

Datasheet for 600-401-FN5**TREX1 Antibody****Overview**

Description:	Anti-TREX1 (RABBIT) Antibody - 600-401-FN5
Item No.:	600-401-FN5
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Trex1 is the major human 3' to 5' exonuclease which is required for checkpoint signaling after DNA damage. It is ubiquitously expressed, binds to single stranded DNA coated with replication protein A that accumulates at sites of DNA damage and recruits the ataxia telangiectasia and Rad3 related protein (ATR), a checkpoint kinase, to sites of DNA damage and replication stress. Trex1 is required for ATR expression. This gene uses two different open reading frames. The upstream ORF encodes proteins which interact with ATR and localize to intranuclear foci induced by DNA damage and are essential components of the DNA damage checkpoint. The downstream ORF encodes proteins with 3' to 5' exonuclease activity and may be a subunit of human DNA polymerase III. Multiple transcript variants encoding different isoforms have been found. Mutations in this gene result in Aicardi-Goutieres syndrome, chilblain lupus, and Cree encephalitis.
Synonyms:	TREX1 Antibody, CRV, AGS1, DRN3, HERNS, Three prime repair exonuclease 1, DNase III
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TREX1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-TREX1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide near the internal region of human TREX1.
Purity/Specificity:	Anti-TREX1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. TREX1 antibody will not cross-react with the related protein TREX2.
Relevant Links:	• UniProtKB - Q9NSU2 • GeneID - 7276 • NCBI - P02766

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-TREX1 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 39 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:	1:5000-1:10000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	0.5-1 µg/mL

Formulation

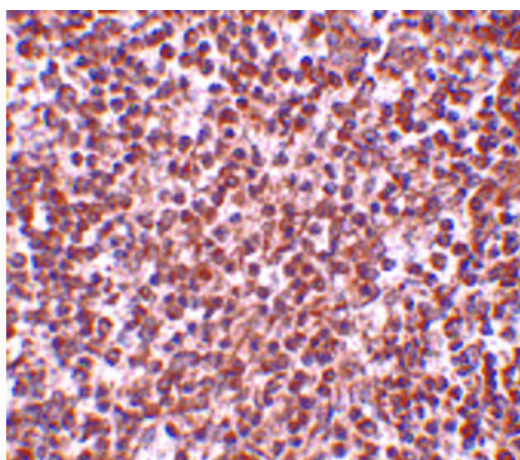
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
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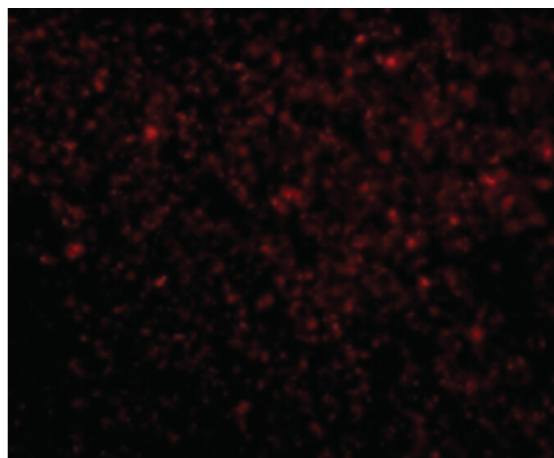
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



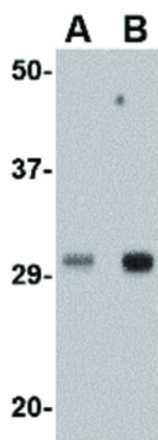
Immunohistochemistry

Immunohistochemistry of TRES1 antibody. Tissue: Human spleen tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: TRES1 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: TRES1 is nuclear and occasionally cytoplasmic. Staining: TRES1 as a precipitated red signal with hematoxylin purple nuclear counterstain.



Immunofluorescence Microscopy

Immunofluorescence Microscopy of TRES1 antibody. Tissue: Human spleen cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: TRES1 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: TRES1 as a red fluorescent signal.

**Western Blot**

Western Blot of TREX1 antibody. Lane A: Human spleen tissue lysate at 0.5 $\mu\text{g/mL}$. Lane B: Human spleen tissue lysate at 1 $\mu\text{g/mL}$. 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: 15.8 kDa, ~30 kDa for TREX1.

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.