SANTA CRUZ BIOTECHNOLOGY, INC.

NCK2 (m): 293T Lysate: sc-121954

BACKGROUND

The NCK family of SH2/SH3 adaptor proteins consists of two members, NCK1 (NCKα) and NCK2 (NCKβ), which couple tyrosine kinase signaling, including the EGF and PDGF receptor-pathways, to downstream signaling proteins. Specifically, overexpression of NCK1 in NIH/3T3 cells decreases DNA synthesis stimulated by EGF. Furthermore, the SH2 domain of NCK2 inhibits EGF- and PDGF-induced DNA synthesis. The SH3 domain of NCK binds a proline-rich domain on PAK, a known Actin cytoskeleton regulator. The NCK protein thus mediates the interaction between PAK and Rac. The NCK2 protein binds human PDGFR-β (Tyr 1009); overexpression of NCK2 inhibits PDGF-induced membrane ruffling and lamellipod formation. Various growth factor receptors, cell surface antigens and adhesion molecules phosphorylate mammalian NCK1 and NCK2. The human NCK1 and NCK2 genes map to chromosomes 3q21 and 2q12, respectively.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Nck2 (mouse) mapping to 1 B.

PRODUCT

NCK2 (m): 293T Lysate represents a lysate of mouse NCK2 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

NCK2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive NCK2 antibodies. Recommended use: 10-20 µl per lane.

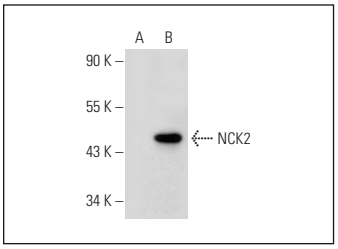
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

NCK2 (8.8): sc-20020 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse NCK2 expression in NCK2 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



NCK2 (8.8): sc-20020. Western blot analysis of NCK2 expression in non-transfected: sc-117752 (**A**) and mouse NCK2 transfected: sc-121954 (**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.