

ZNF703 (C-18): sc-82449



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. ZNF703 (zinc-finger protein 703) is a 590 amino acid nuclear protein that contains one C₂H₂-type zinc finger and is thought to play a role in transcriptional regulation. Multiple isoforms of ZNF703 exist due to alternative splicing events. The gene encoding ZNF703 maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that map to chromosome 8.

REFERENCES

1. Wildenauer, D.B. and Schwab, S.G. 1999. Chromosomes 8 and 10 workshop. *Am. J. Med. Genet.* 88: 239-243.
2. Kashino, G., et al. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. *Biochem. Biophys. Res. Commun.* 289: 111-115.
3. Selicorni, A., et al. 2002. Cytogenetic mapping of a novel locus for type II Waardenburg syndrome. *Hum. Genet.* 110: 64-67.
4. McQueen, M.B., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. *Am. J. Hum. Genet.* 77: 582-595.
5. Agrelo, R., et al. 2006. Epigenetic inactivation of the premature aging Werner syndrome gene in human cancer. *Proc. Natl. Acad. Sci USA* 103: 8822-8827.
6. Pole, J.C., et al. 2006. High-resolution analysis of chromosome rearrangements on 8p in breast, colon and pancreatic cancer reveals a complex pattern of loss, gain and translocation. *Oncogene* 25: 5693-5706.
7. Nakamura, M., et al. 2008. Nlz1/Znf703 acts as a repressor of transcription. *BMC Dev. Biol.* 8: 108.

CHROMOSOMAL LOCATION

Genetic locus: ZNF703 (human) mapping to 8p11.23; Zfp703 (mouse) mapping to 8 A2.

SOURCE

ZNF703 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ZNF703 of human origin.

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-82449 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-82449 X, 200 µg/0.1 ml.

APPLICATIONS

ZNF703 (C-18) is recommended for detection of ZNF703 of mouse, rat and 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).

ZNF703 (C-18) is also recommended for detection of ZNF703 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for ZNF703 siRNA (h): sc-76999, ZNF703 siRNA (m): sc-77000, ZNF703 shRNA Plasmid (h): sc-76999-SH, ZNF703 shRNA Plasmid (m): sc-77000-SH, ZNF703 shRNA (h) Lentiviral Particles: sc-76999-V and ZNF703 shRNA (m) Lentiviral Particles: sc-77000-V.

ZNF703 (C-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

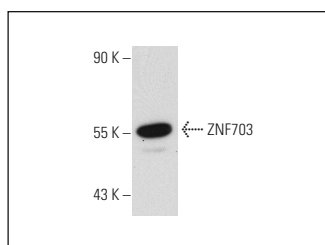
Molecular Weight of ZNF703: 58 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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) 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



ZNF703 (C-18): sc-82449. Western blot analysis of ZNF703 expression in Jurkat 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.