EXOSC4 (H-245): sc-98777



The Power to Question

BACKGROUND

The exosome is a multisubunit 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 (ARE) elements in their untranslated 3' region. EXOSC4 (exosome component 4), also known as SKI6, RRP41 or p12A, is a 245 amino acid protein that localizes to both the nucleus and the cytoplasm and shares 96% sequence identity with its mouse counterpart. Functioning as a component of the exosome complex, EXOSC4 exhibits 3'→5' exonuclease activity and is required for the 3'-processing of 7S pre-RNA to mature 5.8S rRNA. The gene encoding EXOSC4 maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: EXOSC4 (human) mapping to 8q24.3; Exosc4 (mouse) mapping to 15 D3.

SOURCE

EXOSC4 (H-245) is a rabbit polyclonal antibody raised against amino acids 2-243 of EXOSC4 of human origin.

PRODUCT

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

APPLICATIONS

EXOSC4 (H-245) is recommended for detection of EXOSC4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

EXOSC4 (H-245) is also recommended for detection of EXOSC4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for EXOSC4 siRNA (h): sc-77781, EXOSC4 siRNA (m): sc-144977, EXOSC4 shRNA Plasmid (h): sc-77781-SH, EXOSC4 shRNA Plasmid (m): sc-144977-SH, EXOSC4 shRNA (h) Lentiviral Particles: sc-77781-V and EXOSC4 shRNA (m) Lentiviral Particles: sc-144977-V.

Molecular Weight of EXOSC4: 27 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or BJAB nuclear extract: sc-2145.

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.

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 **EXOSC4 (G-9): sc-166772**, our highly recommended monoclonal alternative to EXOSC4 (H-245).

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