

EXOSC8 (h): 293T Lysate: sc-174027

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. and Altman, S. 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. and Sanderson, C.M. 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.

PRODUCT

EXOSC8 (h): 293T Lysate represents a lysate of human EXOSC8 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

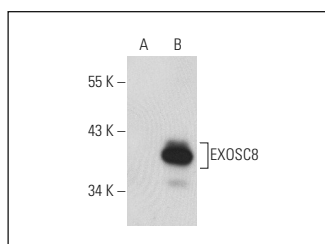
APPLICATIONS

EXOSC8 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive EXOSC8 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

EXOSC8 (2336C2b): sc-81561 is recommended as a positive control antibody for Western Blot analysis of enhanced human EXOSC8 expression in EXOSC8 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



EXOSC8 (2336C2b): sc-81561. Western blot analysis of EXOSC8 expression in non-transfected: sc-117752 (A) and human EXOSC8 transfected: sc-174027 (B) 293T whole cell lysates.

RESEARCH USE

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