

versican (H-56): sc-25831

BACKGROUND

Versican (chondroitin sulfate proteoglycan 2) is a large extracellular matrix proteoglycan involved in cell growth and differentiation. Important as a structural molecule, versican creates loose and hydrated matrices during key events in development and disease. The protein contains hyaluronic acid and glycosaminoglycan-binding domains, epidermal growth factor-like repeats, a lectin-like sequence and a complement regulatory protein-like domain. Splice variants differ greatly in length and degree of modification by glycosaminoglycan chains. Accumulation around smooth muscle cells in lesions of atherosclerosis, suggests a role for versican in atherogenesis. Versican, differentially expressed in human melanoma, plays a role in tumor development and may be a reliable marker for clinical diagnosis. The organization of HA- and versican-rich pericellular matrices may facilitate migration and mitosis by diminishing cell surface adhesivity and affecting cell shape through steric exclusion and the viscous properties of HA proteoglycan gels. The human versican gene maps to chromosome 5q14.2.

CHROMOSOMAL LOCATION

Genetic locus: VCAN (human) mapping to 5q14.2; Vcan (mouse) mapping to 13 C3.

SOURCE

versican (H-56) is a rabbit polyclonal antibody raised against amino acids 3341-3396 mapping at the C-terminus of versican 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.

STORAGE

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

APPLICATIONS

versican (H-56) is recommended for detection of versican 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).

versican (H-56) is also recommended for detection of versican in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for versican siRNA (h): sc-41903, versican siRNA (m): sc-41904, versican shRNA Plasmid (h): sc-41903-SH, versican shRNA Plasmid (m): sc-41904-SH, versican shRNA (h) Lentiviral Particles: sc-41903-V and versican shRNA (m) Lentiviral Particles: sc-41904-V.

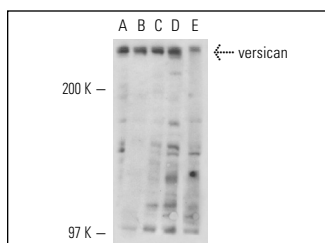
Molecular Weight of versican: 380 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, JAR cell lysate: sc-2276 or HeLa whole cell lysate: sc-2200.

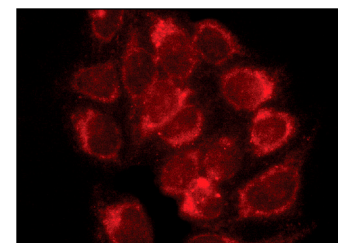
RECOMMENDED SECONDARY REAGENTS

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) 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



versican (H-56): sc-25831. Western blot analysis of versican expression in A-431 (A), JAR (B), MIA PaCa-2 (C), U-87 MG (D) and HeLa (E) whole cell lysates.



versican (H-56): sc-25831. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Coulson-Thomas, V.J., et al. 2011. Colorectal cancer desmoplastic reaction up-regulates collagen synthesis and restricts cancer cell invasion. *Cell Tissue Res.* 346: 223-236.
- Didangelos, A., et al. 2012. Novel role of ADAMTS-5 protein in proteoglycan turnover and lipoprotein retention in atherosclerosis. *J. Biol. Chem.* 287: 19341-19345.
- Attia, M., et al. 2012. Alterations of overused supraspinatus tendon: a possible role of glycosaminoglycans and HARP/pleiotrophin in early tendon pathology. *J. Orthop. Res.* 30: 61-71.
- Morone, S., et al. 2012. Overexpression of CD157 contributes to epithelial ovarian cancer progression by promoting mesenchymal differentiation. *PLoS ONE* 7: e43649.

RESEARCH USE

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


 MONOS
Satisfaction
Guaranteed

Try **versican (4C5): sc-47769** or **versican (5C1): sc-47777**, our highly recommended monoclonal alternatives to versican (H-56).