

DIS3 (P-18): sc-84082

BACKGROUND

The exosome is a multi-protein complex composed of several highly conserved subunits, some of which are 3' to 5' exoribonucleases. The complex is involved in a variety of cellular processes and is responsible for degrading unstable mRNAs that contain AU-rich elements (AREs) in their untranslated 3' regions. DIS3, also known as RRP44, is a 958 amino acid protein that localizes to both the cytoplasm and the nucleus and contains one PINc domain. Widely expressed with highest expression in testis, DIS3 functions as a component of the exosome exoribonuclease complex and is required for processing of 7S pre-rRNA into a mature nuclear complex and, ultimately, for proper mitotic progression. Abnormal expression levels of DIS3 may be associated with colon cancer, suggesting a role for DIS3 in tumorigenesis. Multiple isoforms of DIS3 exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DIS3 (human) mapping to 13q22.1.

SOURCE

DIS3 (P-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of DIS3 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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

APPLICATIONS

DIS3 (P-18) is recommended for detection of DIS3 of human and rat 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).

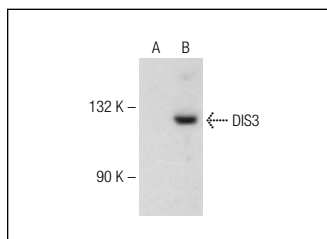
DIS3 (P-18) is also recommended for detection of DIS3 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for DIS3 siRNA (h): sc-105297, DIS3 shRNA Plasmid (h): sc-105297-SH and DIS3 shRNA (h) Lentiviral Particles: sc-105297-V.

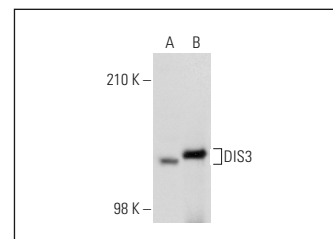
Molecular Weight of DIS3: 110 kDa.

Positive Controls: rat brain extract: sc-2392, Jurkat nuclear extract: sc-2132 or DIS3 (h): 293T Lysate: sc-116575.

DATA



DIS3 (P-18): sc-84082. Western blot analysis of DIS3 expression in non-transfected: sc-117752 (A) and human DIS3 transfected: sc-116575 (B) 293T whole cell lysates.



DIS3 (P-18): sc-84082. Western blot analysis of DIS3 expression in Jurkat nuclear extract (A) and rat brain tissue extract (B).

STORAGE

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

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.



Try **DIS3 (H-3): sc-398663**, our highly recommended monoclonal alternative to DIS3 (P-18).