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Datasheet for 212-401-B32

IL-17A Antibody

Overview

Description:	Anti-Rat IL-17A (RABBIT) Antibody - 212-401-B32
Item No.:	212-401-B32
Size:	100 µg
Applications:	WB
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.
Synonyms:	rabbit anti-IL-17A Antibody, rabbit anti-Interleukin-17A Antibody, Interleukin17, IL-17, Cytotoxic T-lymphocyte-associated antigen 8 and CTLA-8
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Il17a
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
Application Note:	This purified antibody has been tested for use in western blotting. Reactivity is also expected in ELISA, neutralizations, radioimmunoassay and immunohistochemistry. The endotoxin content is estimated to be <10 pg/µl by the LAL method. The recombinant immunogen is a non-glycosylated homodimer joined by disulfide bonds having a molecular mass of 30.0 kDa. By western blot from a reducing gel expect a band approximately 15.0 kDa in size corresponding to rat IL17-A protein 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:	1:1,000 - 1:5,000
WB:	1:1,000

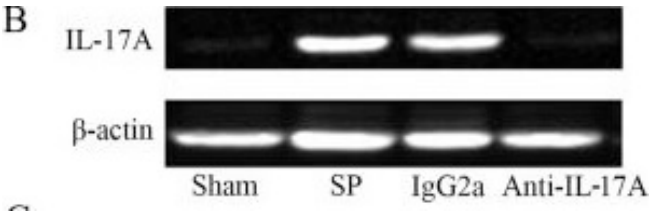
Formulation

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)

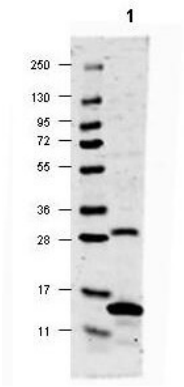
Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store 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 six (6) months from date of receipt.

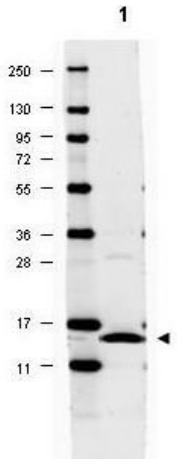
Images



Western Blot
Expression of atrial fibrillation (AF)-related pro-inflammatory cytokines at 4 days after surgery. (A) Fold mRNA expression of interleukin (IL)-6, IL-1β, transforming growth factor-β1 (TGF-β1) and IL-17A. (B) Protein expression of IL-17A detected by western blot analysis. (C) Quantitative analysis of IL-17A protein expression. *P<0.05 and **P<0.01 vs. Sham. #P<0.05 and ##P<0.01 vs. IgG2a. Sham, sham-operated rats; SP, rats with sterile pericarditis. Figure provided by CiteAb. Source: Int J Mol Med, PMID: 25955429.



Western Blot
Western blot using Rockland's anti-IL-17A antibody shows detection of rat recombinant IL-17A protein (lane 1). Approximately 2 µg of recombinant protein was loaded onto the gel. Primary antibody was used at a 1:1,000 dilution. The membrane was washed and reacted with a 1:20,000 dilution of DyLight™ 649 conjugated Gt-a-Rabbit IgG (p/n 611-143-122). Expect ~15kDa, or 30kDa homodimer. Molecular weight estimation was made by comparison to prestained MW markers indicated at the left. Other detection systems will yield similar results.



Western Blot
Western blot using Rockland's anti-IL-17A antibody shows detection of rat recombinant IL-17A protein (arrowhead, lane 1). Approximately 2 µg of recombinant protein was loaded onto the gel. Primary antibody was used at a 1:1,000 dilution. The membrane was washed and reacted with a 1:20,000 dilution of DyLight™ 649 conjugated Gt-a-Rabbit IgG (p/n 611-143-122). Expect ~15kDa, or 30kDa homodimer. Molecular weight estimation was made by comparison to prestained MW markers indicated at the left. Other detection systems will yield similar results.

References

- Fu et al. Interleukin-17A contributes to the development of post-operative atrial fibrillation by regulating inflammation and fibrosis in rats with sterile pericarditis. *International Journal of Molecular Medicine* (2015)

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