

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant IL-12, His, Rat

Catalog Number: BK0229-10µg

Source: CHO

Quantity: 10µg

### 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 Rβ1 and IL-12 Rβ2. 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:

26-28kDa (p35) and 42-45 kDa (p40), observed by reducing SDS-PAGE.

### Purity:

> 95% as analyzed by SDS-PAGE.

### Biological Activity:

ED50 < 0.1ng/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:RVIPVSGPAKCLNQSQNLLKTTDDMVRTARE  
KLKHYSCTAGDIDHEDITRDKTSTLEA-  
CLPLELHKNESCLATKETSSIIRG-  
SCLPPQKTSLMMTLCLGSIYEDLK-  
MYQSEFQAINAALQSHNHQQITLDRN-  
MLMAIDELMRSLNHSGETLHQKAPMGAD-

PYRVKMKLCILLHAF-  
STRVMTINRVMNYLSSSHHHHHH  
p40:MWELEKDVYVVEVDWRPDAPGETVTLTCD  
SPEEDDIT-  
WTSDQRRGVIGSGKTLTITVREFLDAGQYTCHR  
GGETLSHSHLLLHKKENGIWSTEILK-  
NFKNKTFLKCEAP-  
NYSGRFTCSWLVRNTDLKF-  
NIKSSSSSPESRAVTCGRASLSAEKVTLNQRDYE  
KYSVACQEDVTC-  
TAEETLPIELVVEAQQQNKYENYSTSF-  
FIRDIKPDPPKNLQVKPLKNS-  
QVEVSWEYPDSWSTPHSYFSLKFFVRIQRK-  
KEKTKETEEECNQKGAFLVEKTSAEVQCKGAN-  
ICVQAQDRYYNSSCSKWTCVPCRGRS

### Endotoxin:

<0.2 EU/µg, determined by LAL method.

### Reconstitution:

Reconstituted in ddH2O or PBS at 100 µg/ml.

### Storage:

Lyophilized recombinant rat Interleukin-12 (IL-12), His remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rat 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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