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TREX2 Antibody
Catalog # ASC10827

Specification

TREX2 Antibody - Product Information

Application	**WB, IHC, IF**
Primary Accession	Q9BQ50
Other Accession	Q9BQ50, 47606206
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**TREX2 antibody can be used for detection of TREX2 by Western blot at 2.5 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.**

TREX2 Antibody - Additional Information

Gene ID **11219**

Target/Specificity
TREX2; This TREX2 antibody will not cross-react with the related protein TREX1.

Reconstitution & Storage
TREX2 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
TREX2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TREX2 Antibody - Protein Information

Name TREX2

Function
Exonuclease with a preference for double-stranded DNA with mismatched 3' termini. May play a role in DNA repair.

Cellular Location
Nucleus.

Tissue Location
Detected in heart, breast, prostate, skeletal muscle, testis, uterus, bone marrow, colon, small intestine, stomach and thymus.

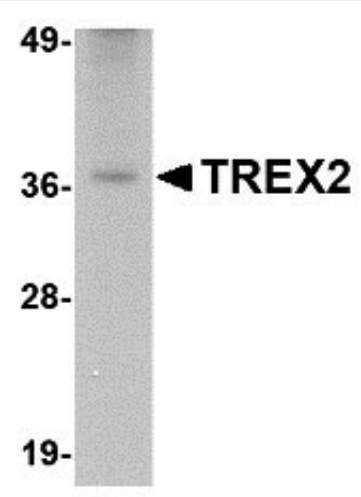
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TREX2 Antibody - Protocols

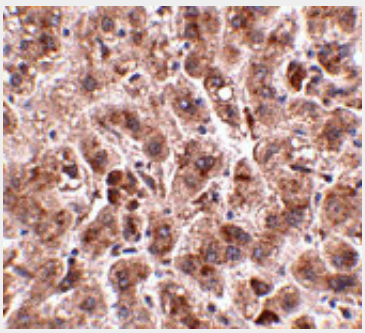
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TREX2 Antibody - Images

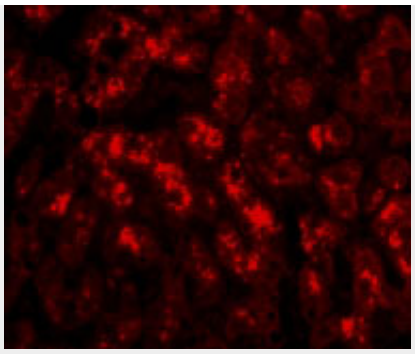


Western blot analysis of TREX2 in rat liver tissue lysate with TREX2 antibody at 2.5 µg/mL.



Immunohistochemistry of TREX2 in human liver tissue with TREX2 antibody at 2.5 µg/mL.

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Immunofluorescence of TREX2 in Human Liver cells with TREX2 antibody at 20 µg/mL.

TREX2 Antibody - Background

TREX2 Antibody: TREX2 is one of two major human 3' to 5' exonucleases which are required for checkpoint signaling after DNA damage. While the related protein TREX1 is required for ATR expression and mutations in this gene result in Aicardi-Goutieres syndrome, chilblain lupus, and Cree encephalitis, less is known about TREX2. Like TREX1, TREX2 is ubiquitously expressed in all tissues examined. X-ray crystallography studies of TREX2-single strand DNA complexes revealed that TREX2 binds DNA as a dimer and may act to displace the second DNA strand, suggesting that TREX2 unzips and denatures double stranded DNA and feed the substrate DNA strand into the TREX2 active site. At least two isoforms of TREX2 are known to exist.

TREX2 Antibody - References

Mazur DJ and Perrino FW. Identification and expression of the TREX1 and TREX2 cDNA sequences encoding mammalian 3→5 exonucleases. J. Biol. Chem.1999; 274:19655-60.
Cortez D, Guntuku S, Qin J, et. al. ATR and ATRIP: partners in checkpoint signaling. Science2001; 294:1713-6
Crow YJ, Hayward BE, Parmar R, et al. Mutations in the gene encoding the 3-5DNA exonuclease TREX1 cause Aicardi-Goutieres syndrome at the AGS1 locus. Nat. Genet. 2006; 38:917-20
Mazur DJ and Perrino FW. Structure and expression of the TREX1 and TREX2 3'→5' exonuclease genes. J. Biol. Chem.2001; 276:14718-27.