ZNF323 (E-12): sc-132529



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 6 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., et al. 1995. Isolation of cDNA clones for 42 different Krüppelrelated zinc-finger proteins expressed in the human monoblast cell line U-937. DNA Cell Biol. 14: 125-136.
- Pi, H., et al. 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., et al. 2006. Progress in the study of KRAB zinc-finger protein. Yi Chuan 28: 1451-1456.
- 8. Liu, J. and Stormo, G.D. 2008. Context-dependent DNA recognition code for C₂H₂ zinc-finger transcription factors. Bioinformatics 24:1850-1857.

CHROMOSOMAL LOCATION

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

SOURCE

ZNF323 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNF323 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-132529 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZNF323 (E-12) is recommended for detection of ZNF323 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) 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.

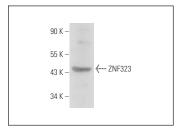
Molecular Weight of ZNF323: 45 kDa.

Positive Controls: A549 cell lysate: sc-2413.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ZNF323 (E-12): sc-132529. Western blot analysis of ZNF323 expression in A549 whole cell lysate.

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.

PROTOCOLS

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