SANTA CRUZ BIOTECHNOLOGY, INC.

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

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5. 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.
6. 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.
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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.

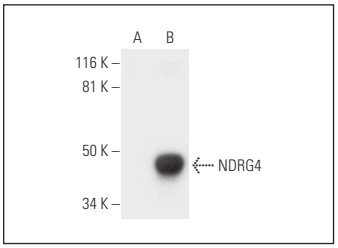
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

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).

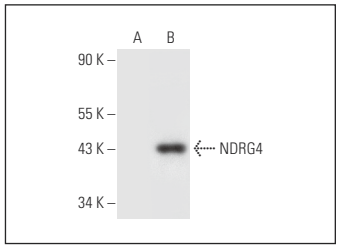
RECOMMENDED SUPPORT REAGENTS

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.