SANTA CRUZ BIOTECHNOLOGY, INC.

NXF2 (C-16): sc-20888

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The Power to Question

BACKGROUND

Nuclear export factor (NXF) proteins belong to an evolutionarily conserved family of proteins which are characterized by a leucine-rich-repeat domain (LRR) followed by a region known as the nuclear transport factor 2 (NTF2)-like domain. The NXF family includes TAP1 (NXF1) and NXF2-5. TAP1 mediates the export of constitutive transport element (CTE)-containing simian type D retroviral RNAs through direct binding to the CTE. NXF2 binds RNA and localizes to the nuclear envelope, where it exhibits RNA export activity. NXF3 does not bind RNA nor localize to the nuclear rim, and NXF3 does not exhibit RNA export activity. NXF5 binds RNA and localizes in the form of granules in the cell body and neurites of mature hippocampal neurons. TAP1, NXF2 and NXF5 form heterodimers with RNA nuclear export-associated protein p15 (NXT).

REFERENCES

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2. Tan, W., Zolotukhin, A.S., Bear, J., Patenaude, D.J. and Felber, B.K. 2000. The mRNA export in *Caenorhabditis elegans* is mediated by Ce-NXF-1, an ortholog of human TAP/NXF and *Saccharomyces cerevisiae* Mex67p. RNA 6: 1762-1772.
3. Braun, I.C., Herold, A., Rode, M., Conti, E. and Izaurralde, E. 2001. Overexpression of TAP/p15 heterodimers bypasses nuclear retention and stimulates nuclear mRNA export. J. Biol. Chem. 276: 20536-20543.
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CHROMOSOMAL LOCATION

Genetic locus: NXF2 (human) mapping to Xq22.1.

SOURCE

NXF2 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of NXF2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-20888 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NXF2 (C-16) is recommended for detection of NXF2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

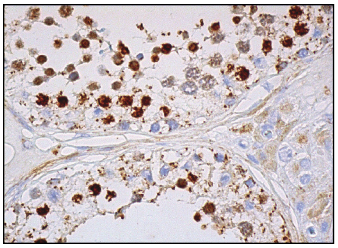
Suitable for use as control antibody for NXF2 siRNA (h): sc-38135, NXF2 shRNA Plasmid (h): sc-38135-SH and NXF2 shRNA (h) Lentiviral Particles: sc-38135-V.

Molecular Weight of NXF2: 72 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



NXF2 (C-16): sc-20888. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing nuclear staining of cells in seminiferous ducts.

STORAGE

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

RESEARCH USE

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