C) for long term. Repeated freeze thaw cycles should be avoided with reconstituted products.

**Storage Buffer:**  
Sterile PBS.

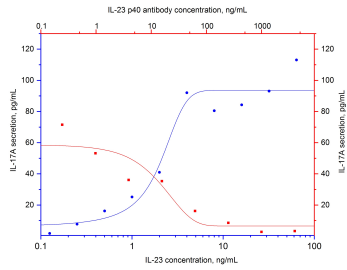
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

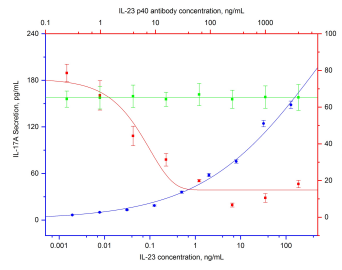
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

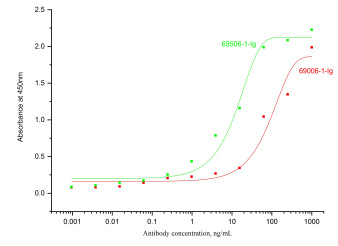
## Selected Validation Data



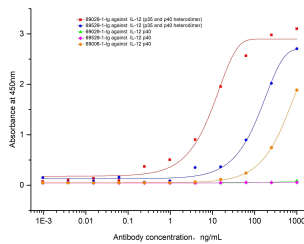
Recombinant human IL-23 (Cat.NO. HZ-1254) induces in vitro cultured mouse splenocytes to secrete IL-17A in a dose-dependent manner (blue curve, refer to bottom X-left Y). The activity of human IL-23 (4 ng/mL HZ-1254) is neutralized by mouse anti-human IL-23 p40 monoclonal antibody 69006-1-Ig at serial dose (refer to top X-right Y). The ND50 is typically 8-30 ng/mL.



Recombinant human IL-23 (Cat.NO. HZ-1254) induces in vitro cultured mouse splenocytes to secrete IL-17A in a dose-dependent manner (blue curve, refer to bottom X-left Y axis). The activity of human IL-23 (4 ng/mL HZ-1254) is neutralized by mouse anti-human IL-23 p40 monoclonal antibody 69006-1-Ig at serial dose (red curve, refer to top X-right Y). The ND50 is typically 8-30 ng/mL. The NeutraControl mouse anti-human IL-23 p40 monoclonal antibody 69506-1-Ig could



Indirect ELISA was carried out by coating recombinant Human IL-23 (Cat.NO. HZ-1254) at 70 ng/well followed by blocking and adding serial diluted IL-23 antibody 69006-1-Ig and 69506-1-Ig respectively. Signal was developed with TMB and stopped by H2SO4. Signal strength was measured by absorbance at 450 nm.



Indirect ELISA was carried out by coating recombinant Human IL-12 (Cat.NO. HZ-1256) and IL-12 p40 (Cat.NO. HZ-1321) respectively at 70 ng/well followed by blocking and adding serial diluted 69029-1-Ig, 69529-1-Ig and 69006-1-Ig respectively. HRP-goat anti-mouse was used for detection. Signal was developed with TMB and stopped by H2SO4. Signal strength was measured by absorbance at 450 nm. The result suggests that 69029-1-Ig and 69529-1-Ig only recognize IL-12(p35