## SANTA CRUZ BIOTECHNOLOGY, INC.

# DDX1 (N-18): sc-49817



### 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 such as translation initiation, nuclear and mitochondrial splicing, and ribosome and spliceosome assembly. Based on their distribution patterns, some members of this family may be involved in embryogenesis, spermatogenesis and cellular growth and division. DDX1 mRNA has a widespread distribution in human fetal tissue, but is not uniformly expressed in all tissues. Chicken DDX1, which shares 93% identity with human DDX1, shows highest levels of expression during the early stages of development. Tissue maturation typically correlates with a decrease in DDX1 expression, although DDX1 levels remain elevated in late embryonic retina and brain.

#### CHROMOSOMAL LOCATION

Genetic locus: DDX1 (human) mapping to 2p24.3; Ddx1 (mouse) mapping to 12 A1.1.

#### SOURCE

DDX1 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of DDX1 of human origin.

#### PRODUCT

Each vial contains 200  $\mu$ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-49817 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-49817 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

DDX1 (N-18) is recommended for detection of DDX1 of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

DDX1 (N-18) is also recommended for detection of DDX1 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for DDX1 siRNA (h): sc-60517, DDX1 siRNA (m): sc-60518, DDX1 shRNA Plasmid (h): sc-60517-SH, DDX1 shRNA Plasmid (m): sc-60518-SH, DDX1 shRNA (h) Lentiviral Particles: sc-60517-V and DDX1 shRNA (m) Lentiviral Particles: sc-60518-V.

DDX1 (N-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of 82 kDa.

Positive Controls: Y79 cell lysate: sc-2240, IMR-32 cell lysate: sc-2409 or Y79 nuclear extract: sc-2126.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### DATA



expression in Y79 (**A**) and IMR-32 (**B**) whole cell lysates and Y79 nuclear extract (**C**).

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



#### Try DDX1 (A-7): sc-271438 or DDX1 (G-4):

**sc-271393**, our highly recommended monoclonal alternatives to DDX1 (N-18).