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Datasheet for 210-401-B54

IL-27/p28 Antibody

Overview

Description:	Anti-Mouse IL-27/p28 (RABBIT) Antibody - 210-401-B54
Item No.:	210-401-B54
Size:	100 µg
Applications:	WB
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

Background:	The cytokine Interleukin 27 (IL-27) is produced in response to inflammation. It is made by activated antigen presenting cells including monocytes, endothelial cells, and dendritic cells. IL-27 consists of a heterodimeric combination of Epstein-Barr virus-induced molecule 3 (EBI3, or IL-27B) non-covalently linked with IL-27 p28 (or IL-27A). It is a regulator of T helper cell development and suppressor of T-cell proliferation. IL-27 has both pro- and anti-inflammatory properties. It can stimulate cytotoxic T cell activity and induce isotype switching in B-cells. It has diverse effects on innate immune cells. It induces monocytes and mast cells to secrete pro-inflammatory cytokines. When infection is present, IL-27 induces naive CD4+ T cells to proliferate and develop Th1 cell responses. As an anti-inflammatory regulator, IL-27 can inhibit Th1 or Th2 responses and restrict the strength and duration of adaptive immune responses. The IL-27 p28 subunit, a 28 kDa glycoprotein belonging to the type I cytokine family, is homologous to IL-12 p35, IL-23 p19, and IL-6. The EBI3 (Epstein-Barr virus-induced molecule 3, or IL-27B) subunit is a 23.6 kDa glycoprotein containing two fibronectin type III domains, and belongs to the type I cytokine receptor family. It can exist as a homodimer and can also heterodimerize with IL-12 p35. It is homologous to the p40 subunit of IL-12 and IL-23 and to the extracellular domain of IL-6 R. EBI3 can heterodimerize also with IL-12 p35, or can exist as a homodimer. The heterodimeric IL-27 receptor contains WSX-1 (TCCR) and gp130. WSX-1 is specific for IL-27, and is expressed on resting/naive CD4+ T cells, CD8+ T cells, NK cells, dendritic cells, monocytes, mast cells, and B cells. Gp130, on the other hand, functions as a subunit of the receptor complexes for at least seven other cytokines. IL-27 also promotes effector functions of NK cells and CD8+ T cells. Anti-Mouse IL-27/p28 Antibody is useful for researchers interested in Cancer Immunology Research.
Synonyms:	rabbit anti-IL-27/p28 antibody, rabbit anti-interleukin 27a antibody, Interleukin-27 subunit alpha, IL-27 subunit alpha, IL-27-A cytokine, IL27-A, p28, IL-30
Host Species:	Rabbit

Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Il27
Reactivity:	Mouse
Immunogen Type:	Recombinant Protein
Immunogen:	This purified antibody was prepared from whole rabbit serum produced by repeated immunizations with full length recombinant mouse IL27/p28 protein.
Purity/Specificity:	This product is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. This antibody is specific for mouse IL-27/p28 protein. A BLAST analysis was used to suggest cross-reactivity with IL-27A/p28 from mouse sources based on 100% homology with the immunizing sequence. Based on 90% or greater positive homology, there is a chance of cross-reactivity to rat. Cross-reactivity with IL-27 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q8K3I6 • NCBI - NP_663611 • GeneID - 246779

Application Details

Tested Applications:	WB
Application Note:	IL-27 is expressed in activated antigen presenting cells including monocytes, endothelial cells, and dendritic cells, for example mouse CD4 splenocytes. This purified antibody has been tested for use in western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 23.6 kDa in size corresponding to the mature mouse IL-27/p28 protein by western blotting in appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:1,000 - 1:5,000
WB:	1:500 - 1:2,000

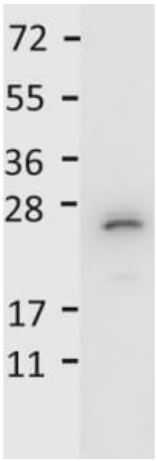
Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store anti-IL27 antibody at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



Western Blot
Detection of recombinant IL27/p28 protein by Rockland's anti-Mouse IL-27/p28 antibody. Recombinant mouse IL27/p28 was loaded on to an SDS-PAGE gel at 0.25 µg and after separation, transferred to nitrocellulose. The membrane was blocked with 1% BSA in TBST for 30 min at RT, followed by incubation with primary antibody diluted 1:1,000 in 1% BSA in TBST overnight at 4°C. After washes, the blot was reacted with secondary antibody HRP Goat anti-Rabbit IgG antibody diluted 1:40,000 in blocking buffer (p/n MB-070) for 30 min at RT. Data was collected using Bio-Rad VersaDoc® 4000 MP imaging system.

Disclaimer

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