

ZBRK1 (N-17): sc-47642



The Power to Question

BACKGROUND

The transcriptional repressor ZBRK1, also designated zinc finger and BRCA1-interacting protein with a KRAB domain 1 or zinc finger protein 350, belongs to the Krüppel C₂H₂-type zinc-finger protein family of proteins. ZBRK1 localizes mainly to the nucleus and may be associated with the nuclear matrix. It is a widely expressed protein that binds to BRCA1. ZBRK1 plays an important role in transcriptional regulation. Likely targets of gene regulation are DNA damage response genes, which effect the survival and growth control of cells. ZBRK1 contains an N-terminal KRAB domain, a C-terminal BRCA1-binding region and eight central zinc-fingers.

REFERENCES

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- Rutter, J.L., et al. 2003. Mutational analysis of the BRCA1-interacting genes ZNF350/ZBRK1 and BRIP1/BACH1 among BRCA1 and BRCA2-negative probands from breast-ovarian cancer families and among early-onset breast cancer cases and reference individuals. *Hum. Mutat.* 22: 121-128.
- Garcia, V., et al. 2004. Altered expression of the ZBRK1 gene in human breast carcinomas. *J. Pathol.* 202: 224-232.
- Tan, W., et al. 2004. Tetrameric oligomerization mediates transcriptional repression by the BRCA1-dependent Krüppel-associated box-zinc finger protein ZBRK1. *J. Biol. Chem.* 279: 55153-55160.
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- Furuta, S., et al. 2006. Removal of BRCA1/CtIP/ZBRK1 repressor complex on ANG1 promoter leads to accelerated mammary tumor growth contributed by prominent vasculature. *Cancer Cell* 10: 13-24.

CHROMOSOMAL LOCATION

Genetic locus: ZNF350 (human) mapping to 19q13.41.

SOURCE

ZBRK1 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ZBRK1 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-47642 P, (100 µg 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-47642 X, 200 µg/0.1 ml.

APPLICATIONS

ZBRK1 (N-17) is recommended for detection of ZBRK1 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).

Suitable for use as control antibody for ZBRK1 siRNA (h): sc-61824, ZBRK1 shRNA Plasmid (h): sc-61824-SH and ZBRK1 shRNA (h) Lentiviral Particles: sc-61824-V.

ZBRK1 (N-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

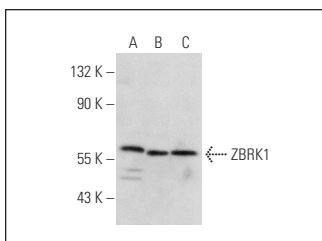
Molecular Weight of ZBRK1: 60 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, THP-1 cell lysate: sc-2238 or Raji whole cell lysate: sc-364236.

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



ZBRK1 (N-17): sc-47642. Western blot analysis of ZBRK1 expression in K-562 nuclear extract (A) and THP-1 (B) and Raji (C) 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.

RESEARCH USE

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