# DDX43 (H-88): sc-292309



The Power to Question

#### **BACKGROUND**

DEAD-box proteins, characterized by the conserved motif Asp-Glu-Ala-Asp, are putative RNA helicases implicated in several cellular processes involving modifications of RNA secondary structure and ribosome/spliceosome assembly. Based on their distribution patterns, some members of this family may be involved in embryogenesis, spermatogenesis and cellular growth and division. DDX43 (DEAD (Asp-Glu-Ala-Asp) box polypeptide 43), also known as CT13 or HAGE, is a 648 amino acid protein that contains one KH domain, one helicase C-terminal domain and one helicase ATP-binding domain and belongs to the DEAD-box family. Expressed in testis and present at abnormally high levels in a variety of tumors, DDX43 is thought to function as an ATP-dependent RNA helicase that may play a role tumor transformation and metastasis.

## **REFERENCES**

- 1. Schmid, S.R. and Linder, P. 1992. DEAD protein family of putative RNA helicases. Mol. Microbiol. 6: 283-291.
- Martelange, V., De Smet, C., De Plaen, E., Lurquin, C. and Boon, T. 2000. Identification on a human sarcoma of two new genes with tumor-specific expression. Cancer Res. 60: 3848-3855.
- 3. Abdelhaleem, M., Maltais, L. and Wain, H. 2003. The human DDX and DHX gene families of putative RNA helicases. Genomics 81: 618-622.
- 4. Nagel, H., Laskawi, R., Eiffert, H. and Schlott, T. 2003. Analysis of the tumour suppressor genes, FHIT and WT-1, and the tumour rejection genes, BAGE, GAGE-1/2, HAGE, MAGE-1, and MAGE-3, in benign and malignant neoplasms of the salivary glands. Mol. Pathol. 56: 226-231.
- Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 606286. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Cordin, O., Tanner, N.K., Doère, M., Linder, P. and Banroques, J. 2004. The newly discovered Q motif of DEAD-box RNA helicases regulates RNA-binding and helicase activity. EMBO J. 23: 2478-2487.
- Linder, P. 2006. DEAD-box proteins: a family affair—active and passive players in RNP-remodeling. Nucleic Acids Res. 34: 4168-4180.
- Mathieu, M.G., Knights, A.J., Pawelec, G., Riley, C.L., Wernet, D., Lemonnier, F.A., Straten, P.T., Mueller, L., Rees, R.C. and McArdle, S.E. 2007. HAGE, a cancer/testis antigen with potential for melanoma immunotherapy: identification of several MHC class I/II HAGE-derived immunogenic peptides. Cancer Immunol. Immunother. 56: 1885-1895.

## **CHROMOSOMAL LOCATION**

Genetic locus: DDX43 (human) mapping to 6q13.

# SOURCE

DDX43 (H-88) is a rabbit polyclonal antibody raised against amino acids 1-88 mapping at the N-terminus of DDX43 of human origin.

# STORAGE

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

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **APPLICATIONS**

DDX43 (H-88) is recommended for detection of DDX43 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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); non cross-reactive with other DDX family members.

Suitable for use as control antibody for DDX43 siRNA (h): sc-95099, DDX43 shRNA Plasmid (h): sc-95099-SH and DDX43 shRNA (h) Lentiviral Particles: sc-95099-V.

Molecular Weight of DDX43: 73 kDa.

## **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.

#### **RESEARCH USE**

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

## **PROTOCOLS**

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

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