

TECHNICAL DATA SHEET

Recombinant Human IL-27 (Carrier-free)

Catalog Number: 21-8279

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human IL-27 (Carrier-free)

DESCRIPTION

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). It belongs to the IL-12 family of heterodimeric cytokines. IL-27 is expressed by antigen presenting cells (APCs) at sites of inflammation in cytokine-driven autoimmune/inflammatory diseases, and plays a role in promoting Th1 polarization. IL-27 also has anti-inflammatory functions that seem to limit T and NK-T cell activity. It binds to a receptor complex composed of IL-27R (also known as TCCR/WSX-1) and gp130, a receptor shared by IL-6.

MOLECULAR MASS

Recombinant human IL-27 produced from HEK-293 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.

AMINO ACID SEQUENCE

p28 subunit: FPRPPGRPQL SLQELRREFT VSLHLARKLL SEVRGQAHRF AESHLPGVNL YLLPLGEQLP DVSLTFQAWR RLSDPERLCF ISTTLQPFHA LLGGLGTQGR WTNMERMQLW AMRLDLRDLQ RHLRFQVLAA GFNLPEEEEE EEEEEEEERK GLLPGALGSA LQGPAQVSWP QLLSTYRLLH SLELVLSRAV RELLLSKAG HSVWPLGFPT LSPQP

EBI3 subunit: RKGPP AALTLPRVQC RASRYPIAVD CSWTLPPAPN STSPVSIAT YRLGMAARGH SWPCLQQTPT STSCTITDVQ LFSMAPYVLN VTAVHPWGSS SSFVPFITEH IIKPDPPEGV RLSPLAERQL QVQWEPGGSW PFPEIFSLKY WIRYKRQGAA RFHRVGPIEA TSFILRAVRP RARYVQVAA QDLTDYGELS DWSLPATATM SLGK

SOURCE

HEK293 cells

APPLICATIONS

Bioassay

PURITY

90 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

BIOACTIVITY

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

RESEARCH AREAS

Immune System, Inflammation, Proliferation

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

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