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NDRG4 (h): 293T Lysate: sc-129235

BACKGROUND

The N-Myc downstream regulated gene (NDRG) family is comprised of 4 members, namely NDRG1, NDRG2, NDRG3 and NDRG4, all of which share 57-65% homology. NDRG4 (NDRG family member 4), also known as SMAP-8 (smooth muscle-associated protein 8) or BDM1 (brain development-related molecule 1), is a 352 amino acid cytoplasmic protein that belongs to the NDRG family. Expressed specifically in brain and heart, NDRG4 is thought to function as a regulator of mitogenic signaling in vascular smooth muscle cells. Additionally, NDRG4 may play a role in early postnatal development and may mediate the differentiation and subsequent function of neuronal cells. NDRG4 is expressed as six isoforms (the first three of which are designated NDRG4-BVar, NDRG4-B and NDRG4-H) due to alternative splicing events.

REFERENCES

- Zhou, R.H., Kokame, K., Tsukamoto, Y., Yutani, C., Kato, H. and Miyata, T. 2001. Characterization of the human NDRG gene family: a newly identified member, NDRG4, is specifically expressed in brain and heart. *Genomics* 73: 86-97.
- Ohki, T., Hongo, S., Nakada, N., Maeda, A. and Takeda, M. 2002. Inhibition of neurite outgrowth by reduced level of NDRG4 protein in antisense transfected PC12 cells. *Brain Res. Dev. Brain Res.* 135: 55-63.
- Qu, X., Zhai, Y., Wei, H., Zhang, C., Xing, G., Yu, Y. and He, F. 2002. Characterization and expression of three novel differentiation-related genes belong to the human NDRG gene family. *Mol. Cell. Biochem.* 229: 35-44.
- Nishimoto, S., Tawara, J., Toyoda, H., Kitamura, K. and Komurasaki, T. 2003. A novel homocysteine-responsive gene, smap8, modulates mitogenesis in rat vascular smooth muscle cells. *Eur. J. Biochem.* 270: 2521-2531.
- Maeda, A., Hongo, S. and Miyazaki, A. 2004. Genomic organization, expression, and comparative analysis of noncoding region of the rat NdrG4 gene. *Gene* 324: 149-158.
- Hongo, S., Watanabe, T., Takahashi, K. and Miyazaki, A. 2006. NdrG4 enhances NGF-induced ERK activation uncoupled with Elk-1 activation. *J. Cell. Biochem.* 98: 185-193.
- Brailoiu, G.C., Dun, S.L., Mizuo, K., Brailoiu, E., Yang, J., Chang, J.K. and Dun, N.J. 2007. Smooth muscle-associated protein 8: distribution and biological activity in the rat brain. *J. Neurosci. Res.* 85: 1789-1796.
- Qu, X., Jia, H., Garrity, D.M., Tompkins, K., Batts, L., Appel, B., Zhong, T.P. and Baldwin, H.S. 2008. NdrG4 is required for normal myocyte proliferation during early cardiac development in zebrafish. *Dev. Biol.* 317: 486-496.
- Okuda, T., Kokame, K. and Miyata, T. 2008. Differential expression patterns of NDRG family proteins in the central nervous system. *J. Histochem. Cytochem.* 56: 175-182.

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.

CHROMOSOMAL LOCATION

Genetic locus: NDRG4 (human) mapping to 16q21.

PRODUCT

NDRG4 (h): 293T Lysate represents a lysate of human NDRG4 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

NDRG4 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive NDRG4 antibodies. Recommended use: 10-20 µl per lane.

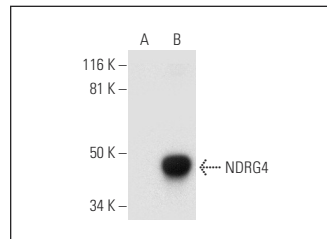
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

NDRG4 (B-10): sc-393342 is recommended as a positive control antibody for Western Blot analysis of enhanced human NDRG4 expression in NDRG4 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

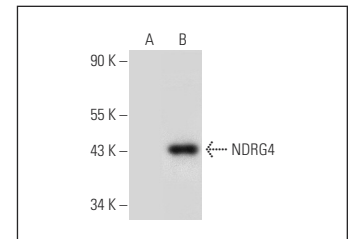
RECOMMENDED SUPPORT REAGENTS

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



NDRG4 (B-10): sc-393342. Western blot analysis of NDRG4 expression in non-transfected: sc-117752 (A) and human NDRG4 transfected: sc-129235 (B) 293T whole cell lysates.



NDRG4 (C-8): sc-514144. Western blot analysis of NDRG4 expression in non-transfected 293T: sc-117752 (A) and human NDRG4 transfected 293T: sc-129235 (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 for detailed protocols and support products.