SANTA CRUZ BIOTECHNOLOGY, INC.

TudorSN (F-5): sc-166676

BACKGROUND

TudorSN functions in the Pim-1 regulation of Myb activity and acts as a trascriptional activatior of EBNA-2. TudorSN also interacts with EAV, NSP1, GTF2E1 and GTF2E2, and forms a ternary complex with Stat6 and POLR2A. The staphylococcal nuclease-like (SN)-domains directly interact with amino acids 1099-1758 of CBP. TudorSN plays an important role in the assembly of Stat6 transcriptome and stimulates IL-4-dependent transcription by mediating interaction between Stat6 and CBP.

REFERENCES

1. Leverson, J.D., et al. 1998. Pim-1 kinase and p100 cooperate to enhance c-Myb activity. Mol. Cell 2: 417-425.
2. Tijms, M.A., et al. 2003. Equine arteritis virus non-structural protein 1, an essential factor for viral subgenomic mRNA synthesis, interacts with the cellular transcription J. Gen. Virol. 84: 2317-2322.
3. Paukku, K., et al. 2003. Tudor and nuclease-like domains containing protein p100 function as coactivators for signal transducer and activator of transcription 5. Mol. Endocrinol. 17: 1805-1814.
4. Broadhurst, M.K., et al. 2005. The p100 EBNA-2 coactivator: a highly conserved protein found in a range of exocrine and endocrine cells and tissues in cattle. Biochim. Biophys. Acta 1681: 126-133.

CHROMOSOMAL LOCATION

Genetic locus: SND1 (human) mapping to 7q32.1; Snd1 (mouse) mapping to 6 A3.3.

SOURCE

TudorSN (F-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 880-910 at the C-terminus of TudorSN of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-166676 X, 200 µg/0.1 ml.

TudorSN (F-5) is available conjugated to agarose (sc-166676 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-166676 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166676 PE), fluorescein (sc-166676 FITC), Alexa Fluor® 488 (sc-166676 AF488), Alexa Fluor® 546 (sc-166676 AF546), Alexa Fluor® 594 (sc-166676 AF594) or Alexa Fluor® 647 (sc-166676 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166676 AF680) or Alexa Fluor® 790 (sc-166676 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-166676 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

RESEARCH USE

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

APPLICATIONS

TudorSN (F-5) is recommended for detection of TudorSN of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), 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).

TudorSN (F-5) is also recommended for detection of TudorSN in additional species, including equine, canine, bovine, porcine and avian.

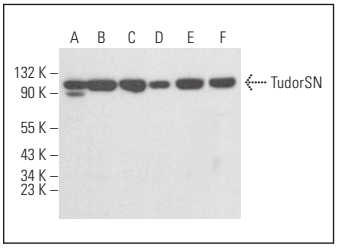
Suitable for use as control antibody for TudorSN siRNA (h): sc-45514, TudorSN siRNA (m): sc-45515, TudorSN shRNA Plasmid (h): sc-45514-SH, TudorSN shRNA Plasmid (m): sc-45515-SH, TudorSN shRNA (h) Lentiviral Particles: sc-45514-V and TudorSN shRNA (m) Lentiviral Particles: sc-45515-V.

TudorSN (F-5) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

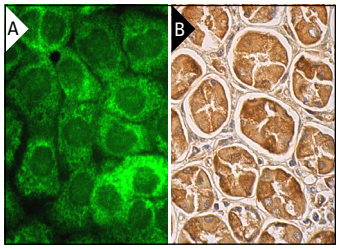
Molecular Weight of TudorSN: 100 kDa.

Positive Controls: Raji whole cell lysate: sc-364236, NAMALWA cell lysate: sc-2234 or 3T3-L1 cell lysate: sc-2243.

DATA



TudorSN (F-5): sc-166676. Western blot analysis of TudorSN expression in Ramos (**A**), Raji (**B**), NAMALWA (**C**), 3T3-L1 (**D**) and MCF7 (**E**) whole cell lysates and MOLT-4 nuclear extract (**F**).



TudorSN (F-5): sc-166676. Immunofluorescence staining of formalin-fixed A-431 cells showing cytoplasmic localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing nuclear and cytoplasmic staining of glandular cells (**B**).

SELECT PRODUCT CITATIONS

1. Nawaz, M.S., et al. 2016. Regulation of human endonuclease V activity and relocalization to cytoplasmic stress granules. J. Biol. Chem. 291: 21786-21801.
2. Zhou, Y., et al. 2022. N-glycosylation on Asn50 of SND1 is required for glioma U87 cell proliferation and metastasis. J. Immunol. Res. 2022: 5239006.
3. Zhang, H. et al. 2023. The chromatin architectural regulator SND1 mediates metastasis in triple-negative breast cancer by promoting CDH1 gene methylation. Breast Cancer Res. 25: 129.

STORAGE

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