

DDX34 (E-19): sc-103455

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/spliceosome assembly. Based on their distribution patterns, some members of this family may be involved in embryogenesis, spermatogenesis and cellular growth and division. DDX34 (DEAD (Asp-Glu-Ala-His) box polypeptide 34), also known as HRH1 or DHX34, is a 576 amino acid ATP-binding RNA helicase containing a helicase ATP-binding domain and a helicase C-terminal domain. The gene encoding DDX34 maps to human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes.

REFERENCES

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- Abdelhaleem, M., et al. 2003. The human DDX and DHX gene families of putative RNA helicases. *Genomics* 81: 618-622.
- Xu, Y.Z., et al. 2004. Prp5 bridges U1 and U2 snRNPs and enables stable U2 snRNP association with intron RNA. *EMBO J.* 23: 376-385.
- Cordin, O., et al. 2004. The newly discovered Q motif of DEAD-box RNA helicases regulates RNA-binding and helicase activity. *EMBO J.* 23: 2478-2487.
- Andersen, J.S., et al. 2005. Nucleolar proteome dynamics. *Nature* 433: 77-83.
- Linder, P. 2006. Dead-box proteins: a family affair—active and passive players in RNP-remodeling. *Nucleic Acids Res.* 34: 4168-4180.

CHROMOSOMAL LOCATION

Genetic locus: DHX34 (human) mapping to 19q13.32; Dhx34 (mouse) mapping to 7 A2.

SOURCE

DDX34 (E-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DDX34 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-103455 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

DDX34 (E-19) is recommended for detection of DDX34 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.

DDX34 (E-19) is also recommended for detection of DDX34 in additional species, including equine, canine and porcine.

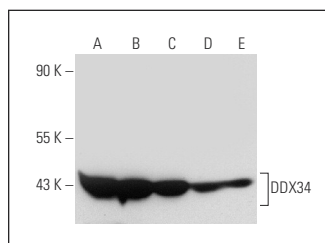
Suitable for use as control antibody for DDX34 siRNA (h): sc-97740, DDX34 siRNA (m): sc-105280, DDX34 shRNA Plasmid (h): sc-97740-SH, DDX34 shRNA Plasmid (m): sc-105280-SH, DDX34 shRNA (h) Lentiviral Particles: sc-97740-V and DDX34 shRNA (m) Lentiviral Particles: sc-105280-V.

Molecular Weight (predicted) of DDX34: 128 kDa.

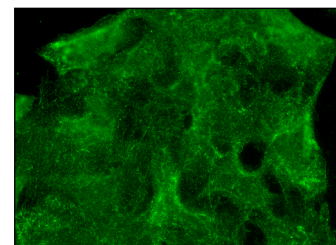
Molecular Weight (observed) of DDX34: 43/132 kDa.

Positive Controls: T24 cell lysate: sc-2292, SK-MEL-28 cell lysate: sc-2236 or ARPE-19 whole cell lysate: sc-364357.

DATA



DDX34 (E-19): sc-103455. Western blot analysis of DDX34 expression in T24 (A), ARPE-19 (B), SK-MEL-28 (C), Raji (D) and Hep G2 (E) whole cell lysates.



DDX34 (E-19): sc-103455. Immunofluorescence staining of formalin-fixed Hep G2 cells showing membrane localization.

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.

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Try **DDX34 (E-3): sc-514665**, our highly recommended monoclonal alternative to DDX34 (E-19).