

ZNF281 (H-220): sc-98280

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. ZNF281, also known as GC-box-binding zinc finger protein 1, ZBP-99 or ZNP-99 (zinc finger DNA-binding protein 99), is a zinc finger protein that belongs to the Krüppel C₂H₂-type zinc finger protein family. It is expressed ubiquitously at low levels with predominant expression in kidney, liver, lymphocytes and placenta. ZNF281 localizes to the nucleus and contains four C₂H₂-type zinc fingers. ZNF281 plays a role in repressing the transcription of a variety of genes including Gastrin and ODC (ornithine decarboxylase). In particular, ZNF281 functions by binding to the G-rich box in the enhancer region of the gene. Upon DNA damage, ZNF281 may become phosphorylated by Atm or ATR.

REFERENCES

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2. Lisowsky, T., et al. 1999. Identification of human GC-box-binding zinc finger protein, a new Krüppel-like zinc finger protein, by the yeast one-hybrid screening with a GC-rich target sequence. *FEBS Lett.* 453: 369-374.
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4. Zhang, X., et al. 2003. ZBP-89 represses vimentin gene transcription by interacting with the transcriptional activator, Sp1. *Nucleic Acids Res.* 31: 2900-2914.
5. Gratiás, S., et al. 2005. Genomic gains on chromosome 1q in retinoblastoma: consequences on gene expression and association with clinical manifestation. *Int. J. Cancer* 116: 555-563.
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CHROMOSOMAL LOCATION

Genetic locus: ZNF281 (human) mapping to 1q32.1; Zfp281 (mouse) mapping to 1 E4.

SOURCE

ZNF281 (H-220) is a rabbit polyclonal antibody raised against amino acids 679-895 mapping at the C-terminus of ZNF281 of human origin.

STORAGE

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

PRODUCT

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

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-98280 X, 200 µg/0.1 ml.

APPLICATIONS

ZNF281 (H-220) is recommended for detection of ZNF281 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

ZNF281 (H-220) is also recommended for detection of ZNF281 in additional species, including canine, bovine and porcine.

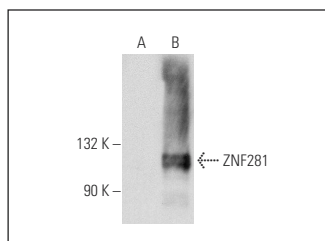
Suitable for use as control antibody for ZNF281 siRNA (h): sc-88283, ZNF281 siRNA (m): sc-106714, ZNF281 shRNA Plasmid (h): sc-88283-SH, ZNF281 shRNA Plasmid (m): sc-106714-SH, ZNF281 shRNA (h) Lentiviral Particles: sc-88283-V and ZNF281 shRNA (m) Lentiviral Particles: sc-106714-V.

ZNF281 (H-220) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

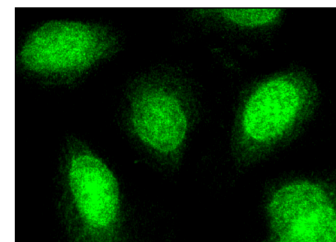
Molecular Weight of ZNF281: 99 kDa.

Positive Controls: KNRK nuclear extract: sc-2141, HeLa nuclear extract: sc-2120 or ZNF281 (m): 293T Lysate: sc-124785.

DATA



ZNF281 (H-220): sc-98280. Western blot analysis of ZNF281 expression in non-transfected: sc-117752 (A) and mouse ZNF281 transfected: sc-124785 (B) 293T whole cell lysates.



ZNF281 (H-220): sc-98280. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

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.