

# ZNF265 (32-Q): sc-100981

## 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. ZNF265 (zinc finger protein 265), also known as ZRANB2 (zinc finger Ran-binding domain-containing protein 2), ZIS, ZIS1 or ZIS2, is a 330 amino acid protein that belongs to the ZRANB2 family. Localized to the nucleus, ZNF265 functions as a splicing factor that is responsible for alternatively splicing Tra-2 $\beta$  (transformer-2 $\beta$ ) transcripts and is thought to interfere with constitutive 5'-splice selection. ZNF265 contains two RanBP2-type zinc fingers through which it conveys its RNA-binding activity. Two isoforms, designated ZIS-1 and ZIS-2, are expressed due to alternative splicing events. Upon DNA damage, ZIS-2 may be phosphorylated by ATM or ATR.

## REFERENCES

1. Nakano, M., et al. 1998. Identification, characterization and mapping of the human ZIS (zinc-finger, splicing) gene. *Gene* 225: 59-65.
2. Adams, D.J., et al. 2000. Chromosome localization and characterization of the mouse and human zinc finger protein 265 gene. *Cytogenet. Cell Genet.* 88: 68-73.
3. Adams, D.J., et al. 2001. ZNF265—a novel spliceosomal protein able to induce alternative splicing. *J. Cell Biol.* 154: 25-32.
4. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604347. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Plambeck, C.A., et al. 2003. The structure of the zinc finger domain from human splicing factor ZNF265 fold. *J. Biol. Chem.* 278: 22805-22811.
6. Mangs, A.H., et al. 2006. XE7: a novel splicing factor that interacts with ASF/SF2 and ZNF265. *Nucleic Acids Res.* 34: 4976-4986.

## CHROMOSOMAL LOCATION

Genetic locus: ZRANB2 (human) mapping to 1p31.1.

## SOURCE

ZNF265 (32-Q) is a mouse monoclonal antibody raised against recombinant ZNF265 of human origin.

## PRODUCT

Each vial contains 50  $\mu$ g IgG<sub>1</sub> in 500  $\mu$ l PBS with < 0.1% sodium azide and 0.1% gelatin.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

ZNF265 (32-Q) is recommended for detection of ZNF265 of human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (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 ZNF265 siRNA (h): sc-78863, ZNF265 shRNA Plasmid (h): sc-78863-SH and ZNF265 shRNA (h) Lentiviral Particles: sc-78863-V.

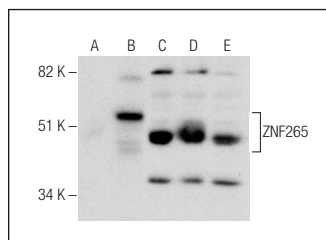
Molecular Weight of ZNF265: 55 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, ZNF265 (h2): 293T Lysate: sc-370093 or Jurkat nuclear extract: sc-2132.

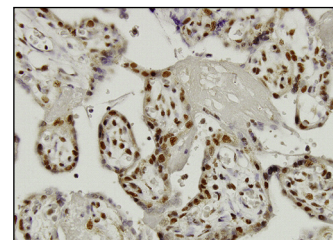
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker<sup>™</sup> compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz<sup>™</sup>: sc-2050 or ABC: sc-2017 mouse IgG Staining Systems.

## DATA



ZNF265 (32-Q): sc-100981. Western blot analysis of ZNF265 expression in non-transfected: sc-117752 (A) and human ZNF265 transfected: sc-370093 (B) 293T whole cell lysates and Jurkat (C), K-562 (D) and Ramos (E) nuclear extracts.



ZNF265 (32-Q): sc-100981. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human placenta tissue showing nuclear localization.

## RESEARCH USE

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