

# Produktinformation



Forschungsprodukte & Biochemikalien
Zellkultur & Verbrauchsmaterial
Diagnostik & molekulare Diagnostik
Laborgeräte & Service

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## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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#### SANTA CRUZ BIOTECHNOLOGY, INC.

## TREX-1 (m): 293T Lysate: sc-124276



#### BACKGROUND

TREX-1 (three prime repair exonuclease-1), also known as trophoblast expressed 1, CRV, AGS1, AGS5, DRN3, HERNS or DNase III, is a member of the exonuclease 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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- Crow, Y.J., et al. 2006. Mutations in the gene encoding the 3'-5' DNA exonuclease TREX-1 cause Aicardi-Goutieres syndrome at the AGS1 locus. Nat. Genet. 38: 917-920.
- Chowdhury, D., et al. 2006. The exonuclease TREX-1 is in the SET complex and acts in concert with nm23-H1 to degrade DNA during granzyme Amediated cell death. Mol. Cell 23: 133-142.
- 4. Wang, J.Y. and Edelmann, W. 2006. Mismatch repair proteins as sensors of alkylation DNA damage. Cancer Cell 9: 417-418.
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- Coscoy, L. and Raulet, D.H. 2007. DNA mismanagement leads to immune system oversight. Cell 131: 836-838.
- Yang, Y.G., et al. 2007. TREX-1 exonuclease degrades ssDNA to prevent chronic checkpoint activation and autoimmune disease. Cell 131: 873-886.
- Lee-Kirsch, M.A., et al. 2007. Mutations in the gene encoding the 3'-5' DNA exonuclease TREX-1 are associated with systemic lupus erythematosus. Nat. Genet. 39: 1065-1067.
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#### CHROMOSOMAL LOCATION

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

#### PRODUCT

TREX-1 (m): 293T Lysate represents a lysate of mouse TREX-1 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

#### APPLICATIONS

TREX-1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive TREX-1 antibodies. Recommended use: 10-20  $\mu$ l per lane.

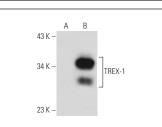
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TREX-1 (C-11): sc-133112 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse TREX-1 expression in TREX-1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgGκ BP-HRP: sc-516102 or m-lgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

#### DATA



TREX-1 (C-11): sc-133112. Western blot analysis of TREX-1 expression in non-transfected: sc-117752 (A) and mouse TREX-1 transfected: sc-124276 (B) 293T whole cell lysates.

#### **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

#### **RESEARCH USE**

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

#### PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.