

IL12, 23-328/23-219aa, Human, His tag, Insect cell

Cat.NO.: TP02605

3th Edition

Synonyms: Interleukin 12 (subunit beta/alpha), NKSF1

Description: IL12 is a cytokine that acts on T and natural killer cells, and has a broad array of biological activities. It is a disulfide-linked heterodimer composed of the 40 kD cytokine receptor like subunit and a 35 kD subunit. This cytokine is expressed by activated macrophages that serve as an essential inducer of Th1 cells development. IL12 has been found to be important for sustaining a sufficient number of memory/effector Th1 cells to mediate long-term protection to an intracellular pathogen. Recombinant human IL12 protein, fused to His-tag at C-terminus, was expressed in insect cells using baculovirus expression system and purified by using conventional chromatography techniques.

Form: Liquid. In Phosphate Buffered Saline (pH7.4) containing 10% glycerol

Molecular Weight: 34.6kDa (p40) & 23.3kDa (p35) (306aa & 203aa) The heterodimeric IL12 has a predicted molecular weight of 57.9kDa (509aa). Molecular weight on SDS-PAGE will appear higher.

Sequences:

RNLPVATPDPGMFPCLHHSQNLLRAVSNNMLQKARQTLEFYPTCTSEIDHEDITKDKTSTVEACLPLELTKNESCLNS
RETSFITNGSCLSRKTSFMMALCLSSIEDLKMYQVEFKTMNAKLLMDPKRQIFLDQNMLAVIDELMQALNFNSET
VPQKSSLEEDFYKTKIKLCILLHAFRIRAVTIDRVMSYLNASHHHHH>IL12B(p40)IWELKKDVYVVELDWYPDAP
GEMVVLTCDTPEEDGITWTLQDSSEVLGSGKTLTIQVKEFGDAGQYTCHKGGVLSHSLLLHKKEDGIWSTDILKD
QKEPKNKTFLRCEAKNYSGRFTCWWLTISTDLTFSVKSSRGSSDPQGVTCGAATLSAERVGRDNKEYEYSVECC
EDSACPAAEESLPIEVMDAVHKLKYENYTSSFFIRDIIKPDPPKNLQLKPLKNSRQVEVSWEYPDTWSTPHSYFSL
TFCVQVQGKSKREKKDRVFTDKTSATVICRKNASISVRAQDRYYSSSWSEWASVPCS

Purity: > 95% by HPLC

Concentration: 0.5 mg/ml (determined by Absorbance at 280nm)

Endotoxin Level: <1.0 EU per 1 ug of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.