



**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](http://linkedin.com/company/szaboscandic)



# ARC (h2): 293T Lysate: sc-159884

## BACKGROUND

ARC (apoptosis repressor with CARD domain), also designated nucleolar protein 3 (NOL3, NOP, NOP30) is a caspase-inhibiting protein that requires phosphorylation in order to prevent apoptosis. 5.5- and 1.0-kb ARC human transcripts are present in skeletal muscle and heart. Expression of the 1.0-kb transcript inhibits apoptosis in a dose-dependent manner when coexpressed with caspase-8. ARC interacts with caspase-2 and caspase-8 through its N-terminal death effector domain and is able to bind to caspase-8 in the mitochondria. ARC inhibits apoptosis induced by stimulation of CD95/FAS, tumor necrosis factor receptor-1 and TRAMP/death receptor-3. It is phosphorylated at Threonine 149 by CK2, and this phosphorylation targets ARC to mitochondria.

## REFERENCES

1. Koseki, T., et al. 1998. ARC, an inhibitor of apoptosis expressed in skeletal muscle and heart that interacts selectively with caspases. Proc. Natl. Acad. Sci. USA 95: 5156-5160.
2. Stoss, O., et al. 1999. Alternative splicing determines the intracellular localization of the novel nuclear protein NOP30 and its interaction with the splicing factor SRp30c. J. Biol. Chem. 274: 10951-10962.
3. Li, P.F., et al. 2002. Phosphorylation by protein kinase CK2: a signaling switch for the caspase-inhibiting protein ARC. Mol. Cell 10: 247-258.
4. Ekhterae, D., et al. 2003. Apoptosis repressor with caspase domain inhibits cardiomyocyte apoptosis by reducing K<sup>+</sup> currents. Am. J. Physiol. Cell Physiol. 284: C1405-C1410.
5. Jo, D.G., et al. 2004. Calcium binding of ARC mediates regulation of caspase-8 and cell death. Mol. Cell. Biol. 24: 9763-9770.

## CHROMOSOMAL LOCATION

Genetic locus: NOL3 (human) mapping to 16q22.1.

## PRODUCT

ARC (h2): 293T Lysate represents a lysate of human ARC transfected 293T cells and is provided as 100 µg protein in 200 µl 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.

## APPLICATIONS

ARC (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive ARC antibodies. Recommended use: 10-20 µl per lane.

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

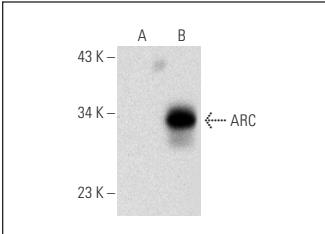
ARC (G-4): sc-398121 is recommended as a positive control antibody for Western Blot analysis of enhanced human ARC expression in ARC transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgG<sub>X</sub> BP-HRP: sc-516102 or m-IgG<sub>X</sub> 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



ARC (G-4): sc-398121. Western blot analysis of ARC expression in non-transfected: sc-117752 (**A**) and human ARC transfected: sc-159884 (**B**) 293T whole cell lysates.

## 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.