

## POGK (F-14): sc-103842

### BACKGROUND

POGK (pogo transposable element with KRAB domain), also known as BASS2 or LST003, is a 609 amino acid protein that may be a member of the DNA-mediated transposon family. Localizing to the nucleus, POGK contains an N-terminal KRAB (Krüppel-associated box) domain, an HTH CENP-B-type (helix-turn-helix and centromere protein B-type) DNA-binding domain and a C-terminal DDE domain. The KRAB domain is a potent transcriptional repression motif and is approximately 75 amino acids in length. DDE domains are catalytic motifs consisting of 2 conserved aspartic acids separated by 70 amino acids and a conserved glutamic acid that is further separated by another 35 amino acids. DDE domains are characteristic of DNA transposases and retroviral integrases.

### REFERENCES

- Andersson, B., et al. 1996. A "double adaptor" method for improved shotgun library construction. *Anal. Biochem.* 236: 107-113.
- Yu, W., et al. 1997. Large-scale concatenation cDNA sequencing. *Genome Res.* 7: 353-358.
- Greenhalf, W., et al. 1999. A selection system for human apoptosis inhibitors using yeast. *Yeast* 15: 1307-1321.
- Nagase, T., et al. 2000. Prediction of the coding sequences of unidentified human genes. XVII. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. *DNA Res.* 7: 143-150.
- Sarkar, A., et al. 2003. Molecular evolutionary analysis of the widespread piggyBac transposon family and related "domesticated" sequences. *Mol. Genet. Genomics* 270: 173-180.
- Rivieccio, V., et al. 2005. Expression, purification and partial characterization of the Krüppel-associated box (KRAB) from the human ZNF2 protein. *Protein Pept. Lett.* 12: 527-532.
- Buchner, J.M., et al. 2005. Piv site-specific invertase requires a DEDD motif analogous to the catalytic center of the RuvC Holliday junction resolvases. *J. Bacteriol.* 187: 3431-3437.
- Peng, H., et al. 2007. The structurally disordered KRAB repression domain is incorporated into a protease resistant core upon binding to KAP-1-RBCC domain. *J. Mol. Biol.* 370: 269-289.

### CHROMOSOMAL LOCATION

Genetic locus: POGK (human) mapping to 1q24.1; Pogk (mouse) mapping to 1 H2.3.

### SOURCE

POGK (F-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of POGK 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-103842 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

POGK (F-14) is recommended for detection of POGK 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).

POGK (F-14) is also recommended for detection of POGK in additional species, including bovine and porcine.

Suitable for use as control antibody for POGK siRNA (h): sc-88850, POGK siRNA (m): sc-106426, POGK shRNA Plasmid (h): sc-88850-SH, POGK shRNA Plasmid (m): sc-106426-SH, POGK shRNA (h) Lentiviral Particles: sc-88850-V and POGK shRNA (m) Lentiviral Particles: sc-106426-V.

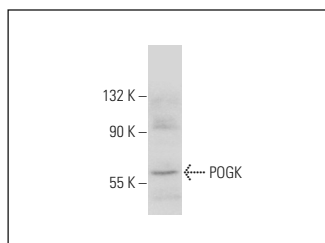
Molecular Weight of POGK: 69 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Jurkat nuclear extract: sc-2132 or NIH/3T3 nuclear extract: sc-2138.

### 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



POGK (F-14): sc-103842. Western blot analysis of POGK expression in Jurkat nuclear extract.

### 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.