

# ZNF253 (F-16): sc-102195

## 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. ZNF253, also known as bone marrow zinc finger 1 (BMZF-1) or zinc finger protein 411, is a 275 amino acid protein belonging to the Krüppel C<sub>2</sub>H<sub>2</sub>-type zinc finger protein family. Localized to the nucleus, ZNF253 contains one KRAB domain and three C<sub>2</sub>H<sub>2</sub>-type zinc fingers. Due to the presence of these domains, ZNF253 may be involved in transcriptional regulation. ZNF253 is also thought to have transcriptional repression activity. ZNF253 is expressed in immature erythroid cell lines and in bone marrow.

## REFERENCES

1. Pengue, G., et al. 1994. Repression of transcriptional activity at a distance by the evolutionarily conserved KRAB domain present in a subfamily of zinc finger proteins. *Nucleic Acids Res.* 22: 2908-2914.
2. Margolin, J.F., et al. 1994. Krüppel-associated boxes are potent transcriptional repression domains. *Proc. Natl. Acad. Sci. USA* 91: 4509-4513.
3. Witzgall, R., et al. 1994. The Krüppel-associated box-A (KRAB-A) domain of zinc finger proteins mediates transcriptional repression. *Proc. Natl. Acad. Sci. USA* 91: 4514-4518.
4. Vissing, H., et al. 1995. Repression of transcriptional activity by heterologous KRAB domains present in zinc finger proteins. *FEBS Lett.* 369: 153-157.
5. Han, Z.G., et al. 1999. Molecular cloning of six novel Krüppel-like zinc finger genes from hematopoietic cells and identification of a novel trans-regulatory domain KRNb. *J. Biol. Chem.* 274: 35741-35748.
6. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606954. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. Shannon, M., et al. 2003. Differential expansion of zinc-finger transcription factor loci in homologous human and mouse gene clusters. *Genome Res.* 13: 1097-1110.

## CHROMOSOMAL LOCATION

Genetic locus: ZNF253 (human) mapping to 19p12.

## SOURCE

ZNF253 (F-16) is a purified rabbit polyclonal antibody raised against ZNF253 of human origin.

## 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.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

ZNF253 (F-16) is recommended for detection of ZNF253 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZNF253 siRNA (h): sc-97581, ZNF253 shRNA Plasmid (h): sc-97581-SH and ZNF253 shRNA (h) Lentiviral Particles: sc-97581-V.

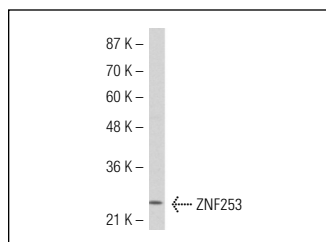
Molecular Weight of ZNF253: 32 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or ZNF253 (h): 293T Lysate: sc-117049.

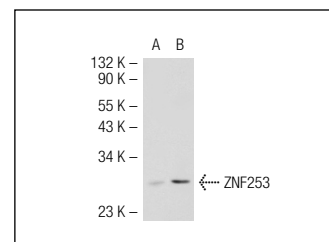
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ 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).

## DATA



ZNF253 (F-16): sc-102195. Western blot analysis of ZNF253 expression in Hep G2 whole cell lysate.



ZNF253 (F-16): sc-102195. Western blot analysis of ZNF253 expression in non-transfected: sc-117752 (A) and human ZNF253 transfected: sc-117049 (B) 293T whole cell lysates.

## RESEARCH USE

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