

IL27 Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS12322**Specification**

IL27 Antibody (N-Terminus) - Product Information

Application	ICC, WB, IHC
Primary Accession	Q8NEV9
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	27kDa KDa

IL27 Antibody (N-Terminus) - Additional Information**Gene ID** 246778**Other Names**

Interleukin-27 subunit alpha, IL-27 subunit alpha, IL-27-A, IL27-A, Interleukin-30, p28, IL27, IL27A, IL30

Target/Specificity

16 amino acid peptide from near the amino terminus of human IL-27

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

IL27 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

IL27 Antibody (N-Terminus) - Protein Information**Name** IL27**Synonyms** IL27A, IL30**Function**

Associates with EBI3 to form the IL-27 interleukin, a heterodimeric cytokine which functions in innate immunity. IL-27 has 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. It also strongly synergizes with IL-12 to trigger interferon-gamma/IFN- gamma production of naive CD4 T-cells, binds to the cytokine receptor WSX-1/TCCR which appears to be required but not sufficient for IL-27- mediated signal transduction. IL-27 potentiate the early phase of TH1 response and suppress TH2 and TH17 differentiation. It induces the differentiation of TH1

cells via two distinct pathways, p38 MAPK/TBX21- and ICAM1/ITGAL/ERK-dependent pathways. It also induces STAT1, STAT3, STAT4 and STAT5 phosphorylation and activates TBX21/T-Bet via STAT1 with resulting IL12RB2 up-regulation, an event crucial to TH1 cell commitment. It suppresses the expression of GATA3, the inhibitor TH1 cells development. In CD8 T-cells, it activates STATs as well as GZMB. IL-27 reveals to be a potent inhibitor of TH17 cell development and of IL-17 production. Indeed IL27 alone is also able to inhibit the production of IL17 by CD4 and CD8 T-cells. While IL-27 suppressed the development of pro-inflammatory Th17 cells via STAT1, it inhibits the development of anti-inflammatory inducible regulatory T-cells, iTreg, independently of STAT1. IL-27 has also an effect on cytokine production, it suppresses pro-inflammatory cytokine production such as IL2, IL4, IL5 and IL6 and activates suppressors of cytokine signaling such as SOCS1 and SOCS3. Apart from suppression of cytokine 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 as well as its antiangiogenic activity with activation of production of antiangiogenic chemokines such as IP- 10/CXCL10 and MIG/CXCL9. In vein endothelial cells, it induces IRF1/interferon regulatory factor 1 and increase the expression of MHC class II transactivator/CIITA with resulting up-regulation of major histocompatibility complex class II. IL-27 also demonstrates antiviral activity with inhibitory properties on HIV-1 replication.

Cellular Location

Secreted. Note=Does not seem to be secreted without coexpression of EB13

Tissue Location

Expressed in monocytes and in placenta.

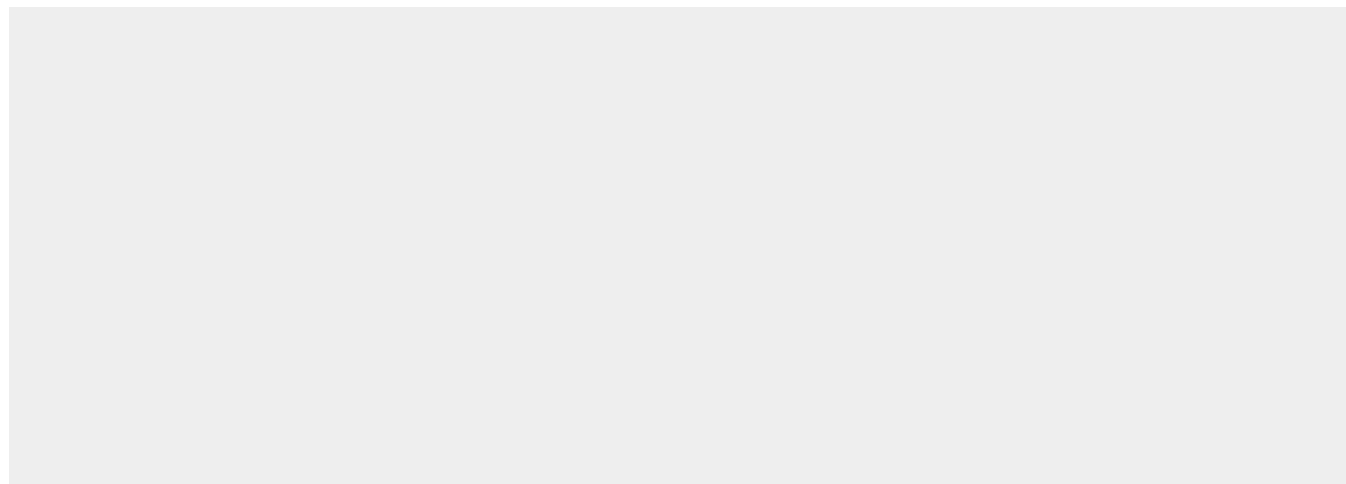
Volume

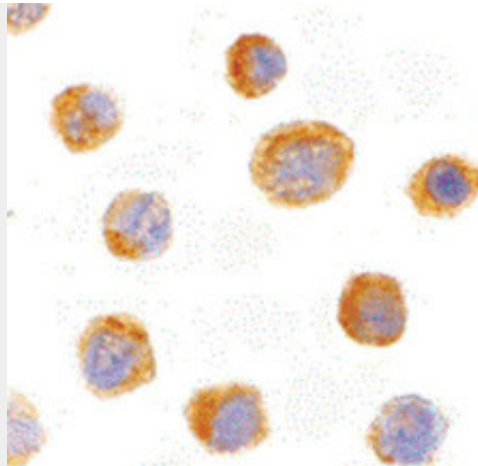
125 µl

IL27 Antibody (N-Terminus) - Protocols

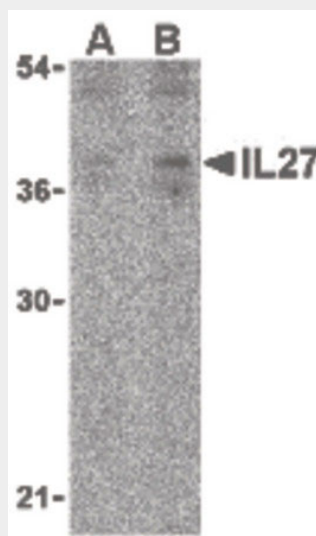
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

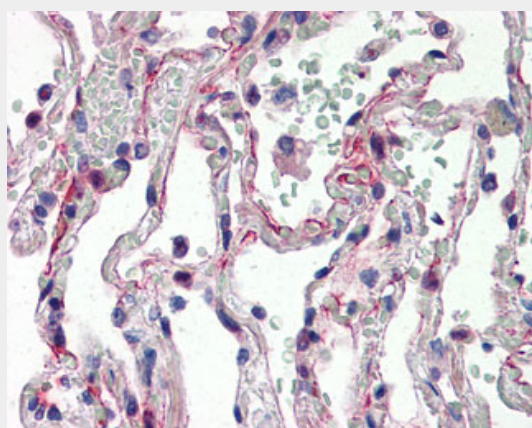
IL27 Antibody (N-Terminus) - Images



Immunocytochemistry of IL-27 in EL4 with IL-27 antibody at 10 ug/ml.



Western blot of IL-27 in EL4 lysate with IL-27 antibody at (A) 2 and (B) 4 ug/ml.



Anti-IL-27 antibody IHC of human lung.

IL27 Antibody (N-Terminus) - Background

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IL27 Antibody (N-Terminus) - References

Pflanz S., et al. *Immunity* 16:779-790(2002).
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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).