SANTA CRUZ BIOTECHNOLOGY, INC.

TAZ (H-70): sc-48805

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The transcriptional co-activator with PDZ-binding motif (TAZ) is a 14-3-3-binding molecule. The highly conserved and ubiquitously expressed 14-3-3 proteins regulate differentiation, cell cycle progression and apoptosis by binding intracellular phosphoproteins involved in signal transduction. TAZ may link events at the plasma membrane and cytosketeton to nuclear transcription in a manner that can be regulated by 14-3-3. TAZ shares homology with the WW domain of Yes-associated protein (YAP) and functions as a transcriptional co-activator by binding to the PPXY motif present on transcription factors. TAZ recognizes immunoreactive protein bands in lysates from MDCK, NIH-3T3 and 293T cells. In addition, COS7, Hep G2, CHO and HeLa cells express endogenous TAZ. 14-3-3 binding requires TAZ phosphorylation on a single Ser 89 residue, resulting in the inhibition of TAZ transcriptional co-activation through 14-3-3-mediated nuclear export.

REFERENCES

1. Kanai, F., et at. 2000. TAZ: a novel transcriptional co-activator regulated by interactions with 14-3-3 and PDZ domain proteins. EMBO J. 19: 6778-6791.
2. Fu, H., et at. 2000. 14-3-3 proteins: structure, function, and regulation. Annu. Rev. Pharmacol. Toxicol. 40: 617-647.
3. Garner, C., et at. 2000. PDZ domains in synapse assmebly and signaling. Trends Cell. Biol. 7: 274-280.

CHROMOSOMAL LOCATION

Genetic locus: WWTR1 (human) mapping to 3q25.1; Wwtr1 (mouse) mapping to 3 D.

SOURCE

TAZ (H-70) is a rabbit polyclonal antibody raised against amino acids 161-230 mapping within an internal region of TAZ 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.

APPLICATIONS

TAZ (H-70) is recommended for detection of TAZ 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), 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 TAZ siRNA (h): sc-38568, TAZ siRNA (m): sc-38569, TAZ shRNA Plasmid (h): sc-38568-SH, TAZ shRNA Plasmid (m): sc-38569-SH, TAZ shRNA (h) Lentiviral Particles: sc-38568-V and TAZ shRNA (m) Lentiviral Particles: sc-38569-V.

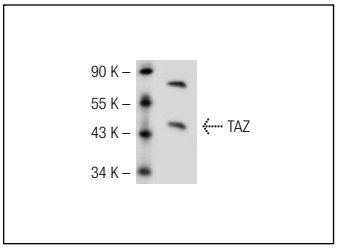
Molecular Weight of TAZ: 45 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

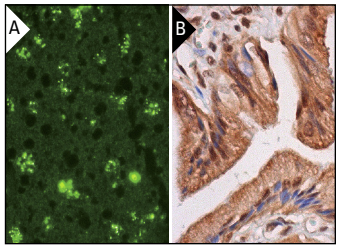
STORAGE

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

DATA



TAZ (H-70): sc-48805. Western blot analysis of TAZ expression in HeLa whole cell lysate.



TAZ (H-70): sc-48805. Immunofluorescence staining of normal mouse liver frozen section showing nuclear staining (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing nuclear and cytoplasmic staining of glandular cells (**B**).

SELECT PRODUCT CITATIONS

1. Di Palma, T., et al. 2009. TAZ is a coactivator for Pax8 and TTF-1, two transcription factors involved in thyroid differentiation. Exp. Cell Res. 315: 162-175.
2. Liu, Y., et al. 2010. Taz-tead1 links cell-cell contact to zeb1 expression, proliferation, and dedifferentiation in retinal pigment epithelial cells. Invest. Ophthalmol. Vis. Sci. 51: 3372-3378.
3. de Cristofaro, T., et al. 2011. TAZ/WWTR1 is overexpressed in papillary thyroid carcinoma. Eur. J. Cancer 47: 926-933.
4. Matteucci, E., et al. 2012. Bone metastatic process of breast cancer involves methylation state affecting E-cadherin expression through TAZ and WWOX nuclear effectors. Eur. J. Cancer 49: 231-244.
5. Xie, M., et al. 2012. Prognostic significance of TAZ expression in resected non-small cell lung cancer. J. Thorac. Oncol. 7: 799-807.
6. Bendinelli, P., et al. 2013. Hypoxia inducible factor-1 is activated by transcriptional co-activator with PDZ-binding motif (TAZ) versus WWdomain-containing oxidoreductase (WWOX) in hypoxic microenvironment of bone metastasis from breast cancer. Eur. J. Cancer pii: S0959-S8049.

RESEARCH USE

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