# ZBTB48 (C-13): sc-131823



The Power to Overtin

## **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. Zinc finger and BTB domain-containing protein 48 (ZBTB48), also known as Krüppel-related zinc finger protein 3 or HKR3, is a 688 amino acid member of the Krüppel  $C_2H_2$ -type zinc-finger protein family. Localized to the nucleus, ZBTB48 is expressed in the adrenal gland and neuroblastoma cell lines. ZBTB48 contains a BTB domain, also known as a POZ domain, which inhibits DNA binding and mediates homotypic and heterotypic dimerization. Characteristics of the BTB domain suggest that ZBTB48 functions as a transcription regulator.

# **REFERENCES**

- Ruppert, J.M., Kinzler, K.W., Wong, A.J., Bigner, S.H., Kao, F.T., Law, M.L., Seuanez, H.N., O'Brien, S.J. and Vogelstein, B. 1988. The GLI-Krüppel family of human genes. Mol. Cell. Biol. 8: 3104-3113.
- 2. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. New Biol. 2: 363-374.
- 3. Abrink, M., Aveskogh, M. and Hellman, L. 1995. Isolation of cDNA clones for 42 different Krüppel-related zinc finger proteins expressed in the human monoblast cell line U-937. DNA Cell Biol. 14: 125-136.
- Maris, J.M., Jensen, J., Sulman, E.P., Beltinger, C.P., Allen, C., Biegel, J.A., Brodeur, G.M. and White, P.S. 1997. Human Krüppel-related 3 (HKR3): a candidate for the 1p36 neuroblastoma tumour suppressor gene? Eur. J. Cancer 33: 1991-1996.
- Walter, L. and Günther, E. 2000. Physical mapping and evolution of the centromeric class I gene-containing region of the rat MHC. Immunogenetics 51: 829-837.
- Durand, S., Abadie, P., Angeletti, S. and Genti-Raimondi, S. 2003. Identification of multiple differentially expressed messenger RNAs in normal and pathological trophoblast. Placenta 24: 209-218.

## CHROMOSOMAL LOCATION

Genetic locus: ZBTB48 (human) mapping to 1p36.31.

# **SOURCE**

ZBTB48 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ZBTB48 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131823 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **RESEARCH USE**

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

#### **APPLICATIONS**

ZBTB48 (C-13) is recommended for detection of ZBTB48 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); non cross-reactive with other ZBTB family members.

Suitable for use as control antibody for ZBTB48 siRNA (h): sc-78823, ZBTB48 shRNA Plasmid (h): sc-78823-SH and ZBTB48 shRNA (h) Lentiviral Particles: sc-78823-V.

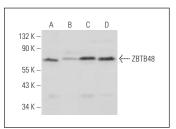
Molecular Weight of ZBTB48: 77 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, AML-193 whole cell lysate: sc-364182 or HEK293 whole cell lysate: sc-45136.

## **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**



ZBTB48 (C-13): sc-131823. Western blot analysis of ZBTB48 expression in Jurkat (A), AML-193 (B), HEK293 (C) and Hep G2 (D) whole cell lysates.

# **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **PROTOCOLS**

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com