

Basic Information

Product Name	Anti-VCAN Antibody	
Gene Name	VCAN	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Versican, different from the related mouse and rat sequences by two amino acids.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	373 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

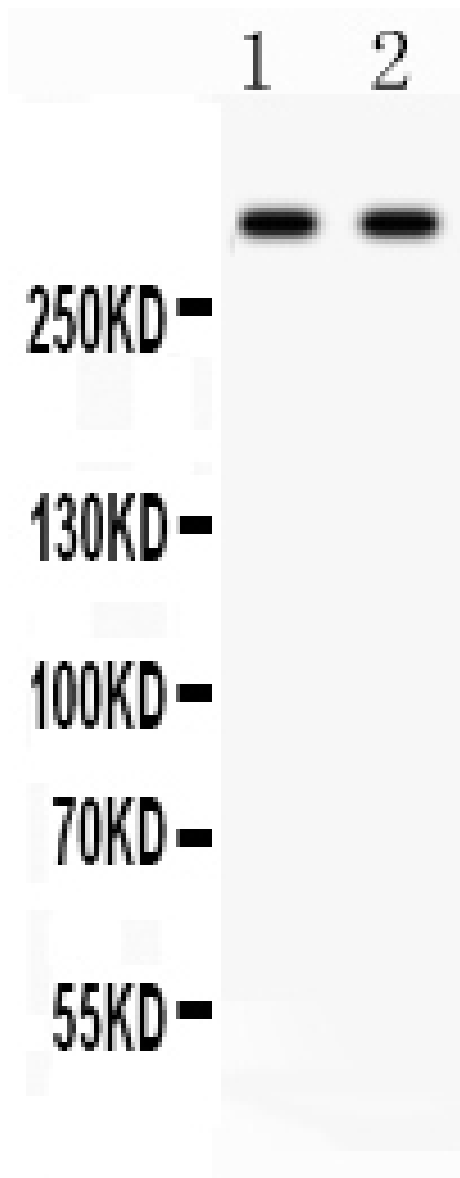
Background Information

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.

Reference

Anti-VCAN Antibody被引用在5文献中。

Selected Validation Data

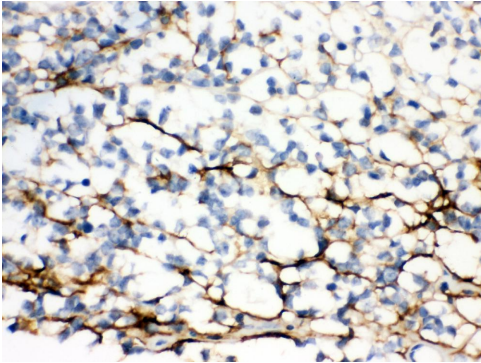


Western blot analysis of VCAN using anti-VCAN antibody (PB9453). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Rat Brain tissue lysates,

Lane 2: HEPA whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-VCAN antigen affinity purified polyclonal antibody (PB9453) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for VCAN at approximately 373 kDa. The expected band size for VCAN is at 373 kDa.



IHC analysis of VCAN using anti-VCAN antibody (PB9453).

VCAN was detected in a paraffin-embedded section of human glioma tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-VCAN Antibody (PB9453) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.