

# DDX19B (J-24): sc-133499

## BACKGROUND

DEAD box proteins, characterized by the conserved motif Asp-Glu-Ala-Asp (DEAD), are putative RNA helicases. DEAD box proteins contain two conserved RecA-like domains that adopt different open structures in the absence of nucleic acid and closed structure when bound to RNA and ATP. They also exhibit RNA-dependent ATPase and ATP-dependent RNA-unwinding activities. DEAD box RNA helicase DEAD5 (Dbp5), also known as DEAD box protein 19B (DDX19B), is a 479 amino acid protein belonging to the DEAD box family. Localized to the cytoplasm and nuclear envelope, Dbp5 participates in the export of mRNA from the nucleus to the cytoplasm. Dbp5 is activated by interactions mediated by Gle1 and is inhibited by Nup214. Two named isoforms of Dbp5 exist as a result of alternative splicing events.

## REFERENCES

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9. von Moeller, H., Basquin, C. and Conti, E. 2009. The mRNA export protein DBP5 binds RNA and the cytoplasmic nucleoporin NUP214 in a mutually exclusive manner. *Nat. Struct. Mol. Biol.* 16: 247-254.

## STORAGE

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

## CHROMOSOMAL LOCATION

Genetic locus: DDX19B, DDX19A (human) mapping to 16q22.1; Ddx19b, Ddx19a (mouse) mapping to 8 E1.

## SOURCE

DDX19B (J-24) is a Protein A purified rabbit polyclonal antibody raised against a synthetic DDX19B peptide of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

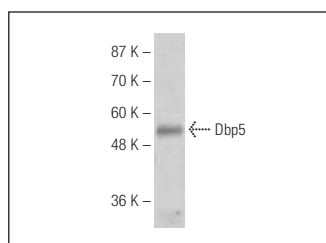
DDX19B (J-24) is recommended for detection of DDX19B of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for DDX19B siRNA (h): sc-77097, DDX19B shRNA Plasmid (h): sc-77097-SH and DDX19B shRNA (h) Lentiviral Particles: sc-77097-V.

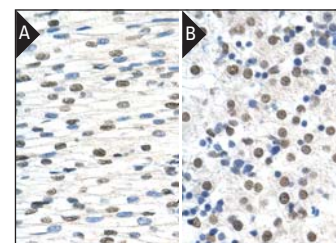
Molecular Weight of DDX19B: 54 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, human heart tissue or human liver tissue.

## DATA



Dbp5 (J-24): sc-133499. Western blot analysis of Dbp5 expression in Hep G2 whole cell lysate.



Dbp5 (J-24): sc-133499. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human heart tissue (A) showing nuclear localization and formalin-fixed, paraffin-embedded human liver tissue (B) showing nuclear and cytoplasmic localization.

## 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) or our catalog for detailed protocols and support products.