

## KBTBD10 (E-13): sc-132724

### BACKGROUND

KBTBD10 (kelch repeat and BTB domain-containing protein 10), also known as kel-like protein 23, sarcosin or kelch-related protein 1, is a 606 amino acid cytoplasmic protein found in sarcomeric muscle. KBTBD10 plays an important role in the protein ubiquitination pathway by acting as the substrate-specific adaptor of an E3 ubiquitin-protein ligase complex. KBTBD10 forms this complex with CUL-3 and Rbx1, and also interacts with N-RAP. Although predominantly cytoplasmic, KBTBD10 can co-localize with actin at the ruffle-like membrane structures located at the tips of pseudopodia, indicating a role in pseudopod elongation in transformed cells. KBTBD10 contains five kelch repeats and one BTB (POZ) domain. Due to alternative splicing events, KBTBD10 exists as two isoforms.

### REFERENCES

1. Taylor, A., et al. 1998. DNA sequence and muscle-specific expression of human sarcosin transcripts. *Mol. Cell. Biochem.* 183: 105-112.
2. Spence, H.J., et al. 2000. Krp1, a novel kelch related protein that is involved in pseudopod elongation in transformed cells. *Oncogene* 19: 1266-1276.
3. Lim, D.S., et al. 2001. Expression profiling of cardiac genes in human hypertrophic cardiomyopathy: insight into the pathogenesis of phenotypes. *J. Am. Coll. Cardiol.* 38: 1175-1180.
4. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607701. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Lu, S., et al. 2003. New N-RAP-binding partners  $\alpha$ -actinin, filamin and Krp1 detected by yeast two-hybrid screening: implications for myofibril assembly. *J. Cell Sci.* 116: 2169-2178.
6. Zhang, D.D., et al. 2005. Ubiquitination of Keap1, a BTB-Kelch substrate adaptor protein for CUL-3, targets Keap1 for degradation by a proteasome-independent pathway. *J. Biol. Chem.* 280: 30091-30099.
7. Foster, L.J., et al. 2006. Insulin-dependent interactions of proteins with Glut4 revealed through stable isotope labeling by amino acids in cell culture (SILAC). *J. Proteome Res.* 5: 64-75.

### CHROMOSOMAL LOCATION

Genetic locus: KBTBD10 (human) mapping to 2q31.1; Kbtbd10 (mouse) mapping to 2 C2.

### SOURCE

KBTBD10 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KBTBD10 of human origin.

### PRODUCT

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

Blocking peptide available for competition studies, sc-132724 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

KBTBD10 (E-13) is recommended for detection of KBTBD10 isoforms long and short of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 KBTBD family members.

KBTBD10 (E-13) is also recommended for detection of KBTBD10 isoforms long and short in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for KBTBD10 siRNA (h): sc-94395, KBTBD10 siRNA (m): sc-146347, KBTBD10 shRNA Plasmid (h): sc-94395-SH, KBTBD10 shRNA Plasmid (m): sc-146347-SH, KBTBD10 shRNA (h) Lentiviral Particles: sc-94395-V and KBTBD10 shRNA (m) Lentiviral Particles: sc-146347-V.

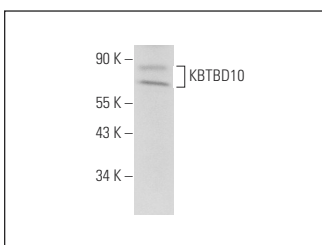
Molecular Weight of KBTBD10: 68 kDa.

Positive Controls: NCI-H292 whole cell lysate: sc-364179.

### 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

### DATA



KBTBD10 (E-13): sc-132724. Western blot analysis of KBTBD10 expression in NCI-H292 whole cell lysate.

### 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.