# ZNF512 (A-1): sc-398142



The Power to Question

## **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  $\rm C_2H_2$ -type zinc-finger protein family, ZNF512 (zinc finger protein 512) is a 567 amino acid protein containing four  $\rm C_2H_2$ -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 icthyosis, 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**

- 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.
- 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.
- 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.

## **CHROMOSOMAL LOCATION**

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

## **SOURCE**

ZNF512 (A-1) 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  $\mu g$   $lgG_{2b}$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ZNF512 (A-1) is available conjugated to agarose (sc-398142 AC), 500 μg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-398142 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398142 PE), fluorescein (sc-398142 FITC), Alexa Fluor® 488 (sc-398142 AF488), Alexa Fluor® 546 (sc-398142 AF546), Alexa Fluor® 594 (sc-398142 AF594) or Alexa Fluor® 647 (sc-398142 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398142 AF680) or Alexa Fluor® 790 (sc-398142 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398142 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

#### **APPLICATIONS**

ZNF512 (A-1) 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  $\mu$ g per 100-500  $\mu$ g 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-1) 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.

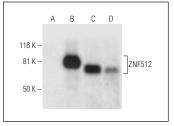
Molecular Weight of ZNF512: 65 kDa.

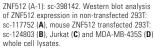
Positive Controls: ZNF512 (m): 293T Lysate: sc-124803, Jurkat whole cell lysate: sc-2204 or MDA-MB-435S whole cell lysate: sc-364184.

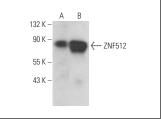
## **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  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-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  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-1): sc-398142. Western blot analysis of ZNF512 expression in MDA-MB-435S (**A**) and CCRF-CEM (**B**) whole cell lysates.

## **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.

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