

ZNRD1 (E-20): sc-82457



The Power to Question

BACKGROUND

ZNRD1 (zinc ribbon domain containing 1), also known as TEX6, Rpa12 or hZR14, is a 126 amino acid protein that localizes to the nucleolus and contains one TFIIIS-type zinc finger. Existing as a component of the multi-protein Pol I (RNA polymerase I) complex, ZNRD1 functions as a DNA-dependent RNA polymerase that catalyzes the transcription of DNA into RNA and plays a role in the synthesis of ribosomal RNA (rRNA) precursors. The gene encoding ZNRD1 maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

1. Lepourcelet, M., et al. 1996. Systematic sequencing of the human HLA-A/HLA-F region: establishment of a cosmid contig and identification of a new gene cluster within 37 kb of sequence. *Genomics* 37: 316-326.
2. Fan, W., et al. 2000. A new zinc ribbon gene (ZNRD1) is cloned from the human MHC class I region. *Genomics* 63: 139-141.
3. Coriton, O., et al. 2000. Transcriptional analysis of the 69-kb sequence centromeric to HLA-J: a dense and complex structure of five genes. *Mamm. Genome* 11: 1127-1131.
4. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607525. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Guo, W., et al. 2008. ZNRD1 might mediate UV irradiation related DNA damage and repair in human esophageal cancer cells by regulation of ERCC1. *Dis. Esophagus* 21: 730-736.
6. Catano, G., et al. 2008. HIV-1 disease-influencing effects associated with ZNRD1, HCP5 and HLA-C alleles are attributable mainly to either HLA-A10 or HLA-B*57 alleles. *PLoS ONE* 3: e3636.

CHROMOSOMAL LOCATION

Genetic locus: ZNRD1 (human) mapping to 6p22.1; Znr1 (mouse) mapping to 17 B1.

SOURCE

ZNRD1 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNRD1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-82457 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-82457 X, 200 µg/0.1 ml.

APPLICATIONS

ZNRD1 (E-20) is recommended for detection of ZNRD1 of mouse, rat and human 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).

ZNRD1 (E-20) is also recommended for detection of ZNRD1 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for ZNRD1 siRNA (h): sc-77010, ZNRD1 siRNA (m): sc-77011, ZNRD1 shRNA Plasmid (h): sc-77010-SH, ZNRD1 shRNA Plasmid (m): sc-77011-SH, ZNRD1 shRNA (h) Lentiviral Particles: sc-77010-V and ZNRD1 shRNA (m) Lentiviral Particles: sc-77011-V.

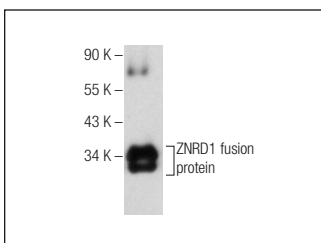
ZNRD1 (E-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ZNRD1: 14 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ZNRD1 (E-20): sc-82457. Western blot analysis of human recombinant ZNRD1 fusion protein.

STORAGE

Store at 4° C, **DO 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.