SANTA CRUZ BIOTECHNOLOGY, INC.

Exportin 5 (H-300): sc-66885



BACKGROUND

The karyopherin-related nuclear transport factor Exportin-5 preferentially recognizes and transports RNAs containing minihelix motifs, structural *cis*-acting export elements that comprise a double-stranded stem (14 nucleotides) with a base-paired 5' end and a 3-8-nucleotide protruding 3' end. Exportin 5 also mediates protein transport between the nuclear and cytoplasmic compartment. Exportin 5 belongs to a large family of karyopherins and stimulates nuclear export of dsRNA binding proteins eEF1A and tRNA.

REFERENCES

- Bohnsack, M.T., Regener, K., Schwappach, B., Saffrich, R., Paraskeva, E., Hartmann, E. and Görlich, D. 2002. Exp5 exports eEF1A via tRNA from nuclei and synergizes with other transport pathways to confine translation to the cytoplasm. EMBO J. 21: 6205-6215.
- Brownawell, A.M. and Macara, I.G. 2002. Exportin 5, a novel karyopherin, mediates nuclear export of double-stranded RNA binding proteins. J. Cell Biol. 156: 53-64.
- Gwizdek, C., Ossareh-Nazari, B., Brownawell, A.M., Evers, S., Macara, I.G. and Dargemont, C. 2004. Minihelix-containing RNAs mediate exportin 5 dependent nuclear export of the double-stranded RNA-binding protein ILF3. J. Biol. Chem. 279: 884-891.
- Macchi, P., Brownawell, A.M., Grunewald, B., DesGroseillers, L., Macara, I.G. and Kiebler, M.A. 2004. The brain-specific double-stranded RNA-binding protein Staufen2: nucleolar accumulation and isoform-specific exportin 5 dependent export. J. Biol. Chem. 279: 31440-31444.

CHROMOSOMAL LOCATION

Genetic locus: XPO5 (human) mapping to 6p21.1; Xpo5 (mouse) mapping to 17 C.

SOURCE

Exportin 5 (H-300) is a rabbit polyclonal antibody raised against amino acids 905-1204 mapping at the C-terminus of Exportin 5 of human origin.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **D0 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 or our catalog for detailed protocols and support products.

APPLICATIONS

Exportin 5 (H-300) is recommended for detection of Exportin 5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Exportin 5 (H-300) is also recommended for detection of Exportin 5 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Exportin 5 siRNA (h): sc-45569, Exportin 5 siRNA (m): sc-45570, Exportin 5 shRNA Plasmid (h): sc-45569-SH, Exportin 5 shRNA Plasmid (m): sc-45570-SH, Exportin 5 shRNA (h) Lentiviral Particles: sc-45569-V and Exportin 5 shRNA (m) Lentiviral Particles: sc-45570-V.

Molecular Weight of Exportin 5: 136 kDa.

Positive Controls: Exportin 5 (m): 293T Lysate: sc-120145, A-431 whole cell lysate: sc-2201 or HeLa whole cell lysate: sc-2200.

DATA





Exportin 5 (H-300): sc-66885. Western blot analysis of Exportin 5 expression in non-transfected: sc-117752 (A) and mouse Exportin 5 transfected: sc-120145 (B) 293T whole cell lysates

Exportin 5 (H-300): sc-66885. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human oral mucosa tissue showing cytoplasmic staining of squamous epithelial cells (**B**).

SELECT PRODUCT CITATIONS

1. Shapiro, J.S., Varble, A., Pham, A.M. and Tenoever, B.R. 2010. Noncanonical cytoplasmic processing of viral microRNAs. RNA 16: 2068-2074.

MONOS Satisfation Guaranteed

Try Exportin 5 (A-11): sc-271036 or Exportin 5 (A-4): sc-166789, our highly recommended monoclonal aternatives to Exportin 5 (H-300).