# SANTA CRUZ BIOTECHNOLOGY, INC.

# TAP (31): sc-136095



## 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

- Truant, R., et al. 1999. The human TAP nuclear RNA export factor contains a novel transportin-dependent nuclear localization signal that lacks nuclear export signal function. J. Biol. Chem. 274: 32167-32171.
- 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.
- Reddy, T.R., et al. 2000. Sam 68, RNA helicase A and TAP cooperate in the post-transcriptional regulation of human immunodeficiency virus and type D retroviral mRNA. Oncogene 19: 3570-3575.
- Levesque, L., et al. 2001. RNA export mediated by TAP involves NXT1dependent interactions with the nuclear pore complex. J. Biol. Chem. 276: 44953-44962.
- Guzik, B.W., et al. 2001. NXT1 (p15) is a crucial cellular cofactor in TAPdependent export of intron-containing RNA in mammalian cells. Mol. Cell. Biol. 21: 2545-2554.
- Ho, D.N., et al. 2002. The crystal structure and mutational analysis of a novel RNA-binding domain found in the human TAP nuclear mRNA export factor. Proc. Natl. Acad. Sci. USA 99: 1888-1893.
- 7. Blevins, M.B., et al. 2003. Complex formation among the RNA export proteins Nup98, Rae-1/Gle2, and TAP. J. Biol. Chem. 278: 20979-20988.
- Saito, K., et al. 2004. TAP/NXF1, the primary mRNA export receptor, specifically interacts with a neuronal RNA-binding protein HuD. Biochem. Biophys. Res. Commun. 321: 291-297.
- 9. Erkmann, J.A., et al. 2005. Nuclear export of metazoan replication-dependent histone mRNAs is dependent on RNA length and is mediated by TAP. RNA 11: 45-58.

## CHROMOSOMAL LOCATION

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

## SOURCE

TAP (31) is a mouse monoclonal antibody raised against amino acids 488-596 of TAP of human origin.

## **RESEARCH USE**

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

#### PRODUCT

Each vial contains 50  $\mu g~lgG_1$  in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin, 20% glycerol and 0.04% stabilizer protein.

#### **APPLICATIONS**

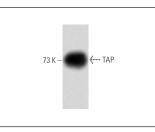
TAP (31) is recommended for detection of TAP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

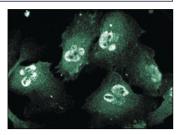
Suitable for use as control antibody for TAP siRNA (h): sc-38142, TAP siRNA (m): sc-38143, TAP shRNA Plasmid (h): sc-38142-SH, TAP shRNA Plasmid (m): sc-38143-SH, TAP shRNA (h) Lentiviral Particles: sc-38142-V and TAP shRNA (m) Lentiviral Particles: sc-38143-V.

Molecular Weight of TAP: 73 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa nuclear extract: sc-2120 or K-562 nuclear extract: sc-2130.

#### DATA





TAP (31): sc-136095. Western blot analysis of TAP expression in Jurkat whole cell lysate.

TAP (31): sc-136095. Immunofluorescence staining of human endothelial cells showing nuclear and cytoplasmic staining.

## STORAGE

Store at 4° C, \*\*D0 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.