

HTF9 (T-16): sc-324879

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. HTF9, also known as zinc finger protein 90, is a 601 amino acid nuclear protein that contains one KRAB domain and 15 C₂H₂-type zinc fingers. Expressed early during embryonic development, it is likely that HTF9 is involved in transcriptional regulation. The gene encoding HTF9 maps to human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes.

REFERENCES

1. Bellefroid, E.J., et al. 1991. The evolutionarily conserved Krüppel-associated box domain defines a subfamily of eukaryotic multifingered proteins. *Proc. Natl. Acad. Sci. USA* 88: 3608-3612.
2. Bellefroid, E.J., et al. 1993. Clustered organization of homologous KRAB zinc-finger genes with enhanced expression in human T lymphoid cells. *EMBO J.* 12: 1363-1374.
3. Klug, A. 1999. Zinc finger peptides for the regulation of gene expression. *J. Mol. Biol.* 293: 215-218.
4. Online Mendelian Inheritance in Man, OMIM™. 1999. Johns Hopkins University, Baltimore, MD. MIM Number: 603973. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Matthews, J.M., et al. 2002. Zinc fingers—folds for many occasions. *IUBMB Life* 54: 351-355.
6. Brandenberger, R., et al. 2004. Transcriptome characterization elucidates signaling networks that control human ES cell growth and differentiation. *Nat. Biotechnol.* 22: 707-716.
7. Brown, R.S. 2005. Zinc finger proteins: getting a grip on RNA. *Curr. Opin. Struct. Biol.* 15: 94-98.
8. Hall, T.M. 2005. Multiple modes of RNA recognition by zinc finger proteins. *Curr. Opin. Struct. Biol.* 15: 367-373.
9. Gamsjaeger, R., et al. 2007. Sticky fingers: zinc-fingers as protein-recognition motifs. *Trends Biochem. Sci.* 32: 63-70.

CHROMOSOMAL LOCATION

Genetic locus: ZNF90 (human) mapping to 19p12.

SOURCE

HTF9 (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HTF9 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-324879 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HTF9 (T-16) is recommended for detection of HTF9 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); may cross-react with ZNF626.

Suitable for use as control antibody for HTF9 siRNA (h): sc-97778, HTF9 shRNA Plasmid (h): sc-97778-SH and HTF9 shRNA (h) Lentiviral Particles: sc-97778-V.

Molecular Weight of HTF9: 69 kDa.

Positive Controls: Human fetal heart tissue extract.

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.

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.