SANTA CRUZ BIOTECHNOLOGY, INC.

EXOSC2 (E-12): sc-104919

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The Power to Question

BACKGROUND

The exosome is a multisubunit complex of 3' to 5' exoribonucleases. It is involved in a variety of cellular processes and is responsible for degrading unstable mRNAs that contain AU-rich elements in their untranslated 3' region. EXOSC2 (exosome component 2), also known as p7, RRP4 (Ribosomal RNA-processing protein 4), hRRP4p or RRP4p, is a component of the exosome multi-enzyme ribonuclease complex. It contains one S1 RNA-binding domain and localizes to the cytoplasm and nucleolus. In humans, EXOSC2 is phosphorylated within the S1 RNA-binding domain at serine residue 124. This phosphorylation site is conserved from yeast to human implying that it is of great importance in the cell. EXOSC2 is one of the four exosome subunits known to have exoribonuclease activity. It is required for the processing of the 7S pre-RNA.

REFERENCES

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6. Walter, P., Klein, F., Lorentzen, E., Ilchmann, A., Klug, G. and Evguenieva-Hackenberg, E. 2006. Characterization of native and reconstituted exosome complexes from the hyperthermophilic archaeon *Sulfolobus solfataricus*. Mol. Microbiol. 62: 1076-1089.

CHROMOSOMAL LOCATION

Genetic locus: EXOSC2 (human) mapping to 9q34.12; Exosc2 (mouse) mapping to 2 B.

SOURCE

EXOSC2 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EXOSC2 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-104919 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EXOSC2 (E-12) is recommended for detection of EXOSC2 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).

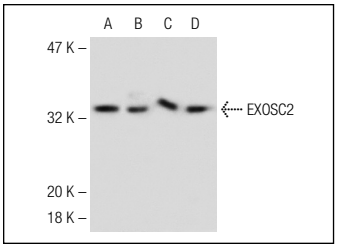
EXOSC2 (E-12) is also recommended for detection of EXOSC2 in additional species, including canine.

Suitable for use as control antibody for EXOSC2 siRNA (h): sc-92604, EXOSC2 siRNA (m): sc-144975, EXOSC2 shRNA Plasmid (h): sc-92604-SH, EXOSC2 shRNA Plasmid (m): sc-144975-SH, EXOSC2 shRNA (h) Lentiviral Particles: sc-92604-V and EXOSC2 shRNA (m) Lentiviral Particles: sc-144975-V.

Molecular Weight of EXOSC2: 33 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Hep G2 cell lysate: sc-2227 or Jurkat nuclear extract: sc-2132.

DATA



EXOSC2 (E-12): sc-104919. Western blot analysis of EXOSC2 expression in Jurkat (**A**) and Hep G2 (**B**) whole cell lysates and HeLa (**C**) and Jurkat (**D**) nuclear extracts.

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.