

TREX-2 (Y-14): sc-169681

BACKGROUND

Proper DNA and RNA metabolism requires nucleases which function in DNA replication, recombination and repair, as well as in RNA processing and degradation events. TREX-2 (three prime repair exonuclease 2) is a 279 amino acid protein that localizes to the nucleus and belongs to the TREX family of exonuclease proteins. Expressed in stomach, heart, breast, testis, prostate, colon and skeletal muscle, TREX-2 exists as a homodimer that functions as an exonuclease and is thought to play a role in DNA repair. Specifically, TREX-2 uses magnesium to catalyze the 3' to 5' exonucleolytic cleavage of 3' mismatched double stranded DNA, thereby yielding nucleoside 5' phosphates and eliminating mutant DNA. Multiple isoforms of TREX-2 exists due to alternative splicing events. Of transcriptional interest, the gene encoding human TREX-2 (Xq28) is either identical to or adjacent to that of UCHL5IP as most mRNAs encoding UCHL5IP also include the N-terminal part of TREX2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TREX2 (human) mapping to Xq28; Trex2 (mouse) mapping to X A7.3.

RESEARCH USE

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

SOURCE

TREX-2 (Y-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TREX-2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-169681 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TREX-2 (Y-14) is recommended for detection of TREX-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with TREX-1.

Suitable for use as control antibody for TREX-2 siRNA (h): sc-91164, TREX-2 siRNA (m): sc-154634, TREX-2 shRNA Plasmid (h): sc-91164-SH, TREX-2 shRNA Plasmid (m): sc-154634-SH, TREX-2 shRNA (h) Lentiviral Particles: sc-91164-V and TREX-2 shRNA (m) Lentiviral Particles: sc-154634-V.

Molecular Weight of TREX-2: 25 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

PROTOCOLS

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