

URG4 (H-267): sc-292018

BACKGROUND

URG4 (up-regulated gene 4), also known as URGCP (upregulator of cell proliferation) or HBV X protein up-regulated gene 4 protein, is a 931 amino acid nuclear and cytoplasmic protein that is strongly expressed in Hepatitis B virus-infected liver, hepatocellular carcinoma cells, well-differentiated gastric cancer tissues and various gastric cancer cell lines. URG4 is suggested to be involved in cell cycle progression through the regulation of cyclin D1 expression. URG4 plays a critical role in development of gastric cancer and promotes hepatocellular growth and survival. URG4 exists as three alternatively spliced isoforms and is considered a potential therapeutic target for gastric cancer. The novel gene encoding URG4 is located on human chromosome 7, which houses over 1,000 genes, comprises nearly 5% of the human genome and has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome.

REFERENCES

1. Tufan, N.L., et al. 2002. Hepatitis Bx antigen stimulates expression of a novel cellular gene, URG4, that promotes hepatocellular growth and survival. *Neoplasia* 4: 355-368.
2. Song, J., et al. 2006. Enhanced cell survival of gastric cancer cells by a novel gene URG4. *Neoplasia* 8: 995-1002.
3. Online Mendelian Inheritance in Man, OMIM[™]. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 610337. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Tong, G.D., et al. 2007. Preneoplastic markers of hepatitis B virus-associated hepatocellular carcinoma and their significance in clinical settings. *Zhonghua Gan Zang Bing Za Zhi* 15: 828-832.
5. Huang, J., et al. 2009. The expression of novel gene URG4 in osteosarcoma: correlation with patients' prognosis. *Pathology* 41: 149-154.
6. Satiroglu-Tufan, N.L., et al. 2010. RNA interference-mediated URG4 gene silencing diminishes cyclin D1 mRNA expression in HepG2 cells. *Genet. Mol. Res.* 9: 1557-1567.
7. Wang, Y., et al. 2010. Expression of URG4 in hepatocellular carcinoma and its correlation with HBx. *Xi Bao Yu Fen Zi Mian Yi Xue Za Zhi* 26: 264-266.

CHROMOSOMAL LOCATION

Genetic locus: URGCP (human) mapping to 7p13; Urgcp (mouse) mapping to 11 A1.

SOURCE

URG4 (H-267) is a rabbit polyclonal antibody raised against amino acids 406-672 mapping within an internal region of URG4 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.

RESEARCH USE

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

APPLICATIONS

URG4 (H-267) is recommended for detection of URG4 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).

URG4 (H-267) is also recommended for detection of URG4 in additional species, including equine, canine, bovine and porcine.

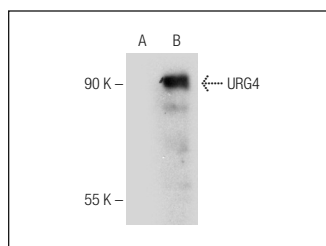
Suitable for use as control antibody for URG4 siRNA (h): sc-89691, URG4 siRNA (m): sc-154934, URG4 shRNA Plasmid (h): sc-89691-SH, URG4 shRNA Plasmid (m): sc-154934-SH, URG4 shRNA (h) Lentiviral Particles: sc-89691-V and URG4 shRNA (m) Lentiviral Particles: sc-154934-V.

Molecular Weight of URG4: 104 kDa.

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



URG4 (H-267): sc-292018. Western blot analysis of URG4 expression in non-transfected: sc-117752 (A) and human URG4 transfected: sc-173380 (B) 293T whole cell lysates.

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.