

EXOSC7 (E-17): sc-83408

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. EXOSC7 (exosome component 7), also known as p8, EAP1, RRP42 (ribosomal RNA-processing protein 42), Rrp42p or hRrp42p, is a component of the exosome multienzyme ribonuclease complex. It belongs to the RNase PH family and localizes to the nucleolus. EXOSC7 is one of the six RNase-PH domain subunits of the exosome. Together, these six subunits form a PNPase-like RING. EXOSC7 is required for the processing of the 7S pre-RNA.

REFERENCES

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2. Chen, C.Y., et al. 2001. AU binding proteins recruit the exosome to degrade ARE-containing mRNAs. *Cell* 107: 451-464.
3. Raijmakers, R., et al. 2002. Protein-protein interactions of hCsl4p with other human exosome subunits. *J. Mol. Biol.* 315: 809-818.
4. Brouwer, R., et al. 2002. Autoantibodies directed to novel components of the PM/Scl complex, the human exosome. *Arthritis Res.* 4: 134-138.
5. Raijmakers, R., et al. 2002. Protein-protein interactions between human exosome components support the assembly of RNase PH-type subunits into a six-membered PNPase-like ring. *J. Mol. Biol.* 323: 653-663.
6. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606488. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. Anderson, J.R., et al. 2006. Sequence-specific RNA binding mediated by the RNase PH domain of components of the exosome. *RNA* 12: 1810-1816.

CHROMOSOMAL LOCATION

Genetic locus: EXOSC7 (human) mapping to 3p21.31; Exosc7 (mouse) mapping to 9 F4.

SOURCE

EXOSC7 (E-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of EXOSC7 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-83408 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-83408 X, 200 µg/0.1 ml.

APPLICATIONS

EXOSC7 (E-17) is recommended for detection of EXOSC7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 EXOSC family members.

Suitable for use as control antibody for EXOSC7 siRNA (h): sc-77294, EXOSC7 siRNA (m): sc-77295, EXOSC7 shRNA Plasmid (h): sc-77294-SH, EXOSC7 shRNA Plasmid (m): sc-77295-SH, EXOSC7 shRNA (h) Lentiviral Particles: sc-77294-V and EXOSC7 shRNA (m) Lentiviral Particles: sc-77295-V.

EXOSC7 (E-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

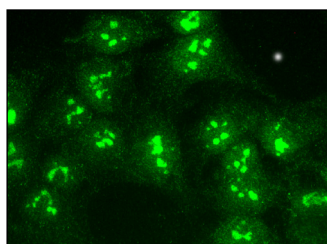
Molecular Weight (predicted) of EXOSC7: 32 kDa.

Molecular Weight (observed) of EXOSC7: 38 kDa.

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) 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.

DATA



EXOSC7 (E-17): sc-83408. Immunofluorescence staining of formalin-fixed HepG2 cells showing nucleolar and nuclear localization.

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.