# ZNF202 (h): 293T Lysate: sc-373435



The Power to Question

## **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 8  $C_2H_2$ -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  $C_2H_2$ -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  $\alpha$  and  $\beta$ , exist due to alternative splicing events.

## **REFERENCES**

- Monaco, C., Helmer Citterich, M., Caprini, E., Vorechovsky, I., Russo, G., Croce, C.M., Barbanti-Brodano, G. and Negrini, M. 1998. Molecular cloning and characterization of ZNF202: a new gene at 11q23.3 encoding testisspecific zinc finger proteins. Genomics 52: 358-362.
- Wagner, S., Hess, M.A., Ormonde-Hanson, P., Malandro, J., Hu, H., Chen, M., Kehrer, R., Frodsham, M., Schumacher, C., Beluch, M., Honer, C., Skolnick, M., Ballinger, D. and Bowen, B.R. 2000. A broad role for the zinc finger protein ZNF202 in human lipid metabolism. J. Biol. Chem. 275: 15685-15690.
- Porsch-Ozcurumez, M., Langmann, T., Heimerl, S., Borsukova, H., Kaminski, W.E., Drobnik, W., Honer, C., Schumacher, C. and Schmitz, G. 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.
- Xing, W. and Sairam, M.R. 2002. Cross talk of two Krüpple transcription factors regulates expression of the ovine FSH receptor gene. Biochem. Biophys. Res. Commun. 295: 1096-1101.
- Langmann, T., Schumacher, C., Morham, S.G., Honer, C., Heimerl, S., Moehle, C. and Schmitz, G. 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.
- Schmitz, G., Heimerl, S. and Langmann, T. 2004. Zinc finger protein ZNF202 structure and function in transcriptional control of HDL metabolism. Curr. Opin. Lipidol. 15: 199-208.
- Stene, M.C., Frikke-Schmidt, R., Nordestgaard, B.G., Steffensen, R., Schnohr, P. and Tybjaerg-Hansen, A. 2006. Zinc Finger Protein 202: a new candidate gene for ischemic heart disease: The Copenhagen City Heart Study. Atherosclerosis 188: 43-50.
- 8. Park, J.W., Cai, J., McIntosh, I., Jabs, E.W., Fallin, M.D., Ingersoll, R., Hetmanski, J.B., Vekemans, M., Attie-Bitach, T., Lovett, M., Scott, A.F. and Beaty, T.H. 2006. High throughput SNP and expression analyses of candidate genes for non-syndromic oral clefts. J. Med. Genet. 43: 598-608.

## **CHROMOSOMAL LOCATION**

Genetic locus: ZNF202 (human) mapping to 11g24.1.

#### **PRODUCT**

ZNF202 (h): 293T Lysate represents a lysate of human ZNF202 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

# **APPLICATIONS**

ZNF202 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive ZNF202 antibodies. Recommended use: 10-20 µl per lane.

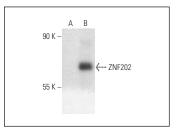
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ZNF202 (GG-7): sc-101074 is recommended as a positive control antibody for Western Blot analysis of enhanced human ZNF202 expression in ZNF202 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

# **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 Ivsates.

#### STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.