

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant IL-12, Mouse

Catalog Number: BK0230-1mg

Source: CHO

Quantity: 1mg

### Description:

Interleukin-12 (IL-12), also known as NKSF, TCMF, CLMF and TSF, is a heterodimeric cytokine composed of p35 and p40 subunits. It is produced by monocytes, macrophages, B cells and dendritic cells in response to bacterial lipopolysaccharides and intracellular pathogens. IL-12 signals through the IL-12 receptor complex, which is comprised of IL-12 R $\beta$ 1 and IL-12 R $\beta$ 2. IL-12 induces the proliferation and activation of hematopoietic stem cells, natural killer cells and T-cells. It is indispensable during the development of Th1 cells, leading to the production of IFN-gamma and IL-2.

### Molecular Weight:

27-29 kDa (p35) and 45-50 kDa (p40), observed by reducing SDS-PAGE.

### Purity:

> 95% as analyzed by SDS-PAGE.

### Biological Activity:

ED50 < 0.15 ng/ml, measured in a cell proliferation assay using 2D6 cells.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

p35:RVIPVSGPARCLSQSRNLLKTTDDMVKTARE  
KLKHYSCAEDIDHEDIT-  
RDQTSTLKTCLPLELHKNESCLATRETSSTTRG-  
SCLPPQKTSLMMTLCLGSIYEDLK-  
MYQTEFQAINAALQNHNHQIILDKGMLVAIDEL

MQSLNHNGETLRQKPPVGEAD-  
PYRVKMKLCILLHAFSTRVVTINRVMGYLSSA  
p40:MWELEKDVYVVEVDWTPDAPGETVNLTC  
TPEEDDITWTSQQRHGVIGSGKTLTITVKEF  
LDAGQYTCHKGGETLSHSHLLLHKKENGW-  
STEILKNFKNKTFLKCEAPNYSGRFTCSWL  
VQRNMDLKF-  
NIKSSSSSPDSRAVTCGMASLSAEKVTLDQRDYE  
KYSVSCQEDVTCPTAEE  
TLPIELALEARQQNKYENYSTSFFIRDIIKPDPP-  
KNLQMKPLKNSQVEVSWEYPDSWSTP  
HSYFSLKFFVRIQRKKEKMKETEE-  
GCNQKGAFLVEKTSTEVQCKGG-  
NVCVQAQDRYYNSS  
CSKWACVPCRVS

### Endotoxin:

< 0.2 EU/ $\mu$ g, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O or PBS at 100  $\mu$ g/ml.

### Storage:

Lyophilized recombinant murine Interleukin-12 (IL-12), remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, murine Interleukin-12 (IL-12), His should be stable up to 1 week at 4 °C or up to 2 months at -20 °C.

### Usage:

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