

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 multi-enzyme 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-rRNA. In addition to its numerous interactions with other proteins, EXOSC8 can also interact with itself.

REFERENCES

- 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.
- Chen, C.Y., et al. 2001. AU binding proteins recruit the exosome to degrade ARE-containing mRNAs. *Cell* 107: 451-464.
- 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.
- 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.

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 IgG₁ 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.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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.

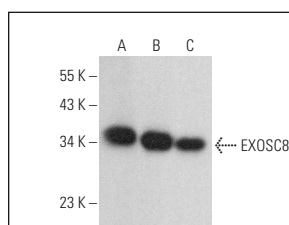
Molecular Weight of EXOSC8: 32-36 kDa.

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

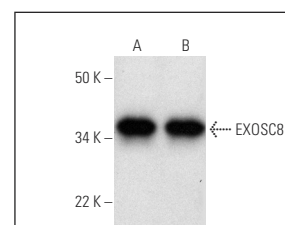
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

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

- Cui, K., et al. 2020. Comprehensive characterization of the rRNA metabolism-related genes in human cancer. *Oncogene* 39: 786-800.
- Müller, J.S., et al. 2020. RNA exosome mutations in pontocerebellar hypoplasia alter ribosome biogenesis and p53 levels. *Life Sci. Alliance* 3: e20200678.

RESEARCH USE

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

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