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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

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- Mindermengenzuschlag
- Trockeneiszuschlag
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- Expressversand

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SANTA CRUZ BIOTECHNOLOGY, INC.

N-SMase (h): 293T Lysate: sc-159286

BACKGROUND

Sphingomyelin and its metabolic products are now known to have second messenger functions in a variety of cellular signaling pathways. At the epicenter of the sphingomyelin-cell signaling pathway is a family of phospholipases called sphingomyelinases. These enzymes cleave sphingomyelin to produce ceramide and phosphocholine. Ceramide in turn serves as a lipid second messenger that induces a variety of cell regulatory phenomenon, such as programmed cell death (apoptosis), cell differentiation, cell proliferation and sterol homeostasis. Neutral sphingomyelinase (N-SMase) is a Mg^{2+} sensitive enzyme that can be activated by a host of physiologically relevant and structurally diverse molecules like tumor necrosis factor α (TNFα), oxidized human low density lipoproteins (Ox-LDL) and several growth factors.

REFERENCES

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8. Yabu, T., Imamura, S., Yamashita, M. and Okazaki, T. 2008. Identification of Mg^{2+} -dependent neutral sphingomyelinase 1 as a mediator of heat stress-induced ceramide generation and apoptosis. J. Biol. Chem. 283: 29971-29982.

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.

CHROMOSOMAL LOCATION

Genetic locus: SMPD2 (human) mapping to 6q21.

PRODUCT

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

APPLICATIONS

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

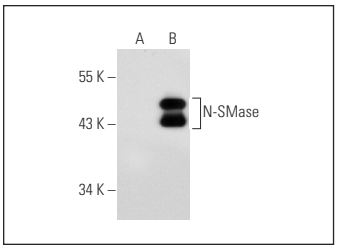
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

N-SMase (56-7): sc-100593 is recommended as a positive control antibody for Western Blot analysis of enhanced human N-SMase expression in N-SMase 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



N-SMase (56-7): sc-100593. Western blot analysis of N-SMase expression in non-transfected: sc-117752 (**A**) and human N-SMase transfected: sc-159286 (**B**) 293T whole cell lysates.

RESEARCH USE

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