

# Exportin 5 (A-11): sc-271036

## BACKGROUND

The karyopherin-related nuclear transport factor Exportin 5, also known as Exp5, 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

Exportin 5 (A-11) is a mouse monoclonal 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<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Exportin 5 (A-11) is available conjugated to agarose (sc-271036 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271036 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271036 PE), fluorescein (sc-271036 FITC), Alexa Fluor<sup>®</sup> 488 (sc-271036 AF488), Alexa Fluor<sup>®</sup> 546 (sc-271036 AF546), Alexa Fluor<sup>®</sup> 594 (sc-271036 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-271036 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-271036 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-271036 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## RESEARCH USE

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

## APPLICATIONS

Exportin 5 (A-11) is recommended for detection of Exportin 5 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), 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).

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.

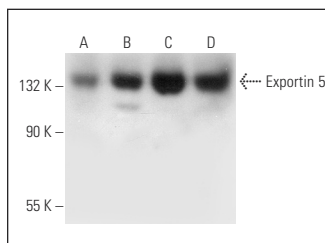
Molecular Weight of Exportin 5: 136 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, Ramos cell lysate: sc-2216 or HeLa whole cell lysate: sc-2200.

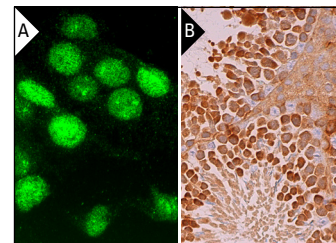
## RECOMMENDED SUPPORT REAGENTS

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<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



Exportin 5 (A-11): sc-271036. Western blot analysis of Exportin 5 expression in Jurkat (A), HeLa (B), K-562 (C) and Ramos (D) whole cell lysates.



Exportin 5 (A-11): sc-271036. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse testis tissue showing nuclear and cytoplasmic staining of cells in seminiferous ducts and cytoplasmic staining of Leydig cells (B).

## SELECT PRODUCT CITATIONS

- Tang, X., et al. 2013. Acetylation of drosha on the N-terminus inhibits its degradation by ubiquitination. *PLoS ONE* 8: e72503.
- Piatek, P., et al. 2019. MS CD49d<sup>+</sup>CD154<sup>+</sup> lymphocytes reprogram oligodendrocytes into immune reactive cells affecting CNS regeneration. *Cells* 8: 1508.
- Yoshinaga, M., et al. 2022. The N<sup>6</sup>-methyladenosine methyltransferase METTL16 enables erythropoiesis through safeguarding genome integrity. *Nat. Commun.* 13: 6435.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

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