# DDX30 (K-25): sc-133505



The Power to Question

#### **BACKGROUND**

Characterized by the conserved motif Asp-Glu-Ala-Asp, DEAD box proteins are putative RNA helicases implicated in several cellular processes involving modifications of RNA secondary structure. Specifically, DEAD box proteins are involved in translation initiation, nuclear and mitochondrial splicing, and ribosome and spliceosome assembly. Based on their distribution patterns, members of this family may be involved in embryogenesis, spermatogenesis, and cellular growth and division. DDX30, DDX35 and DDX36 each contain one helicase ATP-binding domain and one helicase C-terminal domain. DDX30 (DEAH box protein 30) is a 1,194 amino acid protein that forms a complex with TFAM and SSBP1 in the mitochondria, suggesting a role for DDX30 in mtDNA replication. There are two isoforms of DDX30 that exist as a result of alternative splicing events.

# **REFERENCES**

- Fu, J.J., Li, L.Y. and Lu, G.X. 2002. Molecular cloning and characterization of human DDX36 and mouse Ddx36 genes, new members of the DEAD/H box superfamily. Sheng Wu Hua Xue Yu Sheng Wu Wu Li Xue Bao 34: 655-661.
- Fu, J.J., Li, L.Y., Liu, S.F., Xing, X.W., Liu, G. and Lu, G.X. 2003. Expression research for human DDX36 and mouse Ddx36 gene in the adult testis. Yi Chuan Xue Bao 30: 201-208.
- Abdelhaleem, M. 2005. RNA helicases: regulators of differentiation. Clin. Biochem. 38: 499-503.
- 4. Cordin, O., Banroques, J., Tanner, N.K. and Linder, P. 2006. The DEAD-box protein family of RNA helicases. Gene 367: 17-37.
- Wang, Y. and Bogenhagen, D.F. 2006. Human mitochondrial DNA nucleoids are linked to protein folding machinery and metabolic enzymes at the mitochondrial inner membrane. J. Biol. Chem. 281: 25791-25802.
- Linder, P. 2006. Dead-box proteins: a family affair—active and passive players in RNP-remodeling. Nucleic Acids Res. 34: 4168-4180.
- 7. Fuller-Pace, F.V. and Ali, S. 2008. The DEAD box RNA helicases p68 (Ddx5) and p72 (Ddx17): novel transcriptional co-regulators. Biochem. Soc. Trans. 36: 609-612.

## CHROMOSOMAL LOCATION

Genetic locus: DHX30 (human) mapping to 3p21.31.

# **SOURCE**

DDX30 (K-25) is an affinity purified rabbit polyclonal antibody raised against synthetic DDX30 peptide of human origin.

## **PRODUCT**

Each vial contains 50  $\mu$ g IgG in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

# **STORAGE**

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

### **APPLICATIONS**

DDX30 (K-25) is recommended for detection of DDX30 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for DDX30 siRNA (h): sc-78188, DDX30 shRNA Plasmid (h): sc-78188-SH and DDX30 shRNA (h) Lentiviral Particles: sc-78188-V.

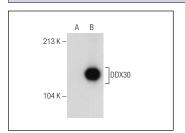
Molecular Weight of DDX30: 134 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

#### **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).

## DATA



DDX30 (K-25): sc-133505. Western blot analysis of DDX30 expression in non-transfected: sc-117752 (**A**) and mouse DDX30 transfected: sc-119718 (**B**) 293T whole cell Ivsates.

# **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.



Try **DDX30 (D-9): sc-390663**, our highly recommended monoclonal alternative to DDX30 (K-25).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com