

DDX25 (H-40): sc-134871

BACKGROUND

DDX25, also designated GRTH for Gonadotropin-regulated testicular RNA helicase, is a testis-specific member of the DEAD-box protein family found in Leydig and germ cells. DDX25 has both ATPase and RNA helicase activity, regulating such translational-associated events as mRNA nuclear export during spermatid development. DDX25 can be phosphorylated on threonine residues, with the phosphorylated form found only in the cytoplasm and not in the nucleus. Essential for spermatogenesis, DDX25 participates in germ cell development and is upregulated by Gonadotropin at the transcriptional level. Genetic variations in DDX25 may contribute to male infertility due to spermatogenic impairment.

REFERENCES

- Sheng, Y., et al. 2003. Cell-specific and hormone-regulated expression of Gonadotropin-regulated testicular RNA helicase gene (GRTH/DDX25) resulting from alternative utilization of translation initiation codons in the rat testis. *J. Biol. Chem.* 278: 27796-27803.
- Tsai-Morris, C.H., et al. 2004. Gonadotropin-regulated testicular RNA helicase (GRTH/DDX25) is essential for spermatid development and completion of spermatogenesis. *Proc. Natl. Acad. Sci. USA* 101: 6373-6378.
- Tsai-Morris, C.H., et al. 2004. Genomic organization and transcriptional analysis of gonadotropin-regulated testicular RNA helicase—GRTH/DDX25 gene. *Gene* 331: 83-94.
- Mee, L., et al. 2005. Hydrolethalus syndrome is caused by a missense mutation in a novel gene HYL1. *Hum. Mol. Genet.* 14: 1475-1488.
- Abdelhaleem, M. 2005. RNA helicases: regulators of differentiation. *Clin. Biochem.* 38: 499-503.

CHROMOSOMAL LOCATION

Genetic locus: DDX25 (human) mapping to 11q24.2; Ddx25 (mouse) mapping to 9 A4.

SOURCE

DDX25 (H-40) is a rabbit polyclonal antibody raised against amino acids 439-478 mapping near the C-terminus of DDX25 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.

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.

APPLICATIONS

DDX25 (H-40) is recommended for detection of DDX25 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).

DDX25 (H-40) is also recommended for detection of DDX25 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for DDX25 siRNA (h): sc-72229, DDX25 siRNA (m): sc-72230, DDX25 shRNA Plasmid (h): sc-72229-SH, DDX25 shRNA Plasmid (m): sc-72230-SH, DDX25 shRNA (h) Lentiviral Particles: sc-72229-V and DDX25 shRNA (m) Lentiviral Particles: sc-72230-V.

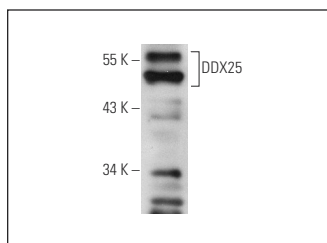
Molecular Weight of DDX25: 61/56 kDa.

Positive Controls: mouse testis extract: sc-2405, rat testis extract: sc-2400 or mouse brain extract: sc-2253.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



DDX25 (H-40): sc-134871. Western blot analysis of DDX25 expression in mouse brain tissue extract.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **DDX25 (F-10): sc-271730** or **DDX25 (G-4): sc-166289**, our highly recommended monoclonal alternatives to DDX25 (H-40).