SANTA CRUZ BIOTECHNOLOGY, INC.

EXOSC8 (H-8): sc-393027

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/

CHROMOSOMAL LOCATION

Genetic locus: EXOSC8 (human) mapping to 13q13.3; Exosc8 (mouse) mapping to 3 C.

SOURCE

EXOSC8 (H-8) is a mouse monoclonal antibody raised against amino acids 135-276 mapping at the C-terminus of EXOSC8 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

EXOSC8 (H-8) is available conjugated to agarose (sc-393027 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-393027 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393027 PE), fluorescein (sc-393027 FITC), Alexa Fluor® 488 (sc-393027 AF488), Alexa Fluor® 546 (sc-393027 AF546), Alexa Fluor® 594 (sc-393027 AF594) or Alexa Fluor® 647 (sc-393027 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393027 AF680) or Alexa Fluor® 790 (sc-393027 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

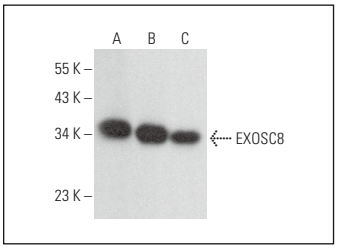
EXOSC8 (H-8) is recommended for detection of EXOSC8 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

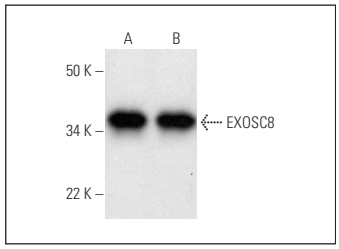
Molecular Weight of EXOSC8: 32-36 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A549 cell lysate: sc-2413 or Hep G2 cell lysate: sc-2227.

DATA



EXOSC8 (H-8): sc-393027. Western blot analysis of EXOSC8 expression in HeLa (**A**), MIA PaCa-2 (**B**) and A549 (**C**) whole cell lysates.



EXOSC8 (H-8): sc-393027. Western blot analysis of EXOSC8 expression in HeLa (**A**) and Hep G2 (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Cui, K., et al. 2020. Comprehensive characterization of the rRNA metabolism-related genes in human cancer. Oncogene 39: 786-800.
2. Müller, J.S., et al. 2020. RNA exosome mutations in pontocerebellar hypoplasia alter ribosome biogenesis and p53 levels. Life Sci. Alliance 3: e202000678.

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 for detailed protocols and support products.

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