

# TREX2 Antibody

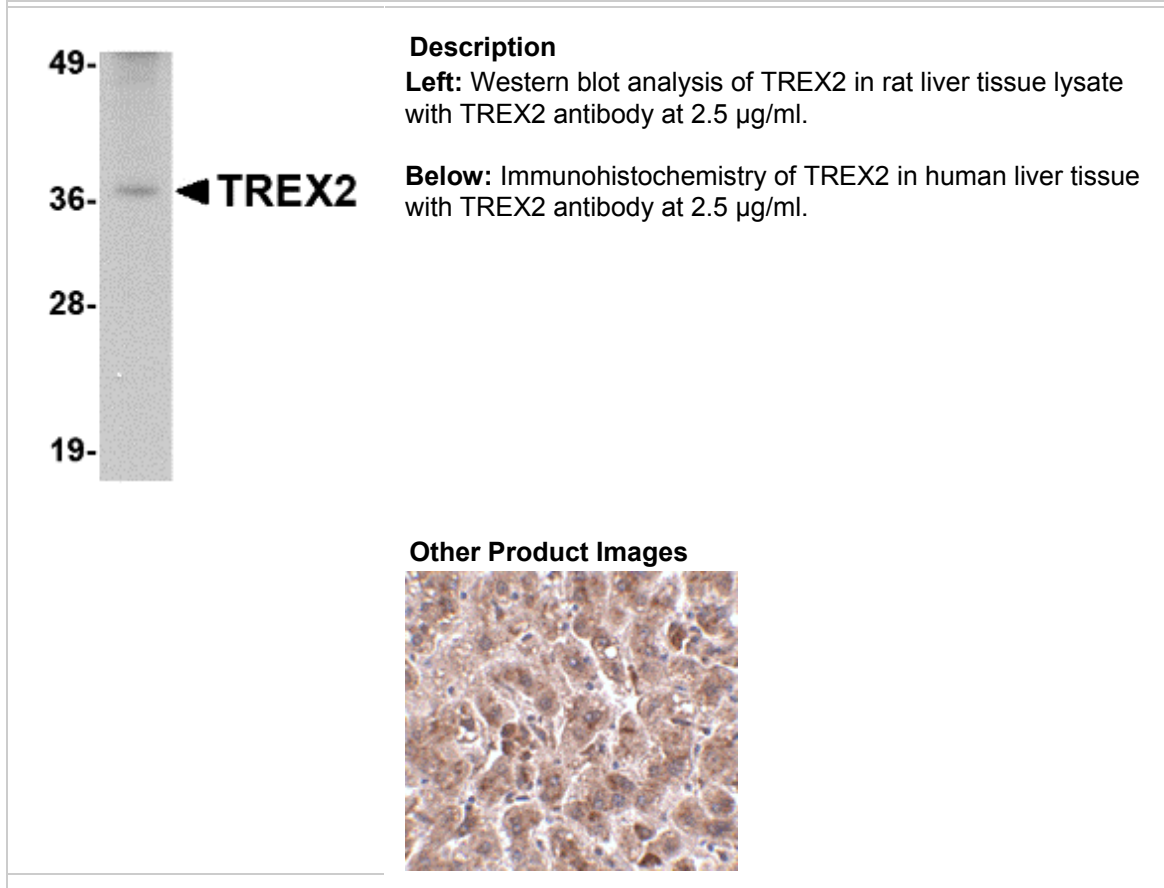
HOM-4971

## Background

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. This TREX2 antibody will not cross-react with the related protein TREX1.

## Additional Names

TREX2, Three prime repair exonuclease 2



## Source

TREX2 antibody was raised against a 15 amino acid peptide near the carboxy terminus of human TREX2.

## Purification

Affinity chromatography purified via peptide column

### **Clonality / Clone**

This is a polyclonal antibody.

### **Host**

TREX2 antibody was raised in rabbit.

Please use anti-rabbit secondary antibodies.

### **Application**

TREX2 antibody can be used for detection of TREX2 by Western blot at 2 – 4 µg/ml.

### **Tested Application**

E, WB, IHC

### **Buffer**

Antibody is supplied in PBS containing 0.02% sodium azide.

### **Blocking Peptide**

TREX2 Peptide (contact Zyagen for availability)

### **Storage**

TREX2 antibody can be stored at 4°C, stable for 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.

### **Positive Control**

Rat Liver Tissue Lysate (contact Zyagen for availability)

### **Species Reactivity**

H, M, R

### **Protein GI Number**

47606206

### **Protein Accession Number**

Q9BQ50

### **Short Description**

Three prime repair exonuclease 2

### **References**

1. 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.
2. Cortez D, Guntuku S, Qin J, et. al. ATR and ATRIP: partners in checkpoint signaling. *Science* 2001; 294:1713-6
3. Crow YJ, Hayward BE, Parmar R, et al. Mutations in the gene encoding the 3'-5' DNA exonuclease TREX1 cause Aicardi-Goutieres syndrome at the AGS1 locus. *Nat. Genet.* 2006; 38:917–20

4. Mazur DJ and Perrino FW. Structure and expression of the TREX1 and TREX2 3'→5' exonuclease genes. *J. Biol. Chem.* 2001; 276:14718-27.