

# DDX27 (D-13): sc-87682

## BACKGROUND

DDX27 (probable ATP-dependent RNA helicase DDX27) is a 796 amino acid protein encoded by the human gene DDX27. This protein belongs to the DEAD box helicase family, DDX27/DRS1 subfamily and contains one helicase ATP-binding domain and one helicase C-terminal domain. DDX27 is a nuclear protein that likely functions as an 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.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: DDX27 (human) mapping to 20q13.13; Ddx27 (mouse) mapping to 2 H3.

## SOURCE

DDX27 (D-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DDX27 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-87682 P, (100 µg 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

DDX27 (D-13) is recommended for detection of DDX27 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.

DDX27 (D-13) is also recommended for detection of DDX27 in additional species, including equine, canine and avian.

Suitable for use as control antibody for DDX27 siRNA (h): sc-77107, DDX27 siRNA (m): sc-77412, DDX27 shRNA Plasmid (h): sc-77107-SH, DDX27 shRNA Plasmid (m): sc-77412-SH, DDX27 shRNA (h) Lentiviral Particles: sc-77107-V and DDX27 shRNA (m) Lentiviral Particles: sc-77412-V.

Molecular Weight of DDX27: 90 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or NIH/3T3 whole cell lysate: sc-2210.

## 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **DDX27 (2251C2a): sc-81074**, our highly recommended monoclonal alternative to DDX27 (D-13).