

Anti-DDX3X antibody, rabbit serum

70-450 100 ul

Storage: Shipped at 4°C or -20°C and stored at -20°C

Reactivity: Reacts with DDX3 of human monkey and rodents. Not tested with other species.

Immunogen: Purified full-length human DDX3X fused with GST

Applications

1. Western blotting (1/1,000~ 1/5,000)
2. Immunofluorescence staining (1/500)
3. Immunohistchemical staining (1/200)

Form: Undiluted anti rabbit serum added with 0.05 % sodium azide

Background: DDX3X (662aa, 73.2 kDa) is a member of DEAD box proteins, characterized by the conserved motif Asp-Glu-Ala-Asp (DEAD) which are putative RNA helicases. They are implicated in a number of cellular processes involving alteration of RNA secondary structure such as translation initiation, nuclear and mitochondrial splicing, and ribosome and spliceosome assembly. Based on their distribution patterns, some members of this family are believed to be involved in embryogenesis, spermatogenesis, and cellular growth and division. This gene encodes a DEAD box protein, which interacts specifically with hepatitis C virus core protein resulting a change in intracellular location. This gene has a homolog located in the nonrecombining region of the Y chromosome. The protein sequence is 91% identical between this gene and the Y-linked homolog. Alternative splicing results in multiple transcript variants.

Data Link UniProtKB/Swiss-Prot [O00571](#) (DDX3X_HUMAN) GeneCards: [DDX3X Gene](#)

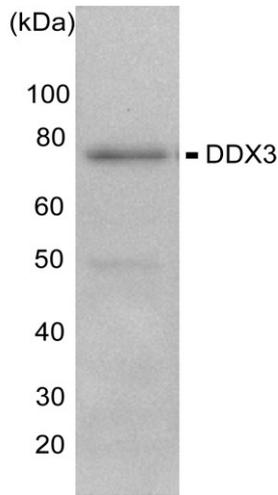


Fig.1 Western blot of endogenous DDX3X

HeLa cells ($10 \mu\text{g}$) with anti-DDX3X antibody at 1/1,000 dilution and as the second antibody, HRP-conjugated goat anti-rabbit IgG was used at 1/20,000 dilution.

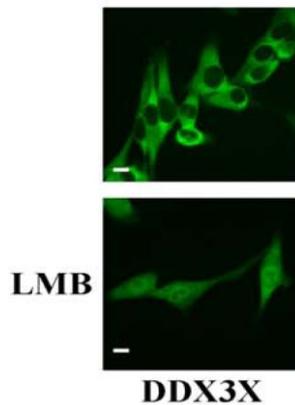


Fig.2 Immunostaining of HeLa cells with anti-DDX3X antibody. Paraformaldehyde-fixed HeLa cells were stained with anti-DDX3X antibody at 1/500 dilution. DDX3X is localized in cytoplasm in the absence of treatment, but once treated with LMB, a nuclear translocation inhibitor, it is localized not only in cytoplasm but also in nuclei.

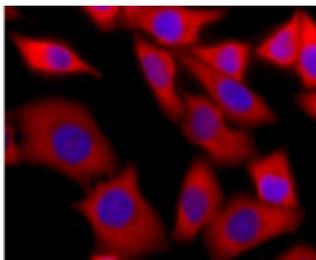


Fig.3 Immunostaining of HeLa cells with anti-DDX3X antibody.

HeLa cells were stained with anti-DDX3X antibody (red) at 1/500 dilution and as the secondary antibody, Alexa Fluor 568-conjugated goat anti-rabbit antibody at $2 \mu\text{g/ml}$. The nuclei were stained with Hoechst

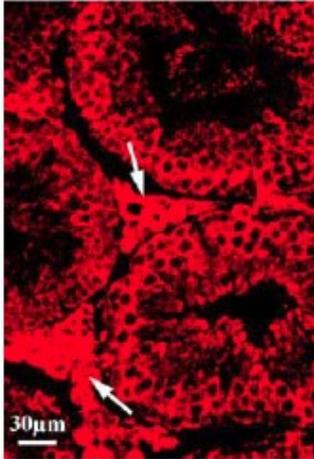


Fig.4 Immunohistochemical staining of DDX3X in mouse testis tissue.

Frozen section was stained with anti-DDX3X antibody at 1/200 dilution and secondarily labeled with Cys-conjugated anti-rabbit IgG. Arrows indicate Leydig cells.

Reference : This product was described and used in the following publications..

- 1 .Sekiguchi T et al Human DDX3Y, the Y-encoded isoform of RNA helicase DDX3, rescues a hamster temperature-sensitive ET24 mutant cell line with a DDX3X mutation. *Exp. Cell. Res.* 300 : 213-222 (2004) PMID: [15383328](#) IF, IHC-F (hu, ms, ham)
2. Sekiguchi T. et al. Phosphorylation of threonine 204 of DEAD-box RNA helicase DDX3 by cyclin B/cdc2 in vitro. [Biochem Biophys Res Commun.](#) 2007 May 11;356(3):668-73. PMID: [17379183](#) WB (hu, ham)