Datasheet for 600-401-BU6

IL-16 Antibody

Overview

Description:	Anti-IL-16 (RABBIT) Antibody - 600-401-BU6
Item No.:	600-401-BU6
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	IL-16 was initially identified as a chemotactic cytokine, but is now known to possess a wide range of activities. Later studies have more fully characterized IL-16 as an immunomodulatory cytokine that contributes to the regulatory process of CD4+ T cell recruitment and activation at sites of inflammation in association with asthma and several autoimmune diseases. The precursor of IL-16 (pro-IL-16) is thought to be cleaved towards the C-terminal region by Caspase-3, releasing a 20 kDa active form that binds to and signals through CD4. Besides acting as a chemotactic cytokine, IL-16 is thought to also be involved in the regulation of T cell proliferation and multiple infectious, immune-mediated, and autoimmune inflammatory disorders including irritable bowel syndrome, systemic lupus erythematosus, and neurodegenerative disorders. At least two isoforms of IL-16 are known to exist; the longer isoform (also known as NIL-16) is detected only in neurons of the cerebellum and hippocampus.
Synonyms:	IL-16 Antibody, LCF, NIL16, PRIL16, prIL-16, Pro-interleukin-16, Lymphocyte chemoattractant factor, IL-16
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	IL16
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-IL-16 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 14 amino acid synthetic peptide near the N-terminus of human IL-16.
Purity/Specificity:	Anti-IL-16 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody will only detect the NIL-16 isoform.
Relevant Links:	• UniProtKB - Q14005 • GeneID - 3603 • NCBI - AAQ86961

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-IL-16 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 142 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	1-2 µg/mL

Formulation

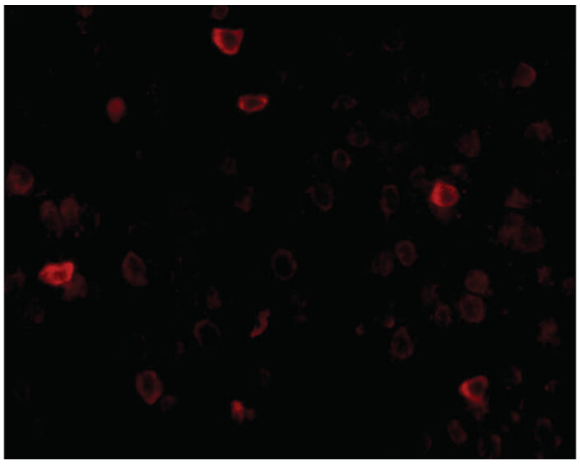
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

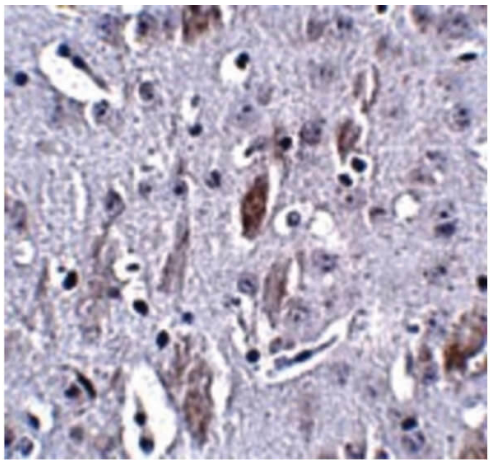
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. 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.

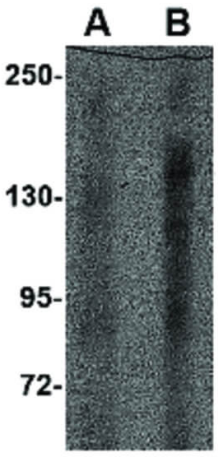
Images



Immunofluorescence Microscopy
Immunofluorescence Microscopy of IL-16 antibody. Tissue: Mouse brain tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: IL-16 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: IL-16 as a red fluorescent signal.



Immunohistochemistry
Immunohistochemistry of IL-16 antibody. Tissue: Mouse brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: IL-16 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: IL-16 is nuclear and occasionally cytoplasmic. Staining: IL-16 as a precipitated red signal with hematoxylin purple nuclear counterstain.



Western Blot

Western Blot of IL-16 antibody. Lane A: Rat brain tissue lysate at 1 µg/ml. Lane B: Rat brain tissue lysate at 2 µg/ml. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 141.7 kDa, ~140 kDa for IL-16.

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.