SANTA CRUZ BIOTECHNOLOGY, INC.

HKR1 (N-12): sc-138953

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. HKR1, also known as Krüppel-related zinc finger protein 1 or zinc finger protein 875, is a 659 amino acid nuclear protein that is thought to play a role in transcriptional regulation. Existing as 2 alternatively spliced isoforms, HKR1 is a member of the Krüppel C_2H_2-type zinc-finger protein family and contains 13 C_2H_2-type zinc fingers and one KRAB domain. The gene encoding HKR1 maps to human chromosome 19q13.12.

REFERENCES

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4. Matsumoto, N., et al. 1996. Assignment of the human GLI2 gene to 2q14 by fluorescence *in situ* hybridization. Genomics 36: 220-221.
5. Oguri, T., et al. 1998. The Krüppel-type zinc finger family gene, HKR1, is induced in lung cancer by exposure to platinum drugs. Gene 222: 61-67.
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8. Filion, G.J., et al. 2006. A family of human zinc finger proteins that bind methylated DNA and repress transcription. Mol. Cell. Biol. 26: 169-181.
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CHROMOSOMAL LOCATION

Genetic locus: HKR1 (human) mapping to 19q13.12.

SOURCE

HKR1 (N-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of HKR1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-138953 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HKR1 (N-12) is recommended for detection of HKR1 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for HKR1 siRNA (h): sc-97871, HKR1 shRNA Plasmid (h): sc-97871-SH and HKR1 shRNA (h) Lentiviral Particles: sc-97871-V.

Molecular Weight of HKR1 isoform 1: 75 kDa.

Molecular Weight of HKR1 isoform 2: 73 kDa

Positive Controls: HeLa whole cell lysate: sc-2200 or HeLa nuclear extract: sc-2120.

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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

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