

Datasheet for ABIN7156879
anti-IL-27 antibody (AA 29-243)[Go to Product page](#)

1 Image

Overview

Quantity:	100 µL
Target:	IL-27 (IL27)
Binding Specificity:	AA 29-243
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This IL-27 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	Recombinant Human Interleukin-27 subunit alpha protein (29-243AA)
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Purification:	Antigen Affinity Purified

Target Details

Target:	IL-27 (IL27)
Alternative Name:	IL27 (IL27 Products)
Background:	Background: 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

Target Details

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 potentiates the early phase of TH1 response and suppresses 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 of 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 proinflammatory 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 proinflammatory 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 increases 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.

Aliases: EBI3 antibody, IL 27 antibody, IL 27 p28 subunit antibody, IL 27A antibody, IL 30 antibody, IL-27 subunit alpha antibody, IL-27-A antibody, IL27 antibody, IL27-A antibody, IL27A antibody, IL27A_HUMAN antibody, IL27p28 antibody, IL30 antibody, Interleukin 27 antibody, Interleukin 27 subunit alpha antibody, Interleukin 27, 28-KD subunit antibody, Interleukin 30 antibody, Interleukin-27 subunit alpha antibody, p28 antibody

UniProt: [Q8NEV9](#)

Application Details

Application Notes: Recommended dilution: WB:1:200-1:1000,

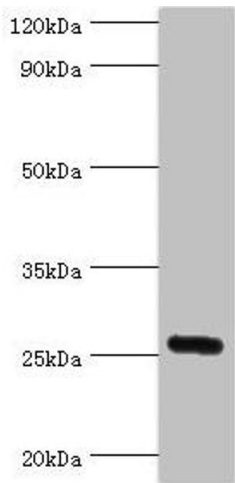
Application Details

Restrictions:	For Research Use only
---------------	-----------------------

Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide, 50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Western Blotting

Image 1. Western blot All lanes: IL27 antibody at 2 µg/mL + Mouse liver tissue Secondary Goat polyclonal to rabbit IgG at 1/10000 dilution Predicted band size: 27 kDa Observed band size: 27 kDa