

ZNF202 (GG-7): sc-101074

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. ZNF202 (zinc finger protein 202), also known as ZKSCAN10, is a 648 amino acid protein that contains eight C₂H₂-type zinc fingers, one KRAB domain and one SCAN box domain. Localized to the nucleus and expressed at high levels in the testis, ZNF202 belongs to the Krüppel C₂H₂-type zinc-finger protein family and functions as a transcriptional repressor of genes that are involved in lipid metabolism. ZNF202 regulates the expression of several classes of proteins, including lipoprotein particles, transporters involved in lipid homeostasis, enzymes involved in lipid processing and a wide variety of proteins that are associated with energy metabolism. Defects in the gene encoding ZNF202 are associated with high cholesterol and may be involved in the pathogenesis of lung, ovarian and breast cancer. Two isoforms of ZNF202, designated α and β , exist due to alternative splicing events.

REFERENCES

1. Monaco, C., et al. 1998. Molecular cloning and characterization of ZNF202: a new gene at 11q23.3 encoding testis-specific zinc finger proteins. *Genomics* 52: 358-362.
2. Wagner, S., et al. 2000. A broad role for the zinc finger protein ZNF202 in human lipid metabolism. *J. Biol. Chem.* 275: 15685-15690.
3. Porsch-Ozcürümez, M., et al. 2001. The zinc finger protein 202 (ZNF202) is a transcriptional repressor of ATP binding cassette transporter A1 (ABCA1) and ABCG1 gene expression and a modulator of cellular lipid efflux. *J. Biol. Chem.* 276: 12427-12433.
4. Xing, W. and Sairam, M.R. 2002. Cross talk of two krüppel transcription factors regulates expression of the ovine FSH receptor gene. *Biochem. Biophys. Res. Commun.* 295: 1096-1101.
5. Langmann, T., et al. 2003. ZNF202 is inversely regulated with its target genes ABCA1 and apoE during macrophage differentiation and foam cell formation. *J. Lipid Res.* 44: 968-977.
6. Schmitz, G., et al. 2004. Zinc finger protein ZNF202 structure and function in transcriptional control of HDL metabolism. *Curr. Opin. Lipidol.* 15: 199-208.
7. Stene, M.C., et al. 2006. Zinc finger protein 202: a new candidate gene for ischemic heart disease: the copenhagen city heart study. *Atherosclerosis* 188: 43-50.

CHROMOSOMAL LOCATION

Genetic locus: ZNF202 (human) mapping to 11q24.1.

SOURCE

ZNF202 (GG-7) is a mouse monoclonal antibody raised against recombinant ZNF202 of human origin.

PRODUCT

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

APPLICATIONS

ZNF202 (GG-7) is recommended for detection of ZNF202 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 ZNF202 siRNA (h): sc-96682, ZNF202 shRNA Plasmid (h): sc-96682-SH and ZNF202 shRNA (h) Lentiviral Particles: sc-96682-V.

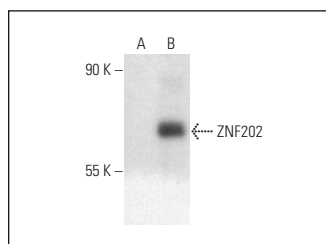
Molecular Weight of ZNF202: 75 kDa.

Positive Controls: ZNF202 (h): 293T Lysate: sc-373435.

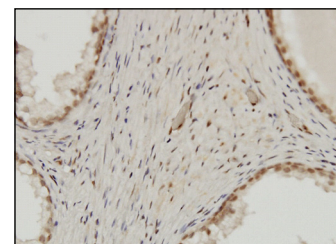
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



ZNF202 (GG-7): sc-101074. Western blot analysis of ZNF202 expression in non-transfected: sc-117752 (A) and human ZNF202 transfected: sc-373435 (B) 293T whole cell lysates.



ZNF202 (GG-7): sc-101074. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human prostate tissue showing nuclear localization.

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.