SANTA CRUZ BIOTECHNOLOGY, INC.

# ZNRD1 (H-56): sc-98492

## 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 TFIIS-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. Hong, L., et al. 2007. DARPP-32 mediates multidrug resistance of gastric cancer through regulation of P-gp and ZNRD1. Cancer Invest. 25: 699-705.
6. 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.


## CHROMOSOMAL LOCATION

Genetic locus: ZNRD1 (human) mapping to 6p22.1; Znrd1 (mouse) mapping to 17 B1.

## SOURCE

ZNRD1 (H-56) is a rabbit polyclonal antibody raised against amino acids 71-126 mapping at the C-terminus 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.

## STORAGE

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

## APPLICATIONS

ZNRD1 (H-56) 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 (H-56) is also recommended for detection of ZNRD1 in additional species, including equine, canine, 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.

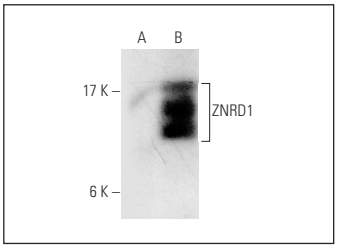
Molecular Weight of ZNRD1: 14 kDa.

Positive Controls: ZNRD1 (h): 293T Lysate: sc-116395.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA




ZNRD1 (H-56): sc-98492. Western blot analysis of ZNRD1 expression in non-transfected: sc-117752 (**A**) and human ZNRD1 transfected: sc-116395 (**B**) 293T whole cell lysates.

## RESEARCH USE

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