

Anti-Versican Picoband Antibody

Catalog # ABO12142

Specification

Anti-Versican Picoband Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionP13611HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionPotection. Tested with WB, IHC-P inHuman;Mouse;Rat.Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Versican Picoband Antibody - Additional Information

Gene ID 1462

Other Names Versican core protein, Chondroitin sulfate proteoglycan core protein 2, Chondroitin sulfate proteoglycan 2, Glial hyaluronate-binding protein, GHAP, Large fibroblast proteoglycan, PG-M, VCAN, CSPG2

Calculated MW 372820 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, By Heat
Western blot, 0.1-0.5 μg/ml, Mouse, Rat, Human

Subcellular Localization Secreted, extracellular space, extracellular matrix.

Tissue Specificity

Cerebral white matter and plasma. Isoform V0 and isoform V1 are expressed in normal brain, gliomas, medulloblastomas, schwannomas, neurofibromas, and meningiomas. Isoform V2 is restricted to normal brain and gliomas. Isoform V3 is found in all these tissues except medulloblastomas.

Protein Name Versican core protein

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.



Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human Versican (65-92aa KWSKIEVDKNGKDLKETTVLVAQNGNIK), different from the related mouse and rat sequences by two amino acids.

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the aggrecan/versican proteoglycan family.

Anti-Versican Picoband Antibody - Protein Information

Name VCAN

Synonyms CSPG2

Function

May play a role in intercellular signaling and in connecting cells with the extracellular matrix. May take part in the regulation of cell motility, growth and differentiation. Binds hyaluronic acid.

Cellular Location

Secreted, extracellular space, extracellular matrix. Cell projection, cilium, photoreceptor outer segment. Secreted, extracellular space, extracellular matrix, interphotoreceptor matrix. Secreted

Tissue Location

Detected in placenta (at protein level) (PubMed:32337544). Detected in cerebrospinal fluid, fibroblasts and urine (at protein level) (PubMed:25326458, PubMed:36213313). Expressed in the retina (at protein level) (PubMed:29777959). Cerebral white matter and plasma (PubMed:2469524). Isoform V0: Expressed in normal brain, gliomas, medulloblastomas, schwannomas, neurofibromas, and meningiomas (PubMed:8627343). Isoform V1: Expressed in normal brain, gliomas, medulloblastomas (PubMed:8627343). Isoform V2: Restricted to normal brain and gliomas (PubMed:8627343). Isoform V3: Found in all these tissues except medulloblastomas (PubMed:8627343).

Anti-Versican Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation



Flow Cytomety

<u>Cell Culture</u>

Anti-Versican Picoband Antibody - Images



Anti- Versican Picoband antibody, ABO12142, Western blottingAll lanes: Anti Versican (ABO12142) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: HEPA Whole Cell Lysate at 40ugPredicted bind size: 373KDObserved bind size: 373KD



Anti- Versican Picoband antibody, ABO12142, IHC(P)IHC(P): Human Glioma Tissue

Anti-Versican Picoband Antibody - Background

Versican (VCAN), also known as CSPG2, is a large extracellular matrix proteoglycan that is present in a variety of human tissues. Versican is a large chondroitin sulfate proteoglycan with an apparent molecular mass of more than 1000kDa. The Versican gene is mapped on 5q14.2-q14.3. The human versican gene contains 15 exons spanning more than 90 kb. The distribution of versican by using affinity-purified polyclonal antibodies that recognize the core protein of the prominent versican splice variants V0 and V1. Versican staining was noted in the central and peripheral nervous system, in the basal layer of the epidermis, and on the luminal surface of some glandular epithelia. Biochemical purification of LLC-conditioned medium led to identification of the extracellular matrix proteoglycan versican, which is upregulated in many human tumors including lung cancer, as a macrophage activator that acts through TLR2 and its coreceptors TLR6 and CD14. By activating TLR2:TLR6 complexes and inducing TNF-alpha secretion by myeloid cells, versican strongly enhances LLC metastatic growth.