

ZNF282 (J-23): sc-102202

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. The majority of zinc finger proteins contain a Krüppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. ZNF282 (zinc finger protein 282), also designated HUB1, is a 671 amino acid nuclear protein that contains one KRAB domain and five C₂H₂-type zinc fingers. Expressed ubiquitously, ZNF282 binds to the 5'-TCCACCCC-3' sequence within the U5 repressive element (U5RE) of the human T cell leukemia virus type I (HTLV-1) long terminal repeat. Through its interaction with the U5RE, ZNF282 effectively represses HTLV-1-mediated expression, thereby suppressing viral replication.

REFERENCES

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3. Margolin, J.F., et al. 1994. Krüppel-associated boxes are potent transcriptional repression domains. *Proc. Natl. Acad. Sci. USA* 91: 4509-4513.
4. Okumura, K., et al. 1997. HUB1, a novel Krüppel type zinc finger protein, represses the human T cell leukemia virus type I long terminal repeat-mediated expression. *Nucleic Acids Res.* 25: 5025-5032.
5. Peng, H., et al. 2000. Biochemical analysis of the Krüppel-associated box (KRAB) transcriptional repression domain. *J. Biol. Chem.* 275: 18000-18010.
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7. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 603397. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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CHROMOSOMAL LOCATION

Genetic locus: ZNF282 (human) mapping to 7q36.1; Zfp282 (mouse) mapping to 6 B2.3.

SOURCE

ZNF282 (J-23) is a purified rabbit polyclonal antibody raised against ZNF282 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 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

ZNF282 (J-23) is recommended for detection of ZNF282 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZNF282 siRNA (h): sc-89572 and ZNF282 siRNA (m): sc-108045; and as shRNA Plasmid control antibody for ZNF282 shRNA Plasmid (h): sc-89572-SH and ZNF282 shRNA Plasmid (m): sc-108045-SH.

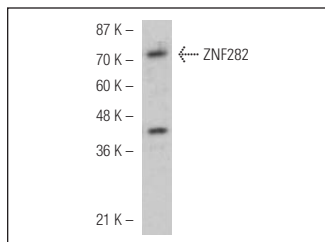
Molecular Weight of ZNF282: 74 kDa.

Positive Controls: 293T whole cell lysate.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



ZNF282 (J-23): sc-102202. Western blot analysis of ZNF282 expression in transfected 293T whole cell lysate.

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.