# ZNF318 (L-20): sc-68002



The Power to Question

#### **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 co-repressor 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 matrintype 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**

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- 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.
- 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: 0L930-0L942.

# CHROMOSOMAL LOCATION

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

## **SOURCE**

ZNF318 (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNF318 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-68002 P, (100  $\mu$ g 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 (L-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), 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).

ZNF318 (L-20) is also recommended for detection of ZNF318 in additional species, including equine, canine, bovine, porcine and avian.

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: 232 kDa.

#### **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) with UltraCruz™ Mounting Medium: sc-24941.

### **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.

**Santa Cruz Biotechnology, Inc.** 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**