

ZNF318 (N-20): sc-68003



BACKGROUND

ZNF318 (zinc finger protein 318), also known as TZF (testicular zinc finger protein) or ZFP318, is a 2,279 amino acid endocrine regulatory protein that localizes to the nucleus. Highly expressed in testes, ovaries and kidneys, ZNF318 is a corepressor of androgen receptor AR-mediated transcriptional activation and is thought to regulate transcription during spermatogenesis. ZNF318 interacts with the N-terminal domain of AR and contains two matrix-type zinc fingers. Two isoforms of ZNF318, designated TZF and TZF-L, are produced due to alternative splicing events. Each of these splice variants are thought to have unique roles in transcriptional regulation. While the TZF isoform functions as a repressor of AR-mediated transcriptional activation, the TZF-L isoform is thought to enhance AR-mediated transcriptional activation.

REFERENCES

1. Ishizuka, M., et al. 2003. Molecular cloning and characteristics of a novel zinc finger protein and its splice variant whose transcripts are expressed during spermatogenesis. *Biochem. Biophys. Res. Commun.* 301: 1079-1085.
2. Ishizuka, M., et al. 2005. A zinc finger protein TZF is a novel corepressor of androgen receptor. *Biochem. Biophys. Res. Commun.* 331: 1025-1031.
3. Sjöblom, T., et al. 2006. The consensus coding sequences of human breast and colorectal cancers. *Science* 314: 268-274.
4. Tao, R.H., et al. 2006. Opposite effects of alternative TZF spliced variants on androgen receptor. *Biochem. Biophys. Res. Commun.* 341: 515-521.
5. Tao, R.H., et al. 2006. Testicular zinc finger protein recruits histone deacetylase 2 and suppresses the transactivation function and intranuclear foci formation of agonist-bound androgen receptor competitively with TIF2. *Mol. Cell. Endocrinol.* 247: 150-165.
6. Trtková, K., et al. 2007. Histone acetylation and methylation in the signaling of steroid hormone receptors. *Cell. Mol. Biol.* 53: OL930-OL942.

CHROMOSOMAL LOCATION

Genetic locus: ZNF318 (human) mapping to 6p21.1; Zfp318 (mouse) mapping to 17 C.

SOURCE

ZNF318 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ZNF318 of mouse 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-68003 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

ZNF318 (N-20) is recommended for detection of ZNF318 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZNF318 siRNA (h): sc-63251, ZNF318 siRNA (m): sc-63252, ZNF318 shRNA Plasmid (h): sc-63251-SH, ZNF318 shRNA Plasmid (m): sc-63252-SH, ZNF318 shRNA (h) Lentiviral Particles: sc-63251-V and ZNF318 shRNA (m) Lentiviral Particles: sc-63252-V.

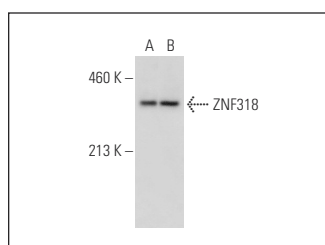
Molecular Weight of ZNF318: 251 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or HEK293 whole cell lysate: sc-45136.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ZNF318 (N-20): sc-68003. Western blot analysis of ZNF318 expression in HeLa nuclear extract (A) and HEK293 whole cell lysate (B).

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.