# Importin-11 (h): 293T Lysate: sc-114980



The Power to Question

### **BACKGROUND**

The Importin complex consists of Importin- $\alpha$  and Importin- $\beta$  proteins which assist in the transport of arginine- or serine-rich (SR) peptides across the nucleus. Importin-11, also known as IPO11 or RanBP11, is a 975 amino acid protein that contains one importin N-terminal domain and 15 HEAT repeats and belongs to the Importin- $\beta$  family. Localized to both the nucleus and the cytoplasm, Importin-11 interacts with UBE2E3 and plays a role in nuclear protein import, specifically functioning as a nuclear transport receptor that mediates the docking of the importin complex to the nuclear pore complex (NPC). The gene encoding Importin-11 maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5q12.1 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5q12.1 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

## **REFERENCES**

- Plafker, S.M. and Macara, I.G. 2000. Importin-11, a nuclear import receptor for the ubiquitin-conjugating enzyme, UbcM2. EMBO J. 19: 5502-5513.
- Plafker, S.M. and Macara, I.G. 2002. Ribosomal protein L12 uses a distinct nuclear import pathway mediated by Importin-11. Mol. Cell. Biol. 22: 1266-1275.
- Wang, W., Yang, Y., Li, L. and Shi, Y. 2003. Synleurin, a novel leucine-rich repeat protein that increases the intensity of pleiotropic cytokine responses. Biochem. Biophys. Res. Commun. 305: 981-988.
- Plafker, S.M., Plafker, K.S., Weissman, A.M. and Macara, I.G. 2004.
  Ubiquitin charging of human class III ubiquitin-conjugating enzymes triggers their nuclear import. J. Cell Biol. 167: 649-659.
- Zhang, X.D. and Matunis, M.J. 2005. Ub in charge: regulating E2 enzyme nuclear import. Nat. Cell Biol. 7: 12-14.
- 6. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 610889. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

## CHROMOSOMAL LOCATION

Genetic locus: IPO11 (human) mapping to 5q12.1.

# **PRODUCT**

Importin-11 (h): 293T Lysate represents a lysate of human Importin-11 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

#### **APPLICATIONS**

Importin-11 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Importin-11 antibodies. Recommended use: 10-20  $\mu$ l per lane

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures

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