

HSPBAP1 (S-14): sc-99444

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; Hspbap1 (mouse) mapping to 16 B3.

SOURCE

HSPBAP1 (S-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of HSPBAP1 of human origin.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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-99444 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HSPBAP1 (S-14) is recommended for detection of HSPBAP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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.

HSPBAP1 (S-14) is also recommended for detection of HSPBAP1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for HSPBAP1 siRNA (h): sc-78001, HSPBAP1 siRNA (m): sc-146104, HSPBAP1 shRNA Plasmid (h): sc-78001-SH, HSPBAP1 shRNA Plasmid (m): sc-146104-SH, HSPBAP1 shRNA (h) Lentiviral Particles: sc-78001-V and HSPBAP1 shRNA (m) Lentiviral Particles: sc-146104-V.

Molecular Weight of HSPBAP1: 53 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

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) 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.

RESEARCH USE

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



Try **HSPBAP1 (B-1): sc-374290**, our highly recommended monoclonal alternative to HSPBAP1 (S-14).