

# ZNF588 (F-11): sc-514985

## 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. As a member of the Krüppel C<sub>2</sub>H<sub>2</sub>-type zinc-finger protein family, ZNF588 (zinc finger 588), also known as Y8, ZFD25, smap-7 or ZNF107, is a 783 amino acid nuclear protein expressed in brain, heart, skeletal muscle, kidney and pancreas. ZNF588 contains 25 C<sub>2</sub>H<sub>2</sub>-type zinc fingers that may be involved in transcriptional regulation. ZNF588 is encoded by a gene located on human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome.

## 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. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. *New Biol.* 2: 363-374.
3. 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.
4. Laity, J.H., et al. 2001. Zinc finger proteins: new insights into structural and functional diversity. *Curr. Opin. Struct. Biol.* 11: 39-46.

## CHROMOSOMAL LOCATION

Genetic locus: ZNF107 (human) mapping to 7q11.21.

## SOURCE

ZNF588 (F-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 744-763 near the C-terminus of ZNF588 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-514985 X, 200 µg/0.1 ml.

ZNF588 (F-11) is available conjugated to agarose (sc-514985 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514985 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514985 PE), fluorescein (sc-514985 FITC), Alexa Fluor® 488 (sc-514985 AF488), Alexa Fluor® 546 (sc-514985 AF546), Alexa Fluor® 594 (sc-514985 AF594) or Alexa Fluor® 647 (sc-514985 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514985 AF680) or Alexa Fluor® 790 (sc-514985 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514985 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## APPLICATIONS

ZNF588 (F-11) is recommended for detection of ZNF588 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 ZNF588 siRNA (h): sc-89509, ZNF588 shRNA Plasmid (h): sc-89509-SH and ZNF588 shRNA (h) Lentiviral Particles: sc-89509-V.

ZNF588 (F-11) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

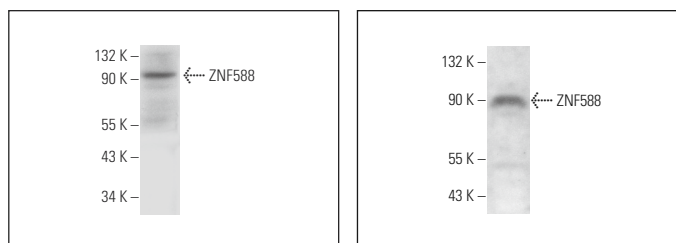
Molecular Weight of ZNF588: 91 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285 or CCRF-CEM cell lysate: sc-2225.

## 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



ZNF588 (F-11): sc-514985. Western blot analysis of ZNF588 expression in MIA PaCa-2 whole cell lysate.

ZNF588 (F-11): sc-514985. Western blot analysis of ZNF588 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.