

# EXOSC6 (D-10): sc-398277

## BACKGROUND

The exosome is a multisubunit complex composed of several highly conserved subunits, some of which are 3' to 5' exoribonucleases. The complex is involved in a variety of cellular processes and is responsible for degrading unstable mRNAs that contain AU-rich (ARE) elements in their untranslated 3' region. EXOSC6 (exosome component 6), also known as MTR3 (mRNA transport regulator 3 homolog) is a 272 amino acid exonuclease that is a component of the exosome complex and is required for processing of 7S pre-rRNA to mature 5.8S rRNA. EXOSC6 belongs to the RNase PH family and localizes to the nucleolus. EXOSC1, EXOSC7 and EXOSC8 interact directly with EXOSC6 in the exosome multienzyme ribonuclease complex.

## REFERENCES

- 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.
- Lehner, B. and Sanderson, C.M. 2004. A protein interaction framework for human mRNA degradation. *Genome Res.* 14: 1315-1323.
- Milligan, L., et al. 2005. A nuclear surveillance pathway for mRNAs with defective polyadenylation. *Mol. Cell. Biol.* 25: 9996-10004.
- Online Mendelian Inheritance in Man, OMIM™. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 606490. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: EXOSC6 (human) mapping to 16q22.1; Exosc6 (mouse) mapping to 8 E1.

## SOURCE

EXOSC6 (D-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 29-52 near the N-terminus of EXOSC6 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

EXOSC6 (D-10) is available conjugated to agarose (sc-398277 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398277 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398277 PE), fluorescein (sc-398277 FITC), Alexa Fluor® 488 (sc-398277 AF488), Alexa Fluor® 546 (sc-398277 AF546), Alexa Fluor® 594 (sc-398277 AF594) or Alexa Fluor® 647 (sc-398277 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398277 AF680) or Alexa Fluor® 790 (sc-398277 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398277 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

EXOSC6 (D-10) is recommended for detection of EXOSC6 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 EXOSC6 siRNA (h): sc-93448, EXOSC6 siRNA (m): sc-144979, EXOSC6 shRNA Plasmid (h): sc-93448-SH, EXOSC6 shRNA Plasmid (m): sc-144979-SH, EXOSC6 shRNA (h) Lentiviral Particles: sc-93448-V and EXOSC6 shRNA (m) Lentiviral Particles: sc-144979-V.

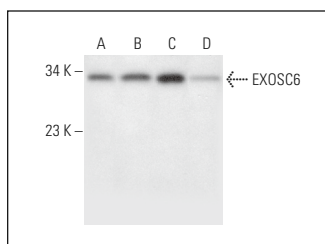
Molecular Weight of EXOSC6: 28 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

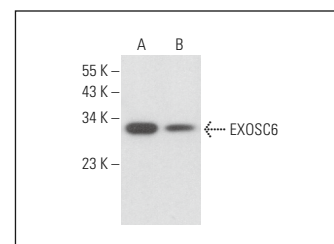
## RECOMMENDED SUPPORT REAGENTS

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



EXOSC6 (D-10): sc-398277. Western blot analysis of EXOSC6 expression in HeLa (A), Jurkat (B), K-562 (C) and WiDr (D) whole cell lysates.



EXOSC6 (D-10): sc-398277. Western blot analysis of EXOSC6 expression in HeLa nuclear extract (A) and MOLT-4 whole cell lysate (B).

## 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.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA