

## Anti-TREX1 Antibody (9A314)

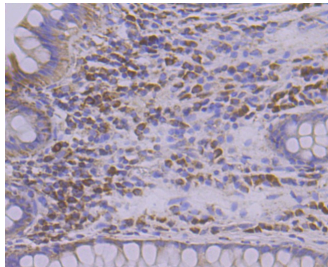
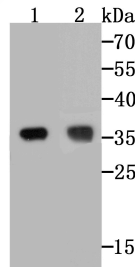
### Product Details

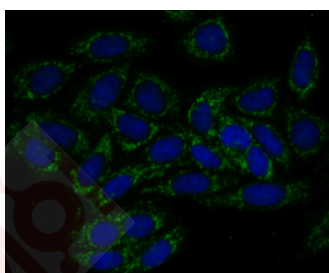
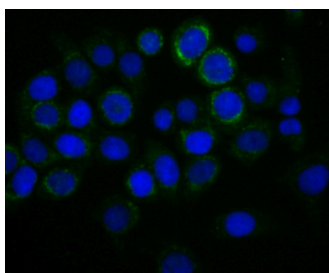
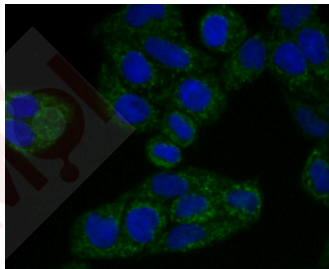
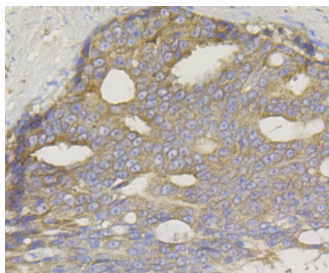
Ig Type:	IgG
Reactivity:	Human
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 34 kDa.
Clone:	9A314
Purification:	ProA affinity purified

### Applications

#### Verified Activity:

1. Western blot analysis of TREX1 on different cell lysates using anti-TREX1 at 1/500 dilution. Positive control: Line 1: A431, Line 2: SK-Br-3.
2. Immunohistochemical analysis of paraffin-embedded human colon tissue using anti-TREX1 antibody. Counter stained with hematoxylin.
3. Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue using anti-TREX1 antibody. Counter stained with hematoxylin.
4. ICC staining TREX1 in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
5. ICC staining TREX1 in LOVO cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
6. ICC staining TREX1 in SiHa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.





Application: ICC,IF,IHC,WB

Recommended WB: 1:500-2000; IHC: 1:50-200; ICC: 1:50-200

### Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

### Antigen Details

Immunogen: Recombinant Protein: human TREX1 aa 100-300

Antigen Species: Human

Uniprot ID: Q9NSU2

Synonyms: TREX1; Three-prime repair exonuclease 1; Deoxyribonuclease III (DNase III); 3'-5' exonuclease  
TREX1

### Research Background

Major cellular 3'-to-5' DNA exonuclease which digests single-stranded DNA (ssDNA) and double-stranded DNA (dsDNA) with mismatched 3' termini. Prevents cell-intrinsic initiation of autoimmunity. Acts by metabolizing DNA fragments from endogenous retroelements, including L1, LTR and SINE elements. Unless degraded, these DNA

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fragments accumulate in the cytosol and activate the IFN-stimulatory DNA (ISD) response and innate immune signaling. Prevents chronic ATM-dependent checkpoint activation, by processing ssDNA polynucleotide species arising from the processing of aberrant DNA replication intermediates. Inefficiently degrades oxidized DNA, such as that generated upon antimicrobial reactive oxygen production or upon absorption of UV light. During GZMA-mediated cell death, contributes to DNA damage in concert with NME1. NME1 nicks one strand of DNA and TREX1 removes bases from the free 3' end to enhance DNA damage and prevent DNA end reannealing and rapid repair.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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