

IL-12, His, Rat

Cat. No.: Z03210-1

Size: 1.0 mg

Synonyms: NKSF, TCMF, CLMF, TSF

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.

Amino Acid Sequence:

p35:p40:

```
00001 RVIPVSGPAK CLNQSQNLK TTDDMVRTAR EKLKHYSCA
00041 GDIDHEDITR DKTSTLEACL PLELHKNESE LATKETSSII
00081 RGSCLPPQKT SLMMTLCCLGS IYEDLKMYQS EFQAINAALQ
00121 SHNHQQITLD RNMLMAIDEL MRSLNHSGET LHKAPMGEA
00161 DPYRVKMKLC ILLHAFSTRV MTINRVMNYL SSSHHHHHHM
00201 WELEKDVYVY EVDWRPDAPG ETVTLTCDSP EEDDITWTSD
00241 QRRGVIGSGK TLITIVREFL DAGQYTCHRG GETLSHSHLL
00281 LHKKENGWIS TEILKNFKNK TFLKCEAPNY SGRFTCSWLV
00321 HRNTDLKFNI KSSSSSPESR AVTCGRASLS AEKVTLNQRD
00361 YEKYSVACQE DVTCPTAET LPIELVVEAQ QNKYENYST
00401 SFFIRDIIKP DPPKNLQVKP LKNSQVEVSW EYDPSWSTPH
00441 SYFSLKFFVR IQRKKEKTK EEECNQKGA FLVEKTSAEV
00481 QCKGANICVQ AQDRYNSSC SKWTCVPCRG RS
```

Source: CHO

Species: Rat

Biological Activity: ED₅₀ < 0.1ng/ml, measured in a cell proliferation assay using 2D6 cells.

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

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at 100 µg/ml.

Purity: > 95% as analyzed by SDS-PAGE.

Endotoxin Level: <0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant rat Interleukin-12 (IL-12), His remains stable up to 6 months at lower than -70°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.