

ZNF295 (D-8): sc-518254

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. ZNF295 (zinc finger protein 295), also known as ZBTB21, is a 1066 amino acid zinc finger protein belonging to the Krüppel C2H2-type zinc-finger protein family. Localized to the nucleus, ZNF295 may play a role in transcriptional regulation. Phosphorylated upon DNA damage, ZNF295 contains one BTB (POZ) domain and eight C2H2-type zinc fingers.

REFERENCES

1. Nagase, T., et al. 1999. Prediction of the coding sequences of unidentified human genes. XV. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. DNA Res. 6: 337-345.
2. Sun, Y., et al. 2003. The KRAB domain of zinc finger gene ZNF268: a potential transcriptional repressor. IUBMB Life 55: 127-131.
3. Englbrecht, C.C., et al. 2004. Conservation, diversification and expansion of C2H2 zinc finger proteins in the *Arabidopsis thaliana* genome. BMC Genomics 5: 39.
4. Jin, J., et al. 2004. Proteomic, functional, and domain-based analysis of *in vivo* 14-3-3 binding proteins involved in cytoskeletal regulation and cellular organization. Curr. Biol. 14: 1436-1450.
5. Nakamura, M., et al. 2004. A novel subfamily of zinc finger genes involved in embryonic development. J. Cell. Biochem. 93: 887-895.
6. Wang, J., et al. 2005. Novel human BTB/POZ domain-containing zinc finger protein ZNF295 is directly associated with ZFP161. Biochem. Biophys. Res. Commun. 327: 615-627.

CHROMOSOMAL LOCATION

Genetic locus: ZBTB21 (human) mapping to 21q22.3.

SOURCE

ZNF295 (D-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 480-508 of ZNF295 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ZNF295 (D-8) is available conjugated to agarose (sc-518254 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-518254 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518254 PE), fluorescein (sc-518254 FITC), Alexa Fluor[®] 488 (sc-518254 AF488), Alexa Fluor[®] 546 (sc-518254 AF546), Alexa Fluor[®] 594 (sc-518254 AF594) or Alexa Fluor[®] 647 (sc-518254 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-518254 AF680) or Alexa Fluor[®] 790 (sc-518254 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

ZNF295 (D-8) is recommended for detection of ZNF295 of human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for ZNF295 siRNA (h): sc-91471, ZNF295 shRNA Plasmid (h): sc-91471-SH and ZNF295 shRNA (h) Lentiviral Particles: sc-91471-V.

Molecular Weight of ZNF295 short isoform: 95 kDa.

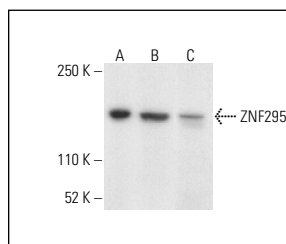
Molecular Weight of ZNF295 long isoform: 118 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812, Hep G2 cell lysate: sc-2227 or HeLa whole cell lysate: sc-2200.

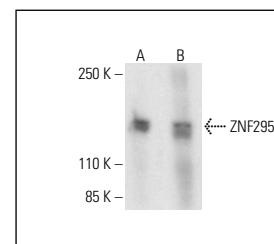
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



ZNF295 (D-8): sc-518254. Western blot analysis of ZNF295 expression in Hep G2 (A), HeLa (B) and SH-SY5Y (C) whole cell lysates. Detection reagent used: m-IgGκ BP-HRP: sc-516102.



ZNF295 (D-8): sc-518254. Western blot analysis of ZNF295 expression in HeLa (A) and SH-SY5Y (B) whole cell lysates. Detection reagent used: m-IgG₁ BP-HRP: sc-525408.

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 for detailed protocols and support products.