# SANTA CRUZ BIOTECHNOLOGY, INC.

# DDX47 (Q-13): sc-132646



# 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, spermatogenesis and cellular growth and division. DDX47 (probable ATP-dependent RNA helicase DDX47) is a 455 amino acid protein encoded by the human gene DDX47. DDX47 belongs to the DEAD-box helicase family (DDX47/RRP3 subfamily) and contains one helicase ATP-binding domain and one helicase C-terminal domain. DDX47 is believed to be a probable ATP-dependent RNA helicase. RNA helicases are highly conserved enzymes that utilize the energy derived from NTP hydrolysis to modulate the structure of RNA. RNA helicases participate in all biological processes that involve RNA, including transcription, splicing and translation.

## CHROMOSOMAL LOCATION

Genetic locus: DDX47 (human) mapping to 12p13.1; Ddx47 (mouse) mapping to 6 G1.

#### SOURCE

DDX47 (Q-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of DDX47 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.

Blocking peptide available for competition studies, sc-132646 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **APPLICATIONS**

DDX47 (Q-13) is recommended for detection of DDX47 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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); non cross-reactive with other DDX family members.

DDX47 (Q-13) is also recommended for detection of DDX47 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for DDX47 siRNA (h): sc-96180, DDX47 siRNA (m): sc-142940, DDX47 shRNA Plasmid (h): sc-96180-SH, DDX47 shRNA Plasmid (m): sc-142940-SH, DDX47 shRNA (h) Lentiviral Particles: sc-96180-V and DDX47 shRNA (m) Lentiviral Particles: sc-142940-V.

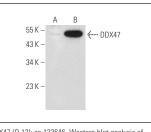
Molecular Weight of DDX47: 51 kDa.

Positive Controls: DDX47 (h): 293T Lysate: sc-117224, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

## **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

# DATA



DDX47 (Q-13): sc-132646. Western blot analysis of DDX47 expression in non-transfected: sc-117752 (A) and human DDX47 transfected: sc-117224 (B) 293T whole cell lysates.

#### **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.

# MONOS Satisfation Guaranteed

Try **DDX47 (H-9): sc-377333**, our highly recommended monoclonal alternative to DDX47 (Q-13).