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## Product Information

### Anti-Versican V0/V1 Neo

Developed in Rabbit, Affinity Isolated Antibody

Product Number **V 5639**

#### Product Description

Anti-Versican V0/V1 Neo was developed in rabbit using a synthetic peptide CGGD(436)PEAAE(441), corresponding to amino acid residues 436-441 from human versican as the immunogen. This sequence is completely conserved between human, mouse and rat. The antibody was affinity purified.

Anti-Versican V0/V1 Neo detects an ~70 kDa protein representing versican from mouse cumulus oocyte complexes by immunoblotting.

Versican is an extracellular matrix (ECM) molecule and member of the family of large aggregating proteoglycans, that includes aggrecan, brevican, and neurocan, that bind to hyaluronan.<sup>1,2</sup> Versican also binds growth factors, enzymes, lipoproteins, and a variety of other ECM components, and accumulates in lesions of atherosclerosis and restenosis.<sup>3</sup> Alternative splicing of versican generates at least four isoforms named V0, V1, V2, and V3 with a prevalence of V1 mRNA and limited expression of versican isoforms V0, V2, and V3 in human adult tissues.<sup>4</sup> Versican V1 has been shown to enhance cell proliferation, and also induce cell transformation and protect cells from apoptosis.<sup>4,5</sup>

#### Reagent

The antibody is supplied as 100 µg of affinity-isolated antibody in 50 µL of phosphate buffered saline containing 1.0 mg/ml BSA and 0.05 % sodium azide as preservative.

#### Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling.

#### Storage/Stability

Store at -20 °C. For extended storage, freeze in working aliquots. Avoid repeated freezing and thawing. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

#### Product Profile

The recommended working dilution is 2 µg/ml for immunoblotting.

**Note:** In order to obtain best results and assay sensitivities of different techniques and preparations, determination of optimal working dilutions by titration test is recommended.

#### References

1. Murakami, T. and Ohtsuka, A., Perisynaptic barrier of proteoglycans in the mature brain and spinal cord, *Arch. Histol. Cytol.*, **66**, 195-207 (2003).
2. Wight, T.N., Versican: a versatile extracellular matrix proteoglycan in cell biology, *Curr. Opin. Cell Biol.*, **14**, 617-623 (2002).
3. Wight, T.N. and Merrilees, M.J., Proteoglycans in atherosclerosis and restenosis: key roles for versican, *Circ. Res.*, **94**, 1158-1167 (2004).
4. Cattaruzza, S., et al., Distribution of PG-M/versican variants in human tissues and *de novo* expression of isoform V3 upon endothelial cell activation, migration, and neoangiogenesis *in vitro*, *J Biol. Chem.*, **277**, 47626-47635 (2002).
5. Sheng, W., et al., The roles of versican V1 and V2 isoforms in cell proliferation and apoptosis, *Mol. Biol. Cell*, **16**, 1330-1340 (2005).

MCT,PHC 04/05-1

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