

# ZBTB48 (V-12): sc-131826

## 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<sub>2</sub>H<sub>2</sub>-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

1. Ruppert, J.M., et al. 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., et al. 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.
4. Maris, J.M., et al. 1997. Human Krüppel-related 3 (HKR3): a candidate for the 1p36 neuroblastoma tumour suppressor gene? *Eur. J. Cancer* 33: 1991-1996.
5. 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.

## CHROMOSOMAL LOCATION

Genetic locus: ZBTB48 (human) mapping to 1p36.31; Zbtb48 (mouse) mapping to 4 E2.

## SOURCE

ZBTB48 (V-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZBTB48 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-131826 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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.

## APPLICATIONS

ZBTB48 (V-12) is recommended for detection of ZBTB48 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); non cross-reactive with other ZBTB family members.

Suitable for use as control antibody for ZBTB48 siRNA (h): sc-78823, ZBTB48 siRNA (m): sc-155451, ZBTB48 shRNA Plasmid (h): sc-78823-SH, ZBTB48 shRNA Plasmid (m): sc-155451-SH, ZBTB48 shRNA (h) Lentiviral Particles: sc-78823-V and ZBTB48 shRNA (m) Lentiviral Particles: sc-155451-V.

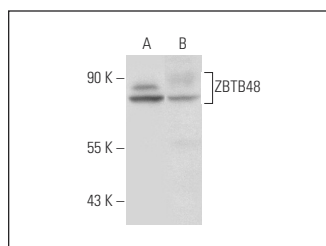
Molecular Weight of ZBTB48: 77 kDa.

Positive Controls: AML-193 whole cell lysate: sc-364182 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

## 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 (V-12): sc-131826. Western blot analysis of ZBTB48 expression in AML-193 (A) and NTERA-2 cl.D1 (B) whole cell lysates.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.