## SANTA CRUZ BIOTECHNOLOGY, INC.

# TREX-1 (M-14): sc-66293



#### BACKGROUND

TREX-1 (3' repair exonuclease-1), also known as trophoblast expressed 1, CRV, AGS1, AGS5, DRN3, HERNS or DNase III, is a member of the exo-nuclease superfamily and belongs to the TREX family. Members of the TREX family are involved in DNA metabolism and repair. TREX-1 is expressed in spleen, liver, thymus, colon, heart, brain and small intestine. It localizes to the nucleus and exists as a homodimer. TREX-1 is an exonuclease and its activity requires magnesium as a cofactor. TREX-1 has a preference for double stranded DNA and functions in the 3'-5' direction yielding nucleoside 5'-phosphates. TREX-1 also interacts with the SET complex (an endoplasmic reticulum (ER)associated complex) and participates in granzyme A-mediated apoptosis. Mutations or defects in the gene encoding TREX-1 have been associated with a variety of diseases, including systemic lupus erythematosus, chilblain lupus (CHBL), Aicardi-Goutieres syndrome type 1 (AGS1) and type 5 (AGS5), and autosomal dominant retinal vasculopathy with cerebral leukodystrophy (CRV).

#### REFERENCES

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- Yang, Y.G., et al. 2007. TREX-1 exonuclease degrades ssDNA to prevent chronic checkpoint activation and autoimmune disease. Cell 131: 873-886.
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#### CHROMOSOMAL LOCATION

Genetic locus: Trex1 (mouse) mapping to 9 F2.

### SOURCE

TREX-1 (M-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TREX-1 of mouse origin.

#### PRODUCT

Each vial contains 200  $\mu$ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-66293 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-66293 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

TREX-1 (M-14) is recommended for detection of 3' repair exonuclease 1 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

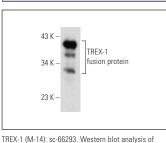
Suitable for use as control antibody for TREX-1 siRNA (m): sc-63158, TREX-1 shRNA Plasmid (m): sc-63158-SH and TREX-1 shRNA (m) Lentiviral Particles: sc-63158-V.

TREX-1 (M-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TREX-1: 33 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

#### DATA



mouse recombinant TREX-1 fusion protein.

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

# MONOS Satisfation Guaranteed Try TREX-1 (C-11): sc-133112, our highly recommended monoclonal aternative to TREX-1 (M-14).