

AR31187PU-N

Human Interleukin-27 / IL27A - Purified

Alternate names:

IL-27 subunit alpha, IL-30, IL27-A, IL30, Interleukin-30, p28

Quantity:

10 µg

Background:

As a member of the IL-12 family of heterodimeric cytokines that also includes IL-12, IL-23, and IL-35, IL-27 is formed by the association of an IL-27-p28 subunit (also known as IL-30) with the Epstein-Barr Virus (EBV)-induced Gene 3 (EBI3) subunit (also known as IL-27B). Expressed by antigen-presenting cells (APCs) in the early phases of antigen-mediated activation, IL-27 acts as a critical initiator of adaptive immune responses by promoting the rapid clonal expansion of naïve CD4+ T cells, IFN-γ production, and Th1 polarization. IL-27 elicits its effects through receptor complexes IL-27R (also known as TCCR/WSX-1) and gp130, a receptor shared by IL-6. Mainly expressed in monocytes, endothelial cells, and dendritic cells, IL-27 plays an important role alongside IL-6 in the regulation of inflammation and autoimmunity; directly antagonizing IL-6's stimulation of CD4+ T cell proliferation and Th17 differentiation.

Uniprot ID:
[Q8NEV9](#)
NCBI:
[NP_663634.2](#)
GeneID:
[246778](#)
Species:

Human

Source:

HEK293 cells

Format:
State: Lyophilized (0.2µ Sterile filtered) purified protein

Purity: >90% pure by SDS-PAGE gel and HPLC analyses

Buffer System: 10mM Sodium Phosphate, pH 6.5 + 100mM NaCl

Endotoxin Level: < 0.1 ng/µg of protein (<1EU/µg)

Reconstitution: Restore in water to a concentration of 0.1-1.0 mg/ml.

Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Description:

Recombinant Human IL-27 produced from *HEK293* cells is a non-disulfide-linked, heterodimeric protein composed of a 209 amino acid length EBI3 subunit and a 215 amino acid length IL-27-p28 subunit, for a total sequence length of 424 amino acid residues. The calculated molecular weight of the associated IL-27 subunits is 47.8 kDa.

AA Sequence:

p28 subunit: FPRPPGRPQL SLQELRREFT VSLHLARKLL SEVRGQAHRF AESHLPGVNL
YLLPLGEQLP DVSLTFQAWR RLSDPERLCFÂ ISTTLQPFHA LLGGLGTQGR WTNMERMQWL
AMRLDLRDLQ RHLRFQVLAA GFNLPPEEEEE EEEEEEEERK GLLPGALGSA LQGPAQVSWP
QLLSTYRLLHÂ SLELVLSRAV RELLLSKAG HSWWPLGFPT LSPQP

EBI3 subunit: RKGPPAALT PRVQCRASRY PIAVDCSWTL PPAPNSTSPV SFIATYRLGM
AARGHSWPCL QQTPTSTSTCT ITDVQLFSMA PYVLNVTAVHÂ PWGSSSSFVP FITEHIKPD
PPEGVRLSPL AERQLQVQWE PPGSWPFPEI FSLKYWIRYK RQGAARFHRV GPIEATSFIL
RAVRPRARYY VQVAAQDLTDÂ YGELSDWSLP ATATMSLGK

Biological Activity: Determined by its ability to stimulate the proliferation of Human TF-1 cells. The expected ED₅₀ range is 400-500 ng/ml.

Molecular weight: 47.8 kDa

Storage:

Store lyophilized at 2-8°C for 6 months or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.