Order online now!

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

Datasheet for 210-501-B54

Mouse IL-27/p28 Antibody

Overview

Description:	Anti-IL-27/p28 (RAT) Monoclonal Antibody - 210-501-B54
Item No.:	210-501-B54
Size:	100 µg
Applications:	ELISA, FC, Multiplex, WB
Reactivity:	Mouse
Host Species:	Rat

Product Details

Background:	Mouse IL-27/p28 Subunit, also known as Interleukin-30, is a member of the IL-12 family of cytokines. When combined with EBI3 (Epstein-Barr virus induced gene 3), the heterodimer formed is IL-27. Mouse p28 is a proinflammatory cytokine inducing immunomodulatory effects. Current research is underway to delineate specific biological functions.
Synonyms:	rat anti-IL-27/p28 antibody, rat anti-interleukin 27a antibody, Interleukin-27 subunit alpha, IL-27 subunit alpha, IL-27-A cytokine, IL27-A, p28, IL-30
Host Species:	Rat
Clonality:	Monoclonal
Clone ID:	3H12.F10
Format:	IgG2a

Target Details

Gene Name:	Il27
Reactivity:	Mouse
Immunogen Type:	Recombinant Protein
Immunogen:	Anti-IL-27/p28 monoclonal antibody was produced in rats by repeated immunizations with mature length recombinant mouse p28 protein (produced in E.coli) followed by hybridoma development.

Purity/Specificity:	IL-27 / p28 antibody is purified 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 and rat p28 protein. Cross-reactivity with IL-27 from other sources has not been determined.
Relevant Links:	• NCBI - NP_663611.1 • UniProtKB - Q8K3I6 • GeneID - 246779

Application Details

Tested Applications:	ELISA, FC, Multiplex, 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 Flow Cytometry, ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 26 KDa in size corresponding to the mature mouse p28 protein, a non-glycosylated polypeptide chain consisting of amino acids, 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:	1:10,000
FC:	1 ug / ml
WB:	1:1000

Formulation

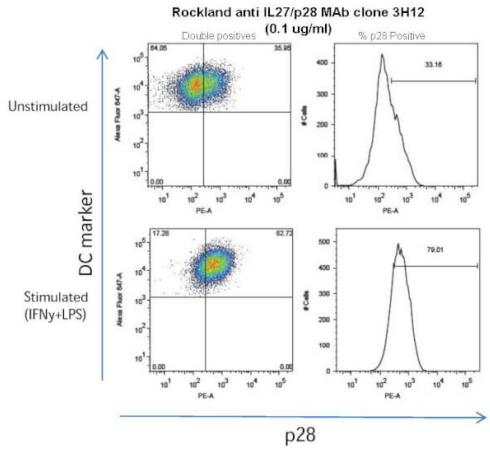
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

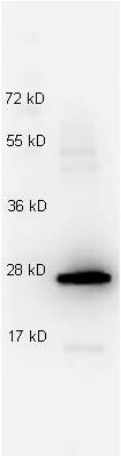
Shipping & Handling

Shipping Condition:	Dry Ice

Storage Condition:	Store vial 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





Flow Cytometry
Mouse peritoneal macrophages were grown in culture for 24 hours, stimulated with 10ng/mL IFN gamma and 1ug/mL LPS for 14 hours and incubated for 4 hours with Bredfeldin A. Cells were harvested, washed, aliquoted 1x106 cells per sample, and fixed and permeabilized according to a standard protocol. Samples were stained with biotinylated primary anti-mouse p28 antibody at (0.1-10ug/mL primary antibody alongside negative controls of unstimulated cells and isotype controls. Cells were stained with 0.25ug/mL rat anti-mouse CD107b conjugated Alexa Fluor 647 and PHYCOERYTHRIN Conjugated secondary at 1:100 and analyzed by flow cytometry. Stimulated cells showed increase PE staining (horizontal axis) when compared with unstimulated cells.

Western Blot
Anti-IL-27/p28 antibody in western blot shows detection of recombinant mouse IL-27/p28. Recombinant protein (0.1 µg) was loaded on to an SDS-PAGE gel, and after separation, transferred to nitrocellulose. The expected band is approximately 26 kDa in size. The membrane was blocked with 1% BSA in TBST for 30 min at RT, followed by incubation with Rockland's Anti-IL-27/p28 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-Rat IgG antibody (p/n 612-103-120) 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

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.