DDX57 (E-13): sc-132268



The Power to Question

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. DDX57, also designated DEAH box protein 57 (DHX57), is a member of the DEAH subfamily within the dead box protein family. The gene encoding DDX57 resides on chromosome 2, which consists of 237 million bases and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2, including harlequin icthyosis, sitosterolemia and Alström syndrome.

REFERENCES

- Lüking, A., et al. 1998. The protein family of RNA helicases. Crit. Rev. Biochem. Mol. Biol. 33: 259-296.
- Bléoo, S., et al. 2001. Association of human DEAD box protein DDX1 with a cleavage stimulation factor involved in 3'-end processing of pre-MRNA. Mol. Biol. Cell 12: 3046-3059.
- 3. Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. Nature 434: 724-731.
- Linder, P. 2006. Dead-box proteins: a family affair-active and passive players in RNP-remodeling. Nucleic Acids Res. 34: 4168-4180.
- Thomas, A.C., et al. 2006. ABCA12 is the major harlequin ichthyosis gene.
 J. Invest. Dermatol. 126: 2408-2413.
- Marshall, J.D., et al. 2007. Alström syndrome. Eur. J. Hum. Genet. 15: 1193-1202.
- Marshall, J.D., et al. 2007. Spectrum of ALMS1 variants and evaluation of genotype-phenotype correlations in Alström syndrome. Hum. Mutat. 28: 1114-1123

CHROMOSOMAL LOCATION

Genetic locus: DHX57 (human) mapping to 2p22.1; Dhx57 (mouse) mapping to 17 E3.

SOURCE

DDX57 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DDX57 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-132268 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

DDX57 (E-13) is recommended for detection of DDX57 isoforms 1, 2 and 3 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); non cross-reactive with other DDX family members.

DDX57 (E-13) is also recommended for detection of DDX57 isoforms 1, 2 and 3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for DDX57 siRNA (h): sc-94325, DDX57 siRNA (m): sc-156107, DDX57 shRNA Plasmid (h): sc-94325-SH, DDX57 shRNA Plasmid (m): sc-156107-SH, DDX57 shRNA (h) Lentiviral Particles: sc-94325-V and DDX57 shRNA (m) Lentiviral Particles: sc-156107-V.

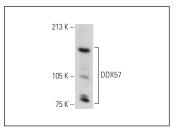
Molecular Weight of DDX57: 156 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136.

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



DDX57 (E-13): sc-132268. Western blot analysis of DDX57 expression in HEK293 whole cell lysate.

STORAGE

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

PROTOCOLS

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