SANTA CRUZ BIOTECHNOLOGY, INC.

TAP (53H8): sc-32319

The Power to Question

BACKGROUND

The constitutive transport element (CTE) of type D retroviruses serves as a signal of nuclear export for unspliced viral RNAs. TAP (tip-associating protein, 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.

CHROMOSOMAL LOCATION

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

SOURCE

TAP (53H8) is a mouse monoclonal antibody raised against TAP of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TAP (53H8) is available conjugated to agarose (sc-32319 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-32319 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-32319 PE), fluorescein (sc-32319 FITC), Alexa Fluor® 488 (sc-32319 AF488), Alexa Fluor® 546 (sc-32319 AF546), Alexa Fluor® 594 (sc-32319 AF594) or Alexa Fluor® 647 (sc-32319 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-32319 AF680) or Alexa Fluor® 790 (sc-32319 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

TAP (53H8) 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 immunohistochemistry (including paraffin-embedded sections) (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: CCRF-CEM cell lysate: sc-2225, RAW 264.7 whole cell lysate: sc-2211 or HeLa nuclear extract: sc-2120.

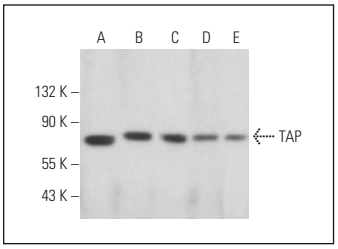
STORAGE

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

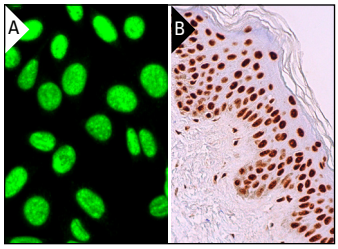
RESEARCH USE

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

DATA



TAP (53H8): sc-32319. Western blot analysis of TAP expression in RAW 264.7 (**A**), CCRF-CEM (**B**) and K-562 (**C**) whole cell lysates and A-673 (**D**) and HeLa (**E**) nuclear extracts.



TAP (53H8): sc-32319. Immunofluorescence staining of formalin-fixed SW480 cells showing nuclear localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing nuclear staining of keratinocytes, fibroblasts, Langerhans cells and melanocytes (**B**).

SELECT PRODUCT CITATIONS

1. Zolotukhin, A.S., et al. 2009. Nuclear export factor RBM15 facilitates the access of Dbp5 to mRNA. Nucleic Acids Res. 37: 7151-7162.
2. Pochukalina, G.N., et al. 2010. Interchromatin granule clusters of mouse preovulatory oocytes, organization, molecular composition and possible functions. Tsitologiia 52: 30-40.
3. Zonta, E., et al. 2013. The RNA helicase DDX5/p68 is a key factor promoting c-Fos expression at different levels from transcription to mRNA export. Nucleic Acids Res. 41: 554-564.
4. Lee, Y.B., et al. 2013. Hexanucleotide repeats in ALS/FTD form length-dependent RNA foci, sequester RNA binding proteins, and are neurotoxic. Cell Rep. 5: 1178-1186.
5. Saito, S., et al. 2016. Leukemia-associated Nup214 fusion proteins disturb the XPO1-mediated nuclear-cytoplasmic transport pathway and thereby the NFκB signaling pathway. Mol. Cell. Biol. 36: 1820-1835.
6. Morris, K.J. and Corbett, A.H. 2018. The polyadenosine RNA-binding protein ZC3H14 interacts with the THO complex and coordinately regulates the processing of neuronal transcripts. Nucleic Acids Res. 46: 6561-6575.
7. Lee, E.S., et al. 2020. TPR is required for the efficient nuclear export of mRNAs and lncRNAs from short and intron-poor genes. Nucleic Acids Res. 48: 11645-11663.
8. Leader, Y., et al. 2021. The upstream 5' splice site remains associated to the transcription machinery during intron synthesis. Nat. Commun. 12: 4545.
9. Tsai, Y.L., et al. 2022. Nuclear RNA transcript levels modulate nucleocytoplasmic distribution of ALS/FTD-associated protein FUS. Sci. Rep. 12: 8180.

PROTOCOLS

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