**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 and spliceosome assembly. Based on their distribution patterns, some members of this family may be involved in embryogenesis and spermatogenesis as well as cellular growth and division. DDX3 (DEAD box polypeptide 3) is involved in RNA metabolism. Two DDX3 paralogs are found in humans; DDX3X is encoded by a gene found on the X chromosome while DDX3Y is encoded by a gene on the Y chromosome. DDX3Y is exclusively expressed in testis and is required for normal spermatogenesis. DDX3X is ubiquitously expressed and predominantly localizes to the nuclear speckles, participating in RNA splicing, transcription, translation initiation, mRNA transport and cell cycle regulation. DDX3X also participates in HIV-1 replication and hepatitis C viral infections.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: DDX3X (human) mapping to Xp11.4; Ddx3x (mouse) mapping to X A1.1.

**SOURCE**

DDX3 (2253C5a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to the N-terminal region of DDX3 of human origin.

**PRODUCT**

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

**APPLICATIONS**

DDX3 (2253C5a) is recommended for detection of DDX3X of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)]. Suitable for use as control antibody for DDX3X siRNA (h): sc-77108, DDX3X siRNA (m): sc-77109, DDX3X shRNA Plasmid (h): sc-77108-SH, DDX3X shRNA Plasmid (m): sc-77109-SH, DDX3X shRNA (h) Lentiviral Particles: sc-77108-V and DDX3X shRNA (m) Lentiviral Particles: sc-77109-V. Molecular Weight of DDX3: 73 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, NIH/3T3 whole cell lysate: sc-2210 or K-562 nuclear extract: sc-2130.

**DATA**

DDX3 (2253C5a): sc-81247. Western Blot analysis of DDX3 expression in Jurkat (A) and PC-12 (B) whole cell lysates and K-562 nuclear extract (C).

**SELECT PRODUCT CITATIONS**


**STORAGE**

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

**RESEARCH USE**

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

**PROTOCOLS**

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