



NXT-1 (m): 293T Lysate: sc-127252

BACKGROUND

Protein transport across the nucleus is a selective, multistep process involving several cytoplasmic factors including Ran. Nuclear transport factor 2 (NTF2) regulates Ran function in a noncatalytic fashion and mediates Ran-GDP targeting to the nucleus. Nucleotide-dependent conformations of Ran alter the site of interaction that would otherwise permit the binding of NTF2 to Ran-GTP. NTF2-related export protein (NXT-1) binds Ran-GTP and promotes nuclear protein export as well as the export of U1 snRNA, tRNA and mRNA. The NXT-1 sequence is 26% identical to NTF2. Known also as p15, NXT-1 localizes to the nuclear pore complex and shuttles between the nucleus and the cytoplasm in mammalian cells. As a necessary cofactor in the TAP-dependent export of intron-containing RNA, NXT-1 binds TAP as well as NXF2 and NXF3. NXT-1 stimulates nuclear protein export through the Crm1-dependent pathway, where NXT-1 binds Crm1. During the final step of this pathway, NXT-1 is required for protein release.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Nxt1 (mouse) mapping to 2 G3.

PRODUCT

NXT-1 (m): 293T Lysate represents a lysate of mouse NXT-1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

NXT-1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive NXT-1 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.

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.