Order online now!

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

Datasheet for 600-401-MN0

Foxp3 Antibody

Overview

Description:	Anti-FOXP3 (RABBIT) Antibody - 600-401-MN0
Item No.:	600-401-MN0
Size:	100 µg
Applications:	ELISA, FC, IF, Multiplex, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	FOXP3 is a member of the forkhead/winged-helix family of transcriptional regulators. The FOX family of transcription factors is a large group of proteins that share a common DNA binding domain termed a winged-helix or forkhead domain. FOXP3 acts as a repressor of transcription and regulates T cell activation, with its overexpression in CD4 T cells leading to an attenuation of activation-induced cytokine production and proliferation. In regulatory T (Treg) cells, FOXP3 is essential for Treg suppressor function and its expression leads to the repression of IL-17 expression. Mutations in FOXP3 gene cause IPEX, a fatal, X-linked inherited disorder characterized by immune dysregulation. The FOXP3 protein is essential for normal immune homeostasis. Specifically, FOXP3 represses transcription through a DNA binding forkhead domain, thereby regulating T cell activation. Anti-FOXP3 antibody is useful for researchers interested in transcription factor activity, polyendocrinopathy, immunodysregulation, and DNA binding research.
Synonyms:	Rabbit Anti-Forkhead Box P3 Antibody, Immune Dysregulation Polyendocrinopathy Enteropathy, X-Linked, Forkhead Box Protein P3, Scurfin, IPEX, Immunodeficiency Polyendocrinopathy Enteropathy X-Linked, FOXP3delta7, DIETER, AIID, PIDX, XPID, JM2, Forkhead box protein P3 41 kDa form, Forkhead box protein P3 C-terminally processed
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Foxp3

Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-Foxp3 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a near N-terminal portion of mouse Foxp3 conjugated to Keyhole Limpet Hemocyanin (KLH).
Purity/Specificity:	This affinity purified antibody is directed against mouse Foxp3. This product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with the antigen based on 100% homology with the immunizing sequence to mouse, human, and Macaca fascicularis.
Relevant Links:	• NCBI - NP_001186276.1 • GeneID - 20371 • UniProtKB - Q99JB6

Application Details

Tested Applications:	ELISA, FC, IF, Multiplex, WB
Application Note:	Anti-Foxp3 Antibody has been tested in ELISA, WB, IF, and FLOW. Expect a band for isoforms 1 and 4 at ~47.2 and 44.4kDa in western blot using appropriate tissues and lysates. Positive control used: NIH/3T3 cells in Immunofluorescence and Flow cytometry.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000-1:50,000
FC:	1:25
IF:	15µg/mL
WB:	1:1000

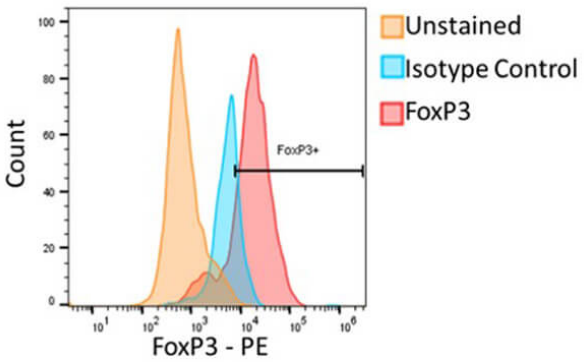
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	0.99 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

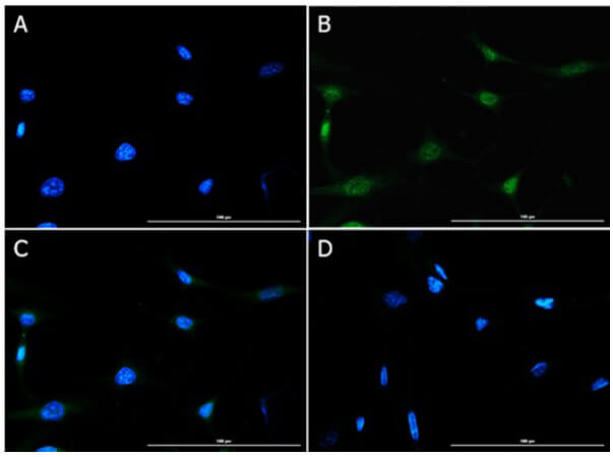
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C 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.

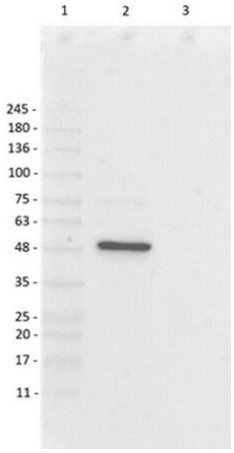
Images



Flow Cytometry
Flow Cytometry of Rabbit Anti-Foxp3 Antibody. Cells: NIH-3T3 cells. Treatment: Fix/Perm solution for 30 minutes at 4°C and washed twice in Permeabilization Buffer. Primary Antibody: Anti-Foxp3 4µL in 100uL FACS buffer for 30 min at room temperature. Secondary Antibody: F(ab')2 Donkey Anti-Rabbit IgG Phycoerythrin (p/n 711-708-127) 5µL of secondary antibody in 100µL of reaction (used for intra-nuclear staining). Isotype control: Rabbit Anti-Rad9 pS1129 Antibody (p/n 600-401-345).



Immunofluorescence Microscopy
Immunofluorescence of Rabbit Anti-Foxp3 Antibody. Cells: NIH-3T3 cells. Fixative: 100% MeOH. Permeabilization: 0.3% Triton X-100. Primary Antibody: Anti-Foxp3 at 15µg/mL overnight at 2-8°C. Secondary Antibody: Donkey Anti-Rabbit IgG DyLight™488 (p/n 611-741-127) at 5µg/mL for 60mins at RT. Nuclear counterstain: DAPI. Staining: (A) DAPI, (B) Anti-Foxp3 + Dylight™488, (C) Merge A+B, (D) secondary only.



Western Blot

Western Blot of Rabbit Anti-Foxp3 Antibody. Lane 1: Opal prestain Molecular Weight Marker (p/n MB-210-0500). Lane 2: Human FoxP3 Overexpression HEK293T Lysate (10 µg). Lane 3: Empty Vector HEK293 Lysate Control (10 µg). Primary Antibody: Anti-Foxp3 at 1:1000 overnight at 2-8°C. Secondary Antibody: Goat anti-Rabbit IgG HRP (p/n 611-103-122) at 1:40,000 for 60mins at RT. Block: 5% BLOTTO/TBST (p/n B501-0500). Predicted MW: ~44-49kDa. Observed MW: ~50kDa.

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.