

ZNF553 (C-16): sc-249645

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. ZNF553 (zinc finger protein 553), also known as ZNF48, is a 618 amino acid nuclear protein that belongs to the Krüppel C₂H₂-type zinc-finger protein family. Containing 12 C₂H₂-type zinc fingers, ZNF553 may be involved in transcriptional regulation. ZNF553 is encoded by a gene located on human chromosome 16p11.2. Chromosome 16 encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

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- Englbrecht, C.C., et al. 2004. Conservation, diversification and expansion of C₂H₂ zinc finger proteins in the *Arabidopsis thaliana* genome. *BMC Genomics* 5: 39.
- Nakamura, M., et al. 2004. A novel subfamily of zinc finger genes involved in embryonic development. *J. Cell. Biochem.* 93: 887-895.

CHROMOSOMAL LOCATION

Genetic locus: ZNF48 (human) mapping to 16p11.2.

SOURCE

ZNF553 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ZNF553 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.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-249645 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZNF553 (C-16) is recommended for detection of ZNF553 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)], 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 ZNF553 siRNA (h): sc-93371, ZNF553 shRNA Plasmid (h): sc-93371-SH and ZNF553 shRNA (h) Lentiviral Particles: sc-93371-V.

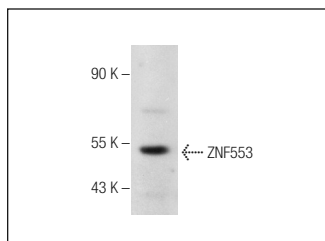
Molecular Weight of ZNF553: 68 kDa.

Positive Controls: human liver extract: sc-363766.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ZNF553 (C-16): sc-249645. Western blot analysis of ZNF553 expression in human liver tissue extract.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.