Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 210-406-B54

IL-27/p28 Antibody Biotin Conjugated

Overview

Description:	Anti-Mouse IL-27/p28 (RABBIT) Antibody Biotin Conjugated - 210-406-B54
Item No.:	210-406-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 34 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.

Synonyms:	rabbit anti-IL-27/p28 biotin conjugated antibody, rabbit anti-interleukin 27a biotin conjugated antibody, Interleukin-27 subunit alpha, IL-27 subunit alpha, IL-27-A cytokine, IL27-A, p28, IL-30
Host Species:	Rabbit
Conjugate:	Biotin
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:	1:20,000-1:100,000

IHC:	1:1,000-1:5,000
WB:	1:2,000-1:10,000

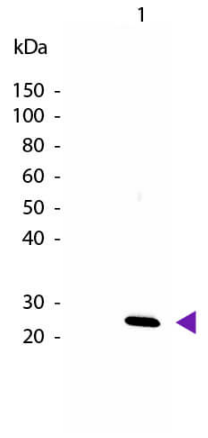
Formulation

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:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial 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 one (1) year from date of receipt.

Images



Western Blot
Western Blot of Biotin Conjugated Rabbit anti-IL-27/p28 antibody. Lane 1: Mouse IL-27/p28. Lane 2: None. Load: 50 ng per lane. Primary antibody: None. Secondary antibody: Biotin rabbit secondary antibody at 1:1,000 for 60 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 24 kDa, 24 kDa for Mouse IL-27/p28. Other band(s): None.

www.rockland.com
tech@rockland.com
+1 484.791.3823

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.