

ZNF76 (I-16): sc-83501

BACKGROUND

ZNF76, also known as ZNF523 or Zfp523, is a transcriptional repressor expressed in the testis. It is the human homolog of the *Xenopus* Staf protein (selenocysteine tRNA gene transcription-activating factor) known to regulate the genes encoding small nuclear RNA and selenocysteine tRNA. ZNF76 localizes to the nucleus and exerts an inhibitory function on p53-mediated transactivation. ZNF76 specifically targets TFIID (TATA-binding protein). The interaction with TFIID occurs through both its N- and C-termini. The transcriptional repression activity of ZNF76 is predominantly regulated by lysine modifications, acetylation and sumoylation. ZNF76 is sumoylated by PIAS 1 and is acetylated by p300. Acetylation leads to the loss of sumoylation and a weakened TFIID interaction. ZNF76 can be deacetylated by HDAC1. In addition to lysine modifications, ZNF76 activity is also controlled by splice variants. Two isoforms exist due to alternative splicing. These isoforms vary in their ability to interact with TFIID.

REFERENCES

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3. Myslinski, E., Krol, A. and Carbon, P. 1998. ZNF76 and ZNF143 are two human homologs of the transcriptional activator Staf. *J. Biol. Chem.* 273: 21998-22006.
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5. Kubota, H., Yokota, S., Yanagi, H. and Yura, T. 2000. Transcriptional regulation of the mouse cytosolic chaperonin subunit gene *Ccta*/T-complex polypeptide 1 by selenocysteine tRNA gene transcription activating factor family zinc finger proteins. *J. Biol. Chem.* 275: 28641-28648.
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CHROMOSOMAL LOCATION

Genetic locus: ZNF76 (human) mapping to 6p21.31; Zfp523 (mouse) mapping to 17 A3.3.

SOURCE

ZNF76 (I-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNF76 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.

Blocking peptide available for competition studies, sc-83501 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZNF76 (G-12) is recommended for detection of ZNF76 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ZNF family members.

ZNF76 (I-16) is also recommended for detection of ZNF76 in additional species, including equine and canine.

Suitable for use as control antibody for ZNF76 siRNA (h): sc-77005, ZNF76 siRNA (m): sc-77006, ZNF76 shRNA Plasmid (h): sc-77005-SH, ZNF76 shRNA Plasmid (m): sc-77006-SH, ZNF76 shRNA (h) Lentiviral Particles: sc-77005-V and ZNF76 shRNA (m) Lentiviral Particles: sc-77006-V.

ZNF76 (G-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ZNF76: 62 kDa.

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

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