

TAZ (1F1): sc-293183

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 cytoskeleton 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 Serine 89 residue, resulting in the inhibition of TAZ transcriptional co-activation through 14-3-3-mediated nuclear export.

REFERENCES

1. Kanai, F., et al. 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 al. 2000. 14-3-3 proteins: structure, function, and regulation. *Annu. Rev. Pharmacol. Toxicol.* 40: 617-647.
3. Garner, C., et al. 2000. PDZ domains in synapse assembly and signaling. *Trends Cell Biol.* 7: 274-280.
4. Baldin, V. 2000. 14-3-3 proteins and growth control. *Prog. Cell Cycle Res.* 4: 49-60.
5. Muslin, A. and Xing, H. 2000. 14-3-3 proteins: regulation of subcellular localization by molecular interference. *Cell. Signal.* 12: 703-709.

CHROMOSOMAL LOCATION

Genetic locus: WWTR1 (human) mapping to 3q25.1.

SOURCE

TAZ (1F1) is a mouse monoclonal antibody raised against amino acids 201-300 of TAZ of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

TAZ (1F1) is recommended for detection of TAZ of 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).

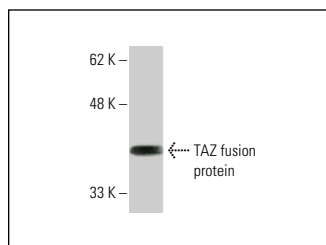
Suitable for use as control antibody for TAZ siRNA (h): sc-38568, TAZ shRNA Plasmid (h): sc-38568-SH and TAZ shRNA (h) Lentiviral Particles: sc-38568-V.

Molecular Weight of TAZ: 45 kDa.

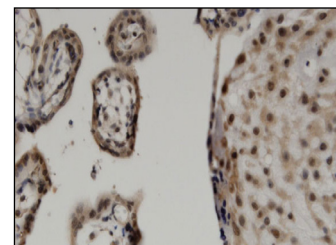
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



TAZ (1F1): sc-293183. Western blot analysis of human recombinant TAZ fusion protein.



TAZ (1F1): sc-293183. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic and nuclear staining.

SELECT PRODUCT CITATIONS

1. Liu, L., et al. 2018. Tiam1 promotes thyroid carcinoma metastasis by modulating EMT via Wnt/β-catenin signaling. *Exp. Cell Res.* 362: 532-540.
2. Farrell, A., et al. 2019. Faulty oxygen sensing disrupts angiomin function in trophoblast cell migration and predisposes to preeclampsia. *JCI Insight* 4: e127009.
3. Zhu, C., et al. 2019. A non-canonical role of YAP/TEAD is required for activation of estrogen-regulated enhancers in breast cancer. *Mol. Cell* 75: 791-806.e8.
4. Jia, Y., et al. 2019. Phosphorylation of 14-3-3ζ links YAP transcriptional activation to hypoxic glycolysis for tumorigenesis. *Oncogenesis* 8: 31.
5. Belgardt, E., et al. 2020. Force-responsive Zyxin modulation in periodontal ligament cells is regulated by YAP rather than TAZ. *Cell. Signal.* 72: 109662.
6. Yang, L., et al. 2022. Targeting PLA2G16, a lipid metabolism gene, by ginsenoside compound K to suppress the malignant progression of colorectal cancer. *J. Adv. Res.* 36: 265-276.

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.