

ZFH4 (D-20): sc-82774



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. The majority of zinc-finger proteins contain a krüppel-type DNA binding domain and a KRAB domain, which are thought to interact with KAP1, thereby recruiting histone modifying proteins. ZFH4, also designated ZHF4 or ZHF4, is a 3,567 amino acid nuclear protein expressed in brain, skeletal muscle and liver with very low expression in stomach. Belonging to the krüppel C₂H₂-type zinc-finger protein family, ZFH4 may play a role in neural and muscle differentiation and may be involved in transcriptional regulation. ZFH4 contains 20 C₂H₂-type zinc fingers and 4 homeobox DNA-binding domains, and exists as 3 alternatively spliced variants.

REFERENCES

1. DeLisi, C. and Wiegel, F.W. 1981. Effect of nonspecific forces and finite receptor number on rate constants of ligand—cell bound-receptor interactions. *Proc. Natl. Acad. Sci. USA* 78: 5569-5572.
2. Skapek, S.X., et al. 2000. Cloning and characterization of a novel Krüppel-associated box family transcriptional repressor that interacts with the retino-blastoma gene product, RB. *J. Biol. Chem.* 275: 7212-7223.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606940. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Nakamura, M., et al. 2004. A novel subfamily of zinc-finger genes involved in embryonic development. *J. Cell. Biochem.* 93: 887-895.
5. Nakashima, M., et al. 2008. Genome-wide linkage analysis and mutation analysis of hereditary congenital blepharoptosis in a Japanese family. *J. Hum. Genet.* 53: 34-41.
6. Comabella, M., et al. 2009. Genome-wide scan of 500,000 single-nucleotide polymorphisms among responders and nonresponders to interferon β therapy in multiple sclerosis. *Arch. Neurol.* 66: 972-978.

CHROMOSOMAL LOCATION

Genetic locus: ZFH4 (human) mapping to 8q21.11; Zfh4 (mouse) mapping to 3 A1.

SOURCE

ZFH4 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZFH4 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-82774 P, (100 μ g 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-82774 X, 200 μ g/0.1 ml.

APPLICATIONS

ZFH4 (D-20) is recommended for detection of ZFH4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

ZFH4 (D-20) is also recommended for detection of ZFH4 in additional species, including canine.

Suitable for use as control antibody for ZFH4 siRNA (h): sc-76956, ZFH4 siRNA (m): sc-76957, ZFH4 shRNA Plasmid (h): sc-76956-SH, ZFH4 shRNA Plasmid (m): sc-76957-SH, ZFH4 shRNA (h) Lentiviral Particles: sc-76956-V and ZFH4 shRNA (m) Lentiviral Particles: sc-76957-V.

ZFH4 (D-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

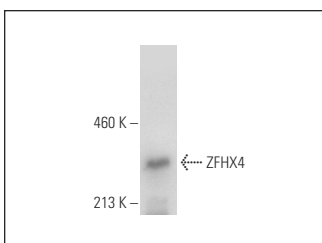
Molecular Weight of ZFH4: 397 kDa.

Positive Controls: A-673 cell lysate: sc-2414.

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



ZFH4 (D-20): sc-82774. Western blot analysis of ZFH4 expression in A-673 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.