

Datasheet for 600-401-CU4**MICA Antibody****Overview**

Description:	Anti-MICA (RABBIT) Antibody - 600-401-CU4
Item No.:	600-401-CU4
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	Major histocompatibility complex (MHC) class I proteins are ubiquitously expressed and mediate the recognition of intracellular antigens by cytotoxic T cells. A related family, termed the MHC class I chain-related (MIC) proteins are recognized by NKG2D, a receptor on NK and T cells, and promote anti-tumor activity. MICA, a member of the MIC family, is widely expressed on many tumors, and it is the MICA/NKG2D interaction that is thought to stimulate the anti-tumor reactivity by T lymphocytes. Both MICA and MICB mRNA are widely expressed in normal tissues, with MICA being present in virtually every tissue except the nervous system, suggesting that MIC protein expression may only be one component of the anti-tumor activity of the immune system.
Synonyms:	MICA Antibody, PERB11.1, PERB11.1, MHC class I polypeptide-related sequence A, MIC-A
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	MICA
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-MICA antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide from near the C-terminus of human MICA.
Purity/Specificity:	Anti-MICA Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with MICA from other sources has not been determined.
Relevant Links:	• UniProtKB - Q29983 • GeneID - 4276 • NCBI - NP_000238

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-MICA 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 43 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:	1:5000 - 1:20,000
IF:	20 µg/mL
IHC:	10 µg/mL
WB:	0.5-2 µg/mL

Formulation

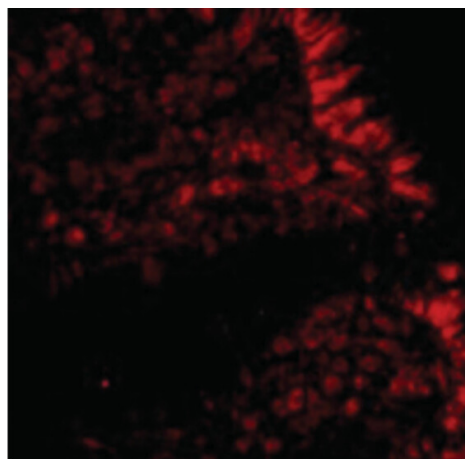
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Wet Ice
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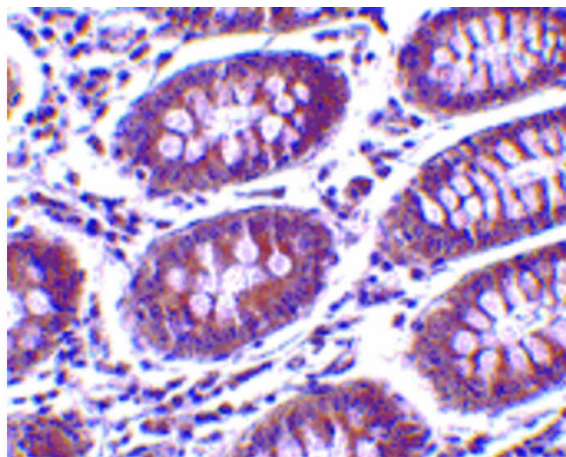
Storage Condition:	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



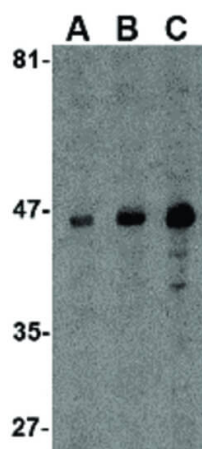
Immunofluorescence Microscopy

Immunofluorescence Microscopy of MICA antibody. Tissue: Human colon cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: MICA 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: MICA as a red fluorescent signal.



Immunohistochemistry

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

**Western Blot**

Western Blot of MICA antibody. Lane A: A-20 cell lysate at 0.5 $\mu\text{g/mL}$. Lane B: A-20 cell lysate at 1 $\mu\text{g/mL}$.

Lane C: A-20 cell lysate at 2 $\mu\text{g/mL}$. 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: 42.9 kDa, ~46 kDa for MICA.

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.