

# RBAK (Q-23): sc-133943

## 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 Krueppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. RBAK (RB-associated KRAB zinc finger), also known as ZNF769 (zinc finger protein 769), is a 714 amino acid protein that localizes to the nucleus and contains one KRAB domain and 16 C<sub>2</sub>H<sub>2</sub>-type zinc fingers. Expressed in liver, heart, kidney, placenta, pancreas, lung and bone, RBAK interacts with AR (androgen receptor) and Rb (retinoblastoma) and is thought to both promote AR-dependent transcription and repress E2F-dependent transcription.

## REFERENCES

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2. Gomes, I., et al. 2002. Novel transcription factors in human CD34 antigen-positive hematopoietic cells. *Blood* 100: 107-119.
3. Hofman, K., et al. 2003. The retinoblastoma protein-associated transcription repressor RBAK interacts with the androgen receptor and enhances its transcriptional activity. *J. Mol. Endocrinol.* 31: 583-596.
4. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 608191. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Zhao, Y., et al. 2006. ZNF325, a novel human zinc finger protein with a RBAK-like RB-binding domain, inhibits AP-1- and SRE-mediated transcriptional activity. *Biochem. Biophys. Res. Commun.* 346: 1191-1199.
6. So, A., et al. 2006. No evidence for coding region mutations in the retinoblastoma-associated Kruppel-associated box protein gene (RBAK) causing familial hyperaldosteronism type II. *Clin. Endocrinol.* 65: 829-831.
7. Jeske, Y.W., et al. 2008. Examination of chromosome 7p22 candidate genes RBAK, PMS2 and GNA12 in familial hyperaldosteronism type II. *Clin. Exp. Pharmacol. Physiol.* 35: 380-385.

## CHROMOSOMAL LOCATION

Genetic locus: RBAK (human) mapping to 7p22.1.

## SOURCE

RBAK (Q-23) is a Protein A purified rabbit polyclonal antibody raised against synthetic RBAK peptide of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## STORAGE

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

## APPLICATIONS

RBAK (Q-23) is recommended for detection of RBAK 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RBAK siRNA (h): sc-76359, RBAK shRNA Plasmid (h): sc-76359-SH and RBAK shRNA (h) Lentiviral Particles: sc-76359-V.

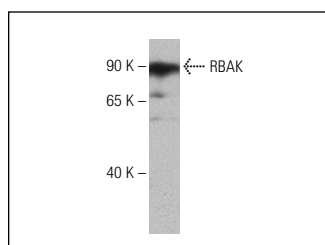
Molecular Weight (predicted) of RBAK: 83 kDa.

Molecular Weight (observed) of RBAK: 89 kDa.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



RBAK (Q-23): sc-133943. Western blot analysis of RBAK expression in Hep G2 whole cell lysate.

## RESEARCH USE

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

## PROTOCOLS

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