



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

# UNC45A (h3): 293T Lysate: sc-175029

## BACKGROUND

UNC45A (UNC-45 homolog A), also known as SMAP1 (smooth muscle cell-associated protein 1) or GCUNC45, is a 944 amino acid protein that localizes to the perinuclear region of the cytoplasm and contains three TPR repeats. Expressed in spinal cord, bone marrow, peripheral blood leukocytes, trachea, stomach and adrenal gland, UNCA45A functions as a chaperone for HSP 90, effectively facilitating the association of HSP 90 with PR (progesterone receptor). Additionally, UNC45A is thought to be necessary for proper folding of Myosin and is required for normal myotube formation during muscle cell development, thereby playing an important role in muscle formation. Over-expression of UNC45A is associated with rapid cell proliferation and motility, especially that observed in ovarian cancer, suggesting a role for UNC45A in tumorigenesis. Multiple isoforms of UNC45A exist due to alternative splicing events.

## REFERENCES

- Price, M.G., Landsverk, M.L., Barral, J.M. and Epstein, H.F. 2002. Two mammalian UNC45 isoforms are related to distinct cytoskeletal and muscle-specific functions. *J. Cell Sci.* 115: 4013-4023.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611219. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Chadli, A., Graham, J.D., Abel, M.G., Jackson, T.A., Gordon, D.F., Wood, W.M., Felts, S.J., Horwitz, K.B. and Toft, D. 2006. GCUNC45 is a novel regulator for the progesterone receptor/HSP 90 chaperoning pathway. *Mol. Cell. Biol.* 26: 1722-1730.
- Bazzaro, M., Santillan, A., Lin, Z., Tang, T., Lee, M.K., Bristow, R.E., Shih, I.e.M. and Roden, R.B. 2007. Myosin II cochaperone general cell UNC45 overexpression is associated with ovarian cancer, rapid proliferation, and motility. *Am. J. Pathol.* 171: 1640-1649.
- Chadli, A., Bruinsma, E.S., Stensgard, B. and Toft, D. 2008. Analysis of HSP 90 cochaperone interactions reveals a novel mechanism for TPR protein recognition. *Biochemistry* 47: 2850-2857.
- Anderson, M.J., Pham, V.N., Vogel, A.M., Weinstein, B.M. and Roman, B.L. 2008. Loss of UNC45A precipitates arteriovenous shunting in the aortic arches. *Dev. Biol.* 318: 258-267.
- Chadli, A., Felts, S.J. and Toft, D.O. 2008. GCUNC45 is the first HSP 90 co-chaperone to show  $\alpha/\beta$  isoform specificity. *J. Biol. Chem.* 283: 9509-9512.
- Liu, L., Srikakulam, R. and Winkelmann, D.A. 2008. UNC45 activates HSP 90-dependent folding of the Myosin motor domain. *J. Biol. Chem.* 283: 13185-13193.

## CHROMOSOMAL LOCATION

Genetic locus: UNC45A (human) mapping to 15q26.1.

## PRODUCT

UNC45A (h3): 293T Lysate represents a lysate of human UNC45A transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## APPLICATIONS

UNC45A (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive UNC45A antibodies. Recommended use: 10-20  $\mu$ l per lane.

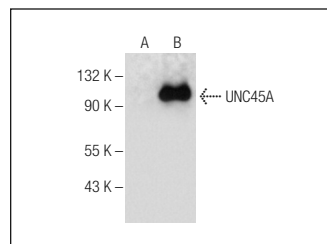
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

UNC45A (D-6): sc-390211 is recommended as a positive control antibody for Western Blot analysis of enhanced human UNC45A expression in UNC45A transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

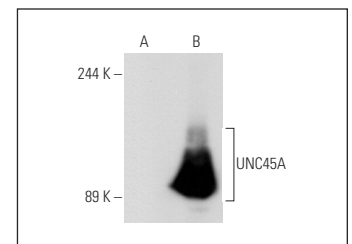
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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.

## DATA



UNC45A (D-6): sc-390211. Western blot analysis of UNC45A expression in non-transfected: sc-117752 (A) and human UNC45A transfected: sc-175029 (B) 293T whole cell lysates.



UNC45A (AbS1): sc-101493. Western blot analysis of UNC45A expression in non-transfected: sc-117752 (A) and human UNC45A transfected: sc-175029 (B) 293T whole cell lysates.

## 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.

## RESEARCH USE

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

## PROTOCOLS

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