

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant IL-12, His, Rat

Catalog Number: BK0229-1mg

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 β 1 and IL-12 R β 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:

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
KYSVACQEDVTCP-
TAEETLPIELVVEAQQQNKYENYSTSF-
FIRDIKPDPPKNLQVKPLKNS-
QVEVSWEYPDSWSTPHSYFSLKFFVRIQRK-
KEKTKETEEECNQKGAFLVEKTSAEVQCKGAN-
ICVQAQDRYYNSSCSKWTCVPCRGRS

Endotoxin:

<0.2 EU/ μ g, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 μ g/ml.

Storage:

Lyophilized recombinant rat Interleukin-12 (IL-12), His remains stable up to 6 months at -80 $^{\circ}$ C from date of receipt. Upon reconstitution, rat Interleukin-12 (IL-12), His should be stable up to 1 week at 4 $^{\circ}$ C or up to 2 months at -20 $^{\circ}$ C.

Usage:

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