

# Human CellExp IL-27, human recombinant protein

p28, IL30, IL-27, IL-27A, IL27p28, Interleukin-27, EBI3 Catalog # PBV10859r

#### Specification

## Human CellExp IL-27, human recombinant protein - Product info

Primary Accession Calculated MW

#### <u>Q8NEV9</u>

The rhIL27 protein complex is composed of IL27B/EBI-3 subunit and the NT truncated IL27A / p28 subunit linked by a polypeptide linker (GSGSSRGGSGGGGGGSKL) with 6 × His tag at the C-terminus. It has a calculated MW of 50.3 kDa. The predicted N-terminus is Arg 21. DTT-reduced Protein migrates as 60 kDa due to glycosylation. KDa

#### Human CellExp IL-27, human recombinant protein - Additional Info

 Gene ID
 246778

 Gene Symbol
 IL-27

 Other Names
 p28, IL30, IL-27, IL-27A, IL27p28, Interleukin-27, EBI3

Gene Source Source Assay&Purity Assay2&Purity2 Recombinant Target/Specificity IL-27 Human HEK 293 cells SDS-PAGE; ≥90% HPLC; Yes

Application Notes

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50  $\mu$ g/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format Lyophilized powder

Storage

-20°C; Lyophilized from 0.22  $\mu$ m filtered solution in PBS. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

# Human CellExp IL-27, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.



- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## Human CellExp IL-27, human recombinant protein - Images

## Human CellExp IL-27, human recombinant protein - Background

Interleukin-27 (IL-27) is a heterodimeric cytokine belonging to the IL-12 family that is composed of two subunits, Epstein-Barr virus (EBV)-induced gene 3 (EBI3) (also known as IL-27B) and IL27-p28 (known as IL-30). IL-27 is produced by antigen-presenting cells. IL-27 plays an important function in regulating the activity of B and T lymphocytes. The effects of IL-27 are eliciting by its interaction with a specific cell surface receptor complex composed of two proteins known as IL27R and gp130. IL-27 is a cytokine with pro- and anti-inflammatory properties, that can regulate T helper cell development, suppress T-cell proliferation, stimulate cytotoxic T cell activity, induce isotype switching in B-cells, and that has diverse effects on innate immune cells. Among its target cells are CD4 T helper cells which can differentiate in type 1 effector cells (TH1), type 2 effector cells (TH2) and IL17 producing helper T-cells (TH17). It drives rapid clonal expansion of naive but not memory CD4 T-cells. IL-27 reveals to be a potent inhibitor of TH17 cell development and of IL-17 production. IL-27 also antagonizes the effects of some cytokines such as IL6 through direct effects on T cells. Another important role of IL-27 is its antitumor activity and anti-angiogenic activity.

#### Human CellExp IL-27, human recombinant protein - References

Pflanz S., et al. Immunity 16:779-790(2002). Livingston R.J., et al. Submitted (OCT-2006) to the EMBL/GenBank/DDBJ databases. Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Hibbert L., et al.J. Interferon Cytokine Res. 23:513-522(2003). Fakruddin J.M., et al. Blood 109:1841-1849(2007).