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

Datasheet for 210-501-B32S

Mouse IL-17A Antibody

Overview

Description:	Anti-IL-17A (RAT) Monoclonal Antibody - 210-501-B32S
Item No.:	210-501-B32S
Size:	25 µL
Applications:	ELISA, FC, Multiplex, WB
Reactivity:	Mouse
Host Species:	Rat

Product Details

Background:	Mouse Interleukin-17A (IL-17A), also known as CTLA-8, is a proinflammatory cytokine member of a six-species family of proteins (IL-17A-17F). Mouse IL-17A protein is a homodimer consisting of two 134 amino acids peptides. IL-17A is secreted mainly by activated CD4+ and CD8+ T lymphocytes and acts through its receptor, IL-17R, to induce the expression of many mediators of inflammation, most strikingly, those that are involved in the proliferation, maturation and chemotaxis of neutrophils. Elevated levels of IL-17A have been associated with several conditions, including rheumatoid arthritis, airway inflammation, allograft rejection, inflammatory bowel disease, psoriasis, cancer and multiple sclerosis. There is 58% identity between the amino acid sequence of human and mouse IL-17A.
Synonyms:	rat anti-IL-17A antibody, rat anti-interleukin17A antibody, Interleukin-17A cytokine, IL-17A, IL-17, Cytotoxic T-lymphocyte-associated antigen 8, CTLA-8
Host Species:	Rat
Clonality:	Monoclonal
Clone ID:	20B4.G10.F5
Format:	IgG2a

Target Details

Gene Name:	IL17a
Reactivity:	Mouse
Immunogen Type:	Recombinant Protein

Immunogen:	This Protein A purified monoclonal antibody was produced in rats by repeated immunizations with full length recombinant mouse IL-17A protein (produced in E.coli) followed by hybridoma development.
Purity/Specificity:	Anti-IL-17A 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 Il-17a protein. Cross-reactivity with Il-17a from other sources has not been determined.
Relevant Links:	• UniProtKB - Q62386 • NCBI - NP_034682.1 • GeneID - 16171

Application Details

Tested Applications:	ELISA, FC, Multiplex, WB
Application Note:	IL-17A monoclonal antibody has been tested for use in western blotting, flow cytometry and ELISA. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 23 kDa in size corresponding to the mature mouse Il17A protein, a non-glycosylated polypeptide chain consisting of 207 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:	1:500
WB:	1:1000

Formulation

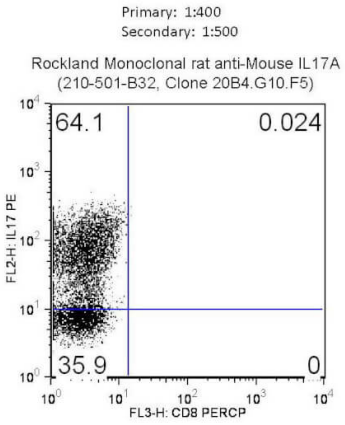
Physical State:	Liquid (sterile filtered)
Concentration:	2.94 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

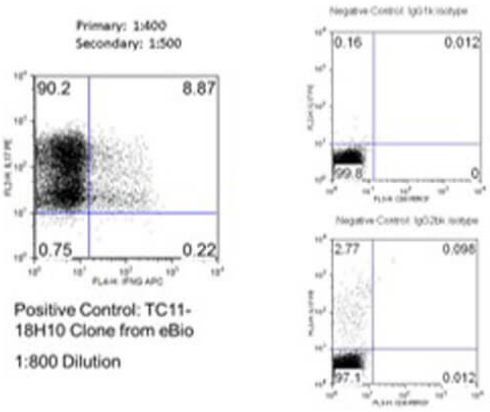
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is three (3) months from date of receipt.

Images



Flow Cytometry
Rockland monoclonal anti-IL-17A was used to detect IL-17A and separate Mouse CD4+ Cells by flow cytometry. Mouse CD4+ T cells were isolated from freshly dissected spleen by centrifugation in T cell separation media and selected by magnetic separation. Cells were grown on plates coated with anti-CD3 antibody, and stimulated with: 5 µg/mL anti-CD28, 10 ng/mL IL-1beta, 50 ng/mL mouse IL-6, 1 ng/mL TGFbeta1 and 10 µg/mL anti-mouse IFN gamma over 8-10 days of culture. Cells were incubated for 15-20 minutes with addition of rat anti-mouse CD4 APC at a concentration of 0.125 µg/mL, washed, fixed and permeabilized and incubated with Rockland Rat anti-mouse IL-17A monoclonal Antibody (210-501-B32) or controls as shown. Cells were washed, incubated in streptavidin conjugated PE, fixed and analyzed by Flow cytometry. Shown here are results for Rockland's monoclonal anti mouse IL-17A antibody (210-501 -B32).



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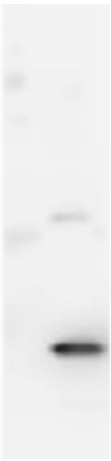

Western Blot

Western Blot showing detection of Mouse IL-17A. 100 ng of Mouse IL-17A was run on a 4-20% gel and transferred to 0.45 µm nitrocellulose. After blocking with 1% BSA-TTBS (p/n MB-013, diluted to 1X) 30 min at 20°C, Anti-Mouse IL-17A (RAT) Antibody (p/n 210-501-B32) was used at 1:1000 in 1% BSA-TTBS over night at 4°C. Peroxidase conjugated Rabbit Anti-mouse secondary antibody (p/n 610-4302) was diluted in Blocking Buffer for Fluorescent Western Blotting (p/n MB-070) at 1:40,000 for 30 min at 20°C and imaged using the Bio-Rad VersaDoc® 4000 MP. Band indicates correct 23 kDa molecular weight position expected for Mouse IL-17A.

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