

DATASHEET

Version 20181206

IL-12, Mouse

Cat. No.: Z03211-1

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 Subunit:p40 Subunit:

```

00001 RVIPVSGPAR CLSQSRNLLK TTDDMVKTAR EKLKHYSCTA
00041 EDIDHEDITR DQTSTLKTCL PLELHKNESE LATRETSSTT
00081 RGSCLPPQKT SLMMTLCLGS IYEDLKMYQT EFQAINAALQ
00121 NHHNQIILD KGMLVAIDEL MQLNHNGET LRQKPPVGEA
00161 DPYRVKMKLC ILLHAFSTRV VTINRVMGYL SSAMWELEKD
00201 VYVVEVDWTP DAPGETVNLT CDTPEEDDIT WTSDQRHGVI
00241 GSGKTLTITV KEFLDAGQYT CHKGGETLSH SHLLHKKEN
00281 GIWSTEILKN FKNKTLKCE APNYSGRFTC SWLVQRNMDL
00321 KFNKSSSSSS PDSRAVTCGM ASLSAEKVTL DQRDYEKYSV
00361 SCQEDVTCPT AEETLPIELA LEARQQNKYE NYSTSFIRD
00401 IIKPDPPKNL QMKPLKNSQV EVSWEYPSDW STPHSYFSLK
00441 FVRIQRKKE KMKETEEGCV QKGAFLVEK STEVQCKGGN
00481 VCVQAQDRYY NSSCSKWACV PCRVRS
  
```

Source: CHO

Species: Mouse

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

Molecular Weight: 27-29 kDa (p35) and 45-50 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 murine Interleukin-12 (IL-12), remains stable up to 6 months at lower than -70°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.