PRODUCT INFORMATION

Expression system Baculovirus

Domain 23-328aa

UniProt No. P29460

NCBI Accession No. NP_002178

Alternative Names

Interleukin 12B, Interleukin-12 beta chain, IL-12B, Cytotoxic lymphocyte maturation factor 40 kDa subunit, CLMF p40, IL-12 subunit p40, interleukin 12 p40, NK cell stimulatory factor chain 2, NKSF2, CLMF2

PRODUCT SPECIFICATION

Molecular Weight

35.8 kDa (315aa)

Concentration

0.25mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 20% glycerol, 100mM NaCl, 0.1mM PMSF

Purity > 90% by SDS-PAGE

Endotoxin level < 1 EU per 1ug of protein (determined by LAL method)

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

IL12P40 (interleukin 12 subunit beta), also known as natural killer cell stimulatory factor 2, or cytotoxic lymphocyte maturation factor 2, p40, belongs to the type I cytokine receptor family. This protein is a cytokine that can act as a growth factor for activated T and NK cells, enhance the lytic activity of NK/lymphokine-



activated killer cells, and stimulate the production of IFN-gamma by resting PBMC. Interleukin 12 is a disulfidelinked heterodimer composed of the 40 kD cytokine receptor like subunit encoded by this gene, and a 35 kD subunit encoded by IL12A. This cytokine is expressed by activated macrophages that serve as an essential inducer of Th1 cells development. Recombinant human IL12P40 protein, fused to His-tag at C-terminus, was expressed in Hi-5 cell using baculovirus expression system and purified by using conventional chromatography.

Amino acid Sequence

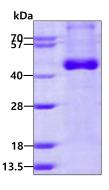
<ADP>IWELKKD VYVVELDWYP DAPGEMVVLT CDTPEEDGIT WTLDQSSEVL GSGKTLTIQV KEFGDAGQYT CHKGGEVLSH SLLLHKKED GIWSTDILKD QKEPKNKTFL RCEAKNYSGR FTCWWLTTIS TDLTFSVKSS RGSSDPQGVT CGAATLSAER VRGDNKEYEY SVECQEDSAC PAAEESLPIE VMVDAVHKLK YENYTSSFFI RDIIKPDPPK NLQLKPLKNS RQVEVSWEYP DTWSTPHSYF SLTFCVQVQG KSKREKKDRV FTDKTSATVI CRKNASISVR AQDRYYSSSW SEWASVPCS<H HHHHH>

General References

Oppmann B., et al (2000) Immunity 13:715-725(2000) Presky et al. (1996) Proc. Natl. Acad. Sci. u.S.A. 93 (24): 14002-7.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.