



ZNF442 (N-18): sc-69143

BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. The majority of zinc-finger proteins contain a Krüppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. ZNF442 is a 627 amino acid member of the krueppel C₂H₂-type zinc-finger protein family. Localized to the nucleus, ZNF442 contains 16 C₂H₂-type zinc fingers and one KRAB domain. The gene encoding ZNF442 maps to chromosome 19p13.2. Chromosome 19, which makes up over 2% of human genomic DNA, is the genetic home for a number of immunoglobulin superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family, and Fc α receptors.

REFERENCES

1. Rooney, P.H., et al. 2004. The candidate oncogene ZNF217 is frequently amplified in colon cancer. *J. Pathol.* 204: 282-288.
2. Huang, G., et al. 2005. ZNF217 suppresses cell death associated with chemotherapy and telomere dysfunction. *Hum. Mol. Genet.* 14: 3219-3225.
3. Sarraf, S., et al. 2005. The human ovarian teratocarcinoma cell line PA-1 demonstrates a single translocation: analysis with fluorescence *in situ* hybridization, spectral karyotyping, and bacterial artificial chromosome microarray. *Cancer Genet. Cytogenet.* 161: 63-69.
4. Shimada, M., et al. 2005. Detection of Her2/Neu, c-Myc and ZNF217 gene amplification during breast cancer progression using fluorescence *in situ* hybridization. *Oncol. Rep.* 13: 633-641.
5. Zhong, M., et al. 2006. ZNF217 gene was detected in ovarian serous cystadenocarcinoma by fluorescence *in situ* hybridization. *Zhonghua Yi Xue Yi Chuan Xue Za Zhi* 23: 665-667.
6. Quinlan, K.G., et al. 2007. Amplification of zinc finger gene 217 (ZNF217) and cancer: when good fingers go bad. *Biochim. Biophys. Acta* 1775: 333-340.
7. Li, P., et al. 2007. Multiple roles of the candidate oncogene ZNF217 in ovarian epithelial neoplastic progression. *Int. J. Cancer* 120: 1863-1873.
8. Krig, S.R., et al. 2007. Identification of genes directly regulated by the oncogene ZNF217 using chromatin immunoprecipitation (ChIP)-chip assays. *J. Biol. Chem.* 282: 9703-9712.
9. Cowger, J.J., et al. 2007. Biochemical characterization of the zinc-finger protein 217 transcriptional repressor complex: identification of a ZNF217 consensus recognition sequence. *Oncogene* 26: 3378-3386.

STORAGE

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

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: ZNF442 (human) mapping to 19p13.2.

SOURCE

ZNF442 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ZNF442 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-69143 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-69143 X, 200 μ g/0.1 ml.

APPLICATIONS

ZNF442 (N-18) is recommended for detection of ZNF442 of 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).

Suitable for use as control antibody for ZNF442 siRNA (h): sc-76986, ZNF442 shRNA Plasmid (h): sc-76986-SH and ZNF442 shRNA (h) Lentiviral Particles: sc-76986-V.

ZNF442 (N-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ZNF442: 73 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) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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