SANTA CRUZ BIOTECHNOLOGY, INC.

ZNF207 (E-2): sc-271942

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. ZNF207 (zinc-finger protein 207) is a 478 amino acid protein that localizes to the nucleus and contains two C_2H_2-type zinc fingers. Expressed ubiquitously, ZNF207 may function as a transcription factor. Three isoforms of ZNF207 are expressed due to alternative splicing events.

REFERENCES

1. Rousseau-Merck, M.F., et al. 1993. Chromosomal localization of 9 KOX zinc-finger genes: physical linkages suggest clustering of KOX genes on chromosomes 12, 16, and 19. Hum. Genet. 92: 583-587.
2. Pahl, P.M., et al. 1998. ZNF207, a ubiquitously expressed zinc-finger gene on chromosome 6p21.3. Genomics 53: 410-412.
3. Rousseau-Merck, M.F., et al. 2002. The KOX zinc-finger genes: genome wide mapping of 368 ZNF PAC clones with zinc-finger gene clusters predominantly in 23 chromosomal loci are confirmed by human sequences annotated in EnsEMBL. Cytogenet. Genome Res. 98: 147-153.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 603428. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Sun, Y., et al. 2003. The KRAB domain of zinc-finger gene ZNF268: a potential transcriptional repressor. IUBMB Life 55: 127-131.
6. Nakamura, M., et al. 2004. A novel subfamily of zinc-finger genes involved in embryonic development. J. Cell. Biochem. 93: 887-895.
7. Englbrecht, C.C., et al. 2004. Conservation, diversification and expansion of C_2H_2 zinc finger proteins in the *Arabidopsis thaliana* genome. BMC Genomics 5: 39.
8. O'Geen, H., et al. 2007. Genome-wide analysis of KAP1 binding suggests autoregulation of KRAB-ZNFs. PLoS Genet. 3: e89.

CHROMOSOMAL LOCATION

Genetic locus: ZNF207 (human) mapping to 17q11.2; Zfp207 (mouse) mapping to 11 B5.

SOURCE

ZNF207 (E-2) is a mouse monoclonal antibody raised against amino acids 1-184 mapping at the N-terminus of ZNF207 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

ZNF207 (E-2) is recommended for detection of ZNF207 of mouse, rat and 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 ZNF207 siRNA (h): sc-93847, ZNF207 siRNA (m): sc-155654, ZNF207 shRNA Plasmid (h): sc-93847-SH, ZNF207 shRNA Plasmid (m): sc-155654-SH, ZNF207 shRNA (h) Lentiviral Particles: sc-93847-V and ZNF207 shRNA (m) Lentiviral Particles: sc-155654-V.

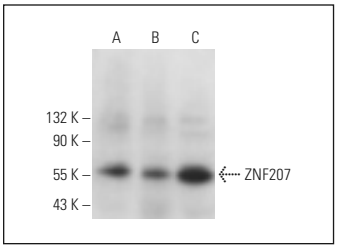
Molecular Weight of ZNF207: 51 kDa.

Positive Controls: Neuro-2A whole cell lysate: sc-364185, MOLT-4 nuclear extract: sc-2151 or Hep G2 nuclear extract: sc-364819.

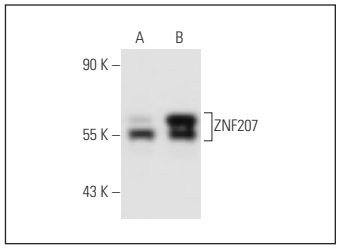
RECOMMENDED SUPPORT REAGENTS

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



ZNF207 (E-2): sc-271942. Western blot analysis of ZNF207 expression in SH-SY5Y (**A**), C6 (**B**) and Neuro-2A (**C**) whole cell lysates.



ZNF207 (E-2): sc-271942. Western blot analysis of ZNF207 expression in Hep G2 (**A**) and MOLT-4 (**B**) nuclear extracts.

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 for detailed protocols and support products.