

# HSPBAP1 (N-16): sc-99443

## BACKGROUND

HSPBAP1 (HSPB (heat shock 27 kDa) associated protein 1), also known as PASS1 (protein associated with small stress protein 1), is a 488 amino acid cytoplasmic protein that contains one JMJC (Jumonji C) domain and shares 80% identity with its rat homolog, PASS1. Widely expressed with highest expression in ovary, thymus and pancreas, HSPBAP1 is thought to play a role in mediating cellular stress responses within the cell. Due to the presence of a JMJC domain, HSPBAP1 may be involved in chromatin remodeling events. Defects or translocations in the gene encoding HSPBAP1 are associated with renal cell carcinoma 1 (RCC1), suggesting a possible role for HSPBAP1 in carcinogenesis. Three isoforms of HSPBAP1 exist due to alternative splicing events.

## REFERENCES

1. Liu, C., Gilmont, R.R., Benndorf, R. and Welsh, M.J. 2000. Identification and characterization of a novel protein from Sertoli cells, PASS1, that associates with mammalian small stress protein HSP 27. *J. Biol. Chem.* 275: 18724-18731.
2. Jiang, M., Ma, Y., Cheng, H., Ni, X., Guo, L., Xie, Y. and Mao, Y. 2001. Molecular cloning and characterization of a novel human gene (HSPBAP1) from human fetal brain. *Cytogenet. Cell Genet.* 95: 48-51.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 608263. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Bodmer, D., Schepens, M., Eleveld, M.J., Schoenmakers, E.F. and Geurts van Kessel, A. 2003. Disruption of a novel gene, DIRC3, and expression of DIRC3-HSPBAP1 fusion transcripts in a case of familial renal cell cancer and t(2;3)(q35;q21). *Genes Chromosomes Cancer* 38: 107-116.
5. Xi, Z.Q., Sun, J.J., Wang, X.F., Li, M.W., Liu, X.Z., Wang, L.Y., Zhu, X., Xiao, F., Li, J.M., Gong, Y. and Guan, L.F. 2007. HSPBAP1 is found extensively in the anterior temporal neocortex of patients with intractable epilepsy. *Synapse* 61: 741-747.

## CHROMOSOMAL LOCATION

Genetic locus: HSPBAP1 (human) mapping to 3q21.1.

## SOURCE

HSPBAP1 (N-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of HSPBAP1 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-99443 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.

## APPLICATIONS

HSPBAP1 (N-16) is recommended for detection of HSPBAP1 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); non cross-reactive with other HSPB family members.

Suitable for use as control antibody for HSPBAP1 siRNA (h): sc-78001, HSPBAP1 shRNA Plasmid (h): sc-78001-SH and HSPBAP1 shRNA (h) Lentiviral Particles: sc-78001-V.

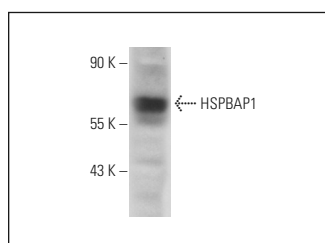
Molecular Weight of HSPBAP1: 53 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

## 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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



HSPBAP1 (N-16): sc-99443. Western blot analysis of HSPBAP1 expression in Jurkat 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.