SANTA CRUZ BIOTECHNOLOGY, INC.

EXOSC8 (P-17): sc-84109

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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. EXOSC8 (exosome component 8), also known as p9, CIP3 (CBP-interacting protein 3), EAP2, OIP2 (Opa-interacting protein 2), RRP43 (Ribosomal RNA-processing protein 43) or Rrp43p, is a component of the exosome multienzyme ribonuclease complex. It belongs to the RNase PH family and localizes to the nucleolus. EXOSC8 is one of the six RNase-PH domain subunits of the exosome. Together, these six subunits form a PNPase-like ring. EXOSC8 is required for the processing of the 7S pre-RNA. In addition to its numerous interactions with other proteins, EXOSC8 can also interact with itself.

REFERENCES

1. Williams, J.M., et al. 1998. Using the yeast two-hybrid system to identify human epithelial cell proteins that bind gonococcal Opa proteins: intracellular gonococci bind pyruvate kinase via their Opa proteins and require host pyruvate for growth. Mol. Microbiol. 27: 171-186.
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 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.
4. Jiang, T., et al. 2002. A protein subunit of human RNase P, Rpp14, and its interacting partner, OIP2, have 3'→5' exoribonuclease activity. Proc. Natl. Acad. Sci. USA 99: 5295-5300.
5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606019. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
6. Lehner, B., et al. 2004. A protein interaction framework for human mRNA degradation. Genome Res. 14: 1315-1323.
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: EXOSC8 (human) mapping to 13q13.3; Exosc8 (mouse) mapping to 3 C.

SOURCE

EXOSC8 (P-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of EXOSC8 of human origin.

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 or our catalog for detailed protocols and support products.

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, sc-84109 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EXOSC8 (P-17) is recommended for detection of EXOSC8 of mouse 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).

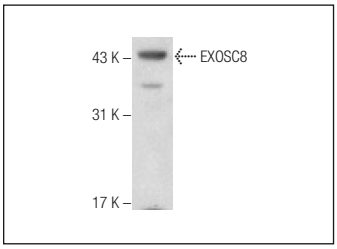
EXOSC8 (P-17) is also recommended for detection of EXOSC8 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for EXOSC8 siRNA (h): sc-105341, EXOSC8 siRNA (m): sc-144980, EXOSC8 shRNA Plasmid (h): sc-105341-SH, EXOSC8 shRNA Plasmid (m): sc-144980-SH, EXOSC8 shRNA (h) Lentiviral Particles: sc-105341-V and EXOSC8 shRNA (m) Lentiviral Particles: sc-144980-V.

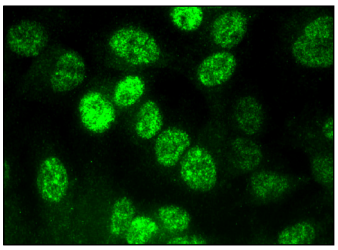
Molecular Weight of EXOSC8: 32-36 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

DATA



EXOSC8 (P-17): sc-84109. Western blot analysis of EXOSC8 expression in HeLa whole cell lysate.



EXOSC8 (P-17): sc-84109. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization.

RESEARCH USE

For research use only, not for use in diagnostic procedures.