

DDX17 (B-6): sc-376297

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. DDX17 (DEAD box protein 17), also designated p72, is highly homologous to DDX5 (p68). DDX17 and DDX5 have been implicated in growth regulation by acting as transcriptional co-regulators for several transcription factors, including ER α , p53, MyoD and Runx2. Impairment of DDX17 may affect early brain development and can lead to Down syndrome. Alternatively, up-regulation of DDX17 and DDX5 directly contributes to colon cancer, suggesting that DDX17 may be a useful therapeutic target to combat colon cancer.

REFERENCES

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- Kircher, S.G., Kim, S.H., Fountoulakis, M. and Lubec, G. 2002. Reduced levels of DEAD-box proteins DBP-RB and p72 in fetal Down syndrome brains. *Neurochem. Res.* 27: 1141-1146.
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- Abdelhaleem, M. 2005. RNA helicases: regulators of differentiation. *Clin. Biochem.* 38: 499-503.
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CHROMOSOMAL LOCATION

Genetic locus: DDX17 (human) mapping to 22q13.1; Ddx17 (mouse) mapping to 15 E1.

SOURCE

DDX17 (B-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 561-591 within an internal region of DDX17 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 μ g IgG₃ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-376297 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

DDX17 (B-6) is recommended for detection of DDX17 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

Suitable for use as control antibody for DDX17 siRNA (h): sc-77106, DDX17 siRNA (m): sc-142922, DDX17 shRNA Plasmid (h): sc-77106-SH, DDX17 shRNA Plasmid (m): sc-142922-SH, DDX17 shRNA (h) Lentiviral Particles: sc-77106-V and DDX17 shRNA (m) Lentiviral Particles: sc-142922-V.

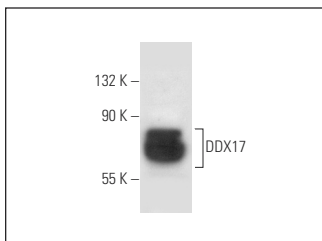
Molecular Weight of DDX17 isoforms: 72/82 kDa.

Positive Controls: LADMAC whole cell lysate, NIH/3T3 whole cell lysate: sc-2210 or Jurkat whole cell lysate: sc-2204.

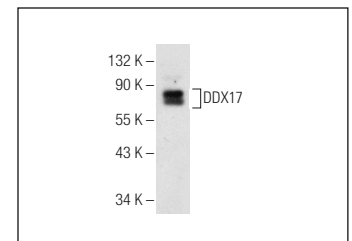
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



DDX17 (B-6): sc-376297. Western blot analysis of DDX17 expression in NIH/3T3 whole cell lysate.



DDX17 (B-6): sc-376297. Western blot analysis of DDX17 expression in LADMAC whole cell lysate.

RESEARCH USE

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