

# TAP (R-20): sc-17311

## BACKGROUND

The constitutive transport element (CTE) of type D retroviruses serves as a signal of nuclear export for unspliced viral RNAs. TAP (also known as NXF1) mediates the export of CTE-containing simian type D retroviral RNAs through binding directly to the CTE. TAP is associated with a recognized mRNA export pathway and is a member of the multigene family of NXF proteins. 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.

## REFERENCES

1. Tan, W., et al. 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.
2. Herold, A., et al. 2000. TAP (NXF1) belongs to a multigene family of putative RNA export factors with a conserved modular architecture. Mol. Cell. Biol. 20: 8996-9008.
3. Zolotukhin, A.S., et al. 2001. Retroviral constitutive transport element evolved from cellular tap(NXF1)-binding sequences. J. Virol. 75: 5567-5575.
4. Nappi, F., et al. 2001. Identification of a novel posttranscriptional regulatory element by using a rev- and RRE-mutated human immunodeficiency virus type 1 DNA proviral clone as a molecular trap. J. Virol. 75: 4558-4569.
5. Braun, I.C., et al. 2001. Overexpression of TAP/p15 heterodimers bypasses nuclear retention and stimulates nuclear mRNA export. J. Biol. Chem. 276: 20536-20543.

## CHROMOSOMAL LOCATION

Genetic locus: NXF1 (human) mapping to 11q12.3; Nxf1 (mouse) mapping to 19 A.

## SOURCE

TAP (R-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TAP 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-17311 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

TAP (R-20) is recommended for detection of TAP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

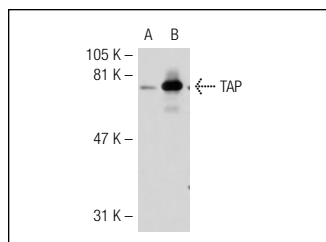
TAP (R-20) is also recommended for detection of TAP in additional species, including canine.

Suitable for use as control antibody for TAP siRNA (h): sc-38142, TAP siRNA (m): sc-38143, TAP shRNA Plasmid (h): sc-38142-SH, TAP shRNA Plasmid (m): sc-38143-SH, TAP shRNA (h) Lentiviral Particles: sc-38142-V and TAP shRNA (m) Lentiviral Particles: sc-38143-V.

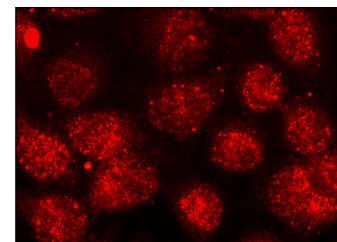
Molecular Weight of TAP: 73 kDa.

Positive Controls: TAP (h): 293T Lysate: sc-114751 or HeLa nuclear extract: sc-2120.

## DATA



TAP (R-20): sc-17311. Western blot analysis of TAP expression in non-transfected: sc-117752 (A) and human TAP transfected: sc-114751 (B) 293T whole cell lysates.



TAP (R-20): sc-17311. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear staining.

## SELECT PRODUCT CITATIONS

1. O'Hagan, H.M., et al. 2004. Efficient NES-dependent protein nuclear export requires ongoing synthesis and export of mRNAs. Exp. Cell. Res. 297: 548-559.
2. Zhang, M., et al. 2007. Fragile X mental retardation protein FMRP and the RNA export factor NXF2 associate with and destabilize Nxf1 mRNA in neuronal cells. Proc. Natl. Acad. Sci. USA 104: 10057-10062.
3. Derheimer, F.A., et al. 2007. RPA and ATR link transcriptional stress to p53. Proc. Natl. Acad. Sci. USA 104: 12778-12783.

## RESEARCH USE

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