

# ZNRD1 (h): 293T Lysate: sc-116395

## 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., Andrieux, N., Giffon, T., Pichon, L., Hampe, A., Galibert, F. and Mosser, J. 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., Wang, Z., Kyzysztof, F., Prange, C. and Lennon, G. 2000. A new zinc ribbon gene (ZNRD1) is cloned from the human MHC class I region. *Genomics* 63: 139-141.
3. Coriton, O., Lepourcelet, M., Hampe, A., Galibert, F. and Mosser, J. 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., Wang, J., Zhao, Y., Han, Z., Zhou, X., Guo, W., Zhang, X., Jin, H., Wu, K., Ding, J. and Fan, D. 2007. DARPP-32 mediates multidrug resistance of gastric cancer through regulation of P-gp and ZNRD1. *Cancer Invest.* 25: 699-705.
6. Guo, W., Zhao, Y.P., Jiang, Y.G., Wang, R.W., Hong, L. and Fan, D.M. 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.
7. Catano, G., Kulkarni, H., He, W., Marconi, V.C., Agan, B.K., Landrum, M., Anderson, S., Delmar, J., Telles, V., Song, L., Castiblanco, J., Clark, R.A., Dolan, M.J. and Ahuja, S.K. 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.
8. Zhao, Y., Hong, L., Wang, R. and Fan, D. 2009. Expression and prognostic value of ZNRD1 in esophageal squamous cell carcinoma. *Dig. Dis. Sci.* 54: 586-592.

## 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.

## CHROMOSOMAL LOCATION

Genetic locus: ZNRD1 (human) mapping to 6p22.1.

## PRODUCT

ZNRD1 (h): 293T Lysate represents a lysate of human ZNRD1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

ZNRD1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive ZNRD1 antibodies. Recommended use: 10-20 µl per lane.

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

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.