# ZNF323 (N-14): sc-132531



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. As a member of the Krüppel  $C_2H_2$ -type zinc-finger protein family, ZNF323 (zinc finger protein 323) is a 406 amino acid protein containing six  $C_2H_2$ -type zinc fingers and one SCAN box domain. Specifically,  $C_2H_2$ -type zinc fingers function to bind DNA, while SCAN box domains are thought to participate in protein-protein interactions. Therefore, it is probable that ZNF323 functions as a transcription factor. With highest expression in kidney, liver and lung and weaker expression in brain, heart, intestine, muscle, cholecyst and pancreas, ZNF323 is localized to the nucleus. It is also suggested that ZNF323 may play a role in the development of multiple embryonic organs.

## **REFERENCES**

- Payre, F. and Vincent, A. 1988. Finger proteins and DNA-specific recognition: distinct patterns of conserved amino acids suggest different evolutionary modes. FEBS Lett. 234: 245-250.
- Berg, J.M. 1988. Proposed structure for the zinc-binding domains from transcription factor IIIA and related proteins. Proc. Natl. Acad. Sci. USA 85: 99-102.
- 3. Thiesen, H.J. 1990. Multiple genes encoding zinc-finger domains are expressed in human T cells. New Biol. 2: 363-374.
- 4. Rosenfeld, R. and Margalit, H. 1993. Zinc fingers: conserved properties that can distinguish between spurious and actual DNA-binding motifs. J. Biomol. Struct. Dyn. 11: 557-570.
- Abrink, M., Aveskogh, M. and Hellman, L. 1995. Isolation of cDNA clones for 42 different Krüppel-related zinc-finger proteins expressed in the human monoblast cell line U-937. DNA Cell Biol. 14: 125-136.
- 6. Pi, H., Li, Y., Zhu, C., Zhou, L., Luo, K., Yuan, W., Yi, Z., Wang, Y., Wu, X. and Liu, M. 2002. A novel human SCAN/(Cys)2(His)2 zinc-finger transcription factor ZNF323 in early human embryonic development. Biochem. Biophys. Res. Commun. 296: 206-213.
- 7. Tian, C.Y., Zhang, L.Q. and He, F.C. 2006. Progress in the study of KRAB zinc-finger protein. Yi Chuan. 28: 1451-1456.
- Liu, J. and Stormo, G.D. 2008. Context-dependent DNA recognition code for C<sub>2</sub>H<sub>2</sub> zinc-finger transcription factors. Bioinformatics 24:1850-1857.

# CHROMOSOMAL LOCATION

Genetic locus: ZNF323 (human) mapping to 6p22.1.

# **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.

#### **SOURCE**

ZNF323 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ZNF323 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-132531 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

ZNF323 (N-14) is recommended for detection of ZNF323 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); non cross-reactive with other ZNF family members.

Suitable for use as control antibody for ZNF323 siRNA (h): sc-95135, ZNF323 shRNA Plasmid (h): sc-95135-SH and ZNF323 shRNA (h) Lentiviral Particles: sc-95135-V.

Molecular Weight of ZNF323: 45 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.

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