SANTA CRUZ BIOTECHNOLOGY, INC.

NIFK (h3): 293T Lysate: sc-170742

BACKGROUND

The structural proteins for the complex metalloenzyme nitrogenase include NIFK, NIFD and NIFH. These proteins are all necessary for archaeal and bacterial nitrogen fixation. The NIFK gene encodes the β-subunit of the nitrogenase molybdenum-iron (MoFe) tetramer. NIFK localizes to the nucleolus where it interactes with the fork-head associated domain of the proliferation marker protein Ki-67 in a mitosis-specific and phosphorylation-dependent manner. NIFK is widely expressed in adult tissues, suggesting other functions in addition to its interaction with Ki-67, which is only expressed in proliferating cells.

REFERENCES

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STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: MKI67IP (human) mapping to 2q14.3.

PRODUCT

NIFK (h3): 293T Lysate represents a lysate of human NIFK transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

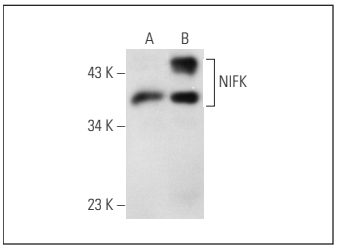
APPLICATIONS

NIFK (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive NIFK 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.

NIFK (18E148): sc-52904 is recommended as a positive control antibody for Western Blot analysis of enhanced human NIFK expression in NIFK transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



NIFK (18E148): sc-52904. Western blot analysis of NIFK expression in non-transfected: sc-117752 (**A**) and human NIFK transfected: sc-170742 (**B**) 293T whole cell lysates.

RESEARCH USE

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