

Datasheet for 212-406-B32**IL-17A Antibody Biotin Conjugated****Overview**

Description:	Anti-Rat IL-17A (RABBIT) Antibody Biotin Conjugated - 212-406-B32
Item No.:	212-406-B32
Size:	100 µg
Applications:	WB, ELISA
Reactivity:	Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Rat IL17-A (also known as Interleukin-17, Cytotoxic T-lymphocyte-associated antigen 8 and CTLA-8) is a proinflammatory cytokine member of a six-species family of proteins (IL-17A-17F). Rat 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 rat IL-17A. Anti-IL-17A antibody is ideal for investigators involved in Immunology research.
Synonyms:	rabbit anti-IL-17A biotin Conjugated Antibody, rabbit anti-Interleukin-17A biotin Conjugated Antibody, Interleukin17, IL-17, Cytotoxic T-lymphocyte-associated antigen 8 and CTLA-8
Host Species:	Rabbit
Conjugate:	Biotin
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	10-20

Target Details

Gene Name:	Il17a
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Reactivity:	Mouse, Rat
Immunogen Type:	Recombinant Protein
Immunogen:	This purified antibody was prepared from whole rabbit serum produced by repeated immunizations with full length recombinant rat IL17-A protein.
Purity/Specificity:	This purified antibody has been heated to 56°C for 30 minutes. In ELISA and other immunoreactive assays, this antibody will recognize both native and recombinant rat IL17-A in cell supernatants and certain body fluids. A control of similarly diluted normal rabbit IgG is recommended.
Relevant Links:	• UniProtKB - Q61453 • NCBI - Q61453.1 • GeneID - 301289

Application Details

Tested Applications:	WB
Suggested Applications:	ELISA (Based on references)
Application Note:	This purified antibody has been tested for use in western blotting and suitable in ELISA. By western blot a band approximately 30.0 kDa in size corresponding to rat IL17-A protein is expected in the appropriate cell lysate or extract. Specific conditions for reactivity should be optimized by the end user.
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)

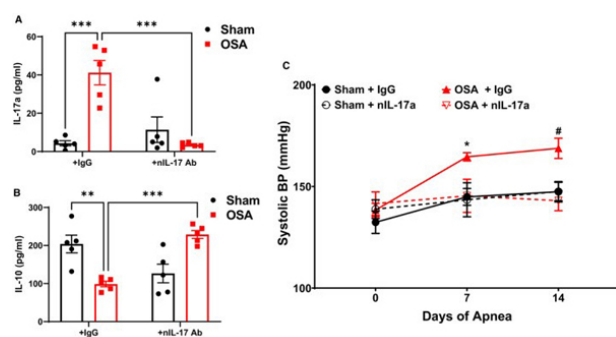
Shipping & Handling

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



ELISA

Plasma levels of interleukin-17a (A) and interleukin-10 (B). Systolic blood pressure (C) in sham and OSA rats treated with a nonimmune IgG or interleukin-17a neutralizing antibody. n=5 in (A and B), n=5–6 in (C); *P<0.05 for Sham +IgG vs OSA+IgG, # P<0.05 of OSA+nIL-17a vs OSA+IgG, ***P<0.001 using two-way ANOVA (A, B) or 2-way repeated measures ANOVA and multiple comparisons with Tukey's multiple comparisons test (C). Error bars represent $\pm$ SEM. BP indicates blood pressure; IgG, immunoglobulin G; and OSA, obstructive sleep apnea. Fig 4. PMID: 37260032



Western Blot

Western Blot showing detection of Rat IL-17A. 50ng of Rat IL-17A (Lane 1) was run on a 4-20% gel and transferred to 0.45 μ m nitrocellulose. After blocking with 5% Biotto (p/n B501-0500) 30 min at 20°C, Anti-Rat IL-17A (RABBIT) Antibody Biotin Conjugated (p/n 212-406-B32) secondary antibody was used at 1:5000 in Blocking Buffer for Fluorescent Western Blotting (p/n MB-070). HRP Streptavidin (p/n S000-03) was used at 1:40,000 in MB-070 for 30 min at 20°C and imaged using the Bio-Rad VersaDoc® 4000 MP. Arrow indicates correct 15 kDa molecular weight position expected for Rat IL-17A.

References

- Ayyaswamy S et al. Obstructive Sleep Apnea-Induced Hypertension Is Associated With Increased Gut and Neuroinflammation. *J Am Heart Assoc.* (2023)

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.