UBAP1 (G-14): sc-160893



The Power to Question

BACKGROUND

Ubiquitin (Ub) is among the most phylogenetically conserved proteins known. The primary function of ubiquitin is to clear abnormal, foreign and improperly folded proteins by targeting them for degradation by the 26S proteosome. Encoded by four genes, ubiquitin is synthesized as precursor proteins that consist of either single ubiquitin moieties fused 5-prime to unrelated carboxyl extension proteins, known as UBA type, or polyubiquitin chains that are cleaved into moieties of the UBB or UBC types. As a member of the UBA (ubiquitin-associated) domain family, UBAP1 (ubiquitin-associated protein 1), also known as NAG20 (nasopharyngeal carcinoma-associated gene 20 protein), is a 502 amino acid protein that is encoded by a gene that maps within a region on human chromosome 9 that undergoes loss of heterozygosity in nasopharyngeal carcinoma. This suggests that the UBAP1 gene may be a tumor suppressor gene that when lost leads to malignant transformation. There are two isoforms of UBAP1 that are produced as a result of alternative splicing events.

REFERENCES

- Qian, J., et al. 2001. Isolation and characterization of a novel cDNA, UBAP1, derived from the tumor suppressor locus in human chromosome 9p21-22.
 J. Cancer Res. Clin. Oncol. 127: 613-618.
- Qian, J., et al. 2001. Cloning and expression analysis of a novel gene, UBAP1, possibly involved in ubiquitin pathway. Sheng Wu Hua Xue Yu Sheng Wu Wu Li Xue Bao 33: 147-152.
- 3. Qian, J., et al. 2002. Identification of digital differential expression patterns of a novel human gene (UBAP1) by an expressed sequence tag strategy. Ai Zheng 21: 225-228.
- Xiong, W., et al. 2003. Polymorphism of two novel SNPs, which locate on chromosome 9p21-22, in Han Chinese of Hunan. Zhonghua Yi Xue Yi Chuan Xue Za Zhi 20: 203-206.
- Zeng, Z.Y., et al. 2005. Expression and location of UBAP1 protein associated with nasopharyngeal carcinoma. Zhong Nan Da Xue Xue Bao Yi Xue Ban 30: 621-624.
- 6. Online Mendelian Inheritance in Man, OMIM™. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 609787. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Xiao, B., et al. 2006. Purification of novel UBAP1 protein and its decreased expression on nasopharyngeal carcinoma tissue microarray. Protein Expr. Purif. 47: 60-67.
- 8. Rollinson, S., et al. 2009. Ubiquitin associated protein 1 is a risk factor for frontotemporal lobar degeneration. Neurobiol. Aging 30: 656-665.

CHROMOSOMAL LOCATION

Genetic locus: UBAP1 (human) mapping to 9p13.3; Ubap1 (mouse) mapping to 4 A5.

SOURCE

UBAP1 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UBAP1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160893 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

UBAP1 (G-14) is recommended for detection of UBAP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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 UBAP2.

UBAP1 (G-14) is also recommended for detection of UBAP1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for UBAP1 siRNA (h): sc-92628, UBAP1 siRNA (m): sc-154842, UBAP1 shRNA Plasmid (h): sc-92628-SH, UBAP1 shRNA Plasmid (m): sc-154842-SH, UBAP1 shRNA (h) Lentiviral Particles: sc-92628-V and UBAP1 shRNA (m) Lentiviral Particles: sc-154842-V.

Molecular Weight of UBAP1 isoform 1: 55 kDa.

Molecular Weight of UBAP1 isoform 2: 48 kDa.

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.

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.

PROTOCOLS

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

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