PRODUCT INFORMATION

Expression system Baculovirus

Domain 23-328aa(p40)/20-189aa(p19)

UniProt No. P29460(p40)/Q9NPF7(p19)

NCBI Accession No. NP_002178(p40)NP_057668(p19)

Alternative Names

Interleukin-12 subunit beta / Interleukin-23 subunit alpha, CLMF, CLMF2, IL-12B, IMD28, IMD29, NKSF, NKSF2/ IL-23, IL-23A, IL23P19, P19, SGRF

PRODUCT SPECIFICATION

Molecular Weight

34.6 kDa (p40, 306aa) 19.5 kDa (p19, 176aa)

Concentration 1mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity > 95% 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

IL23 p40 and p19, also known as interleukin-12 subunit beta/interleukin-23 subunit alpha, is a heterodimeric cytokine composed of two disulfide-linked subunit, a p19 subunit that is unique to IL23, and a p40 subunit that is



shared with IL12. The p19 subunit has homology to the p35 subunit of IL12, as well as to other single chain sytokines sub as IL6 and IL11. It is produced by macrophages and B lymphocytes and has multiple effects on T-cells and NK cells, including stimulation of cytotoxic activity, proliferation, and promotion of Th1 development as well as IFN-gamma and TNF production. Recombinant human IL23 p40 and p19, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

IL12B(p40)

IWELKKDVYV VELDWYPDAP GEMVVLTCDT PEEDGITWTL DQSSEVLGSG KTLTIQVKEF GDAGQYTCHK GGEVLSHSLL LLHKKEDGIW STDILKDQKE PKNKTFLRCE AKNYSGRFTC WWLTTISTDL TFSVKSSRGS SDPQGVTCGA ATLSAERVRG DNKEYEYSVE CQEDSACPAA EESLPIEVMV DAVHKLKYEN YTSSFFIRDI IKPDPPKNLQ LKPLKNSRQV EVSWEYPDTW STPHSYFSLT FCVQVQGKSK REKKDRVFTD KTSATVICRK NASISVRAQD RYYSSSWSEW ASVPCS IL23A(p19)

RAVPGGSSPA WTQCQQLSQK LCTLAWSAHP LVGHMDLREE GDEETTNDVP HIQCGDGCDP QGLRDNSQFC LQRIHQGLIF YEKLLGSDIF TGEPSLLPDS PVGQLHASLL GLSQLLQPEG HHWETQQIPS LSPSQPWQRL LLRFKILRSL QAFVAVAARV FAHGAATLSP <HHHHHH>

General References

Oppmann B., et al, (2000) Immunity. 13:715-25. Parham C., et al, (2002) J. Immunol. 168:5699-708.

DATA

SDS-PAGE



3ug by SDS-PAGE visualized by coomassie blue stain. Lane 1 : reducing condition Lane 2 : non-reducing condition