

ZNF512 (A-8): sc-398143

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 C₂H₂-type zinc-finger protein family, ZNF512 (zinc finger protein 512) is a 567 amino acid protein containing four C₂H₂-type zinc fingers. Localized to the nucleus, ZNF512 is thought to be involved in transcriptional regulation. The gene encoding ZNF512 maps to chromosome 2 which consists of 237 million bases encoding over 1,400 genes and making up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome is due to mutations in the ALMS1 gene.

REFERENCES

1. 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.
2. Ijdo, J.W., et al. 1991. Origin of human chromosome 2: an ancestral telomere-telomere fusion. *Proc. Natl. Acad. Sci. USA* 88: 9051-9055.
3. Avarello, R., et al. 1992. Evidence for an ancestral alphoid domain on the long arm of human chromosome 2. *Hum. Genet.* 89: 247-249.
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.
5. Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. *Nature* 434: 724-731.
6. Thomas, A.C., et al. 2006. ABCA12 is the major harlequin ichthyosis gene. *J. Invest. Dermatol.* 126: 2408-2413.
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CHROMOSOMAL LOCATION

Genetic locus: ZNF512 (human) mapping to 2p23.3; Zfp512 (mouse) mapping to 5 B1.

SOURCE

ZNF512 (A-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 41-62 near the N-terminus of ZNF512 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-398143 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

ZNF512 (A-8) is recommended for detection of ZNF512 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).

ZNF512 (A-8) is also recommended for detection of ZNF512 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ZNF512 siRNA (h): sc-94755, ZNF512 siRNA (m): sc-155733, ZNF512 shRNA Plasmid (h): sc-94755-SH, ZNF512 shRNA Plasmid (m): sc-155733-SH, ZNF512 shRNA (h) Lentiviral Particles: sc-94755-V and ZNF512 shRNA (m) Lentiviral Particles: sc-155733-V.

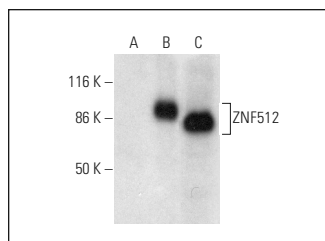
Molecular Weight of ZNF512: 65 kDa.

Positive Controls: ZNF512 (m): 293T Lysate: sc-124803. CCRF-CEM cell lysate: sc-2225 or Jurkat whole cell lysate: sc-2204.

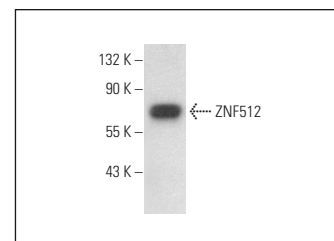
RECOMMENDED SUPPORT REAGENTS

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



ZNF512 (A-8): sc-398143. Western blot analysis of ZNF512 expression in non-transfected 293T: sc-117752 (A), mouse ZNF512 transfected 293T: sc-124803 (B) and Jurkat (C) whole cell lysates.



ZNF512 (A-8): sc-398143. Western blot analysis of ZNF512 expression in CCRF-CEM 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.