

Anti-NOV/CCN3 Picoband Antibody
Catalog # ABO13050**Specification****Anti-NOV/CCN3 Picoband Antibody - Product Information**

Application	IHC
Primary Accession	P48745
Host	Rabbit
Reactivity	Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Protein NOV homolog(NOV) detection. Tested with WB, IHC-P in Human;Rat.

Reconstitution

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

Anti-NOV/CCN3 Picoband Antibody - Additional Information

Gene ID 4856

Other Names

Protein NOV homolog, NovH, CCN family member 3, Insulin-like growth factor-binding protein 9, IBP-9, IGF-binding protein 9, IGFBP-9, Nephroblastoma-overexpressed gene protein homolog, NOV, CCN3, IGFBP9, NOVH

Calculated MW

39162 MW KDa

Application Details

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

Subcellular Localization

Secreted.

Tissue Specificity

Expressed in bone marrow, thymic cells and nephroblastoma. Increased expression in Wilms tumor of the stromal type. .

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human NOV/CCN3 (334-357aa HTNCPKNNEAFLQELELKTTRGKM), different from the related mouse sequence by seven amino acids, and from the related rat sequence by four amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

At -20°C for one year. After r^o 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.

Anti-NOV/CCN3 Picoband Antibody - Protein Information

Name CCN3 ([HGNC:7885](#))

Synonyms IGFBP9, NOV, NOVH

Function

Immediate-early protein playing a role in various cellular processes including proliferation, adhesion, migration, differentiation and survival (PubMed:12050162, PubMed:12695522, PubMed:15181016, PubMed:15611078, PubMed:21344378). Acts by binding to integrins or membrane receptors such as NOTCH1 (PubMed:12695522, PubMed:15611078, PubMed:21344378). Essential regulator of hematopoietic stem and progenitor cell function (PubMed:17463287). Inhibits myogenic differentiation through the activation of Notch-signaling pathway (PubMed:12050162). Inhibits vascular smooth muscle cells proliferation by increasing expression of cell-cycle regulators such as CDKN2B or CDKN1A independently of TGFB1 signaling (PubMed:20139355). Ligand of integrins ITGAV:ITGB3 and ITGA5:ITGB1, acts directly upon endothelial cells to stimulate pro-angiogenic activities and induces angiogenesis. In endothelial cells, supports cell adhesion, induces directed cell migration (chemotaxis) and promotes cell survival (PubMed:12695522). Also plays a role in cutaneous wound healing acting as integrin receptor ligand. Supports skin fibroblast adhesion through ITGA5:ITGB1 and ITGA6:ITGB1 and induces fibroblast chemotaxis through ITGAV:ITGB5. Seems to enhance bFGF-induced DNA synthesis in fibroblasts (PubMed:15611078). Involved in bone regeneration as a negative regulator (By similarity). Enhances the articular chondrocytic phenotype, whereas it repressed the one representing endochondral ossification (PubMed:21871891). Impairs pancreatic beta-cell function, inhibits beta-cell proliferation and insulin secretion (By similarity). Plays a role as negative regulator of endothelial pro-inflammatory activation reducing monocyte adhesion, its anti-inflammatory effects occur secondary to the inhibition of NF-kappaB signaling pathway (PubMed:21063504). Contributes to the control and coordination of inflammatory processes in atherosclerosis (By similarity). Attenuates inflammatory pain through regulation of IL1B- and TNF-induced MMP9, MMP2 and CCL2 expression. Inhibits MMP9 expression through ITGB1 engagement (PubMed:21871891).

target="_blank">21871891). Brain osteoanabolic hormone (By similarity). Drives osteogenesis in osteochondral skeletal stem cells (PubMed:38987585). During lactation, maintains the maternal skeleton and viability of offspring (By similarity).

Cellular Location

Secreted {ECO:0000250|UniProtKB:Q64299}. Cytoplasm. Cell junction, gap junction.
Note=Localizes at the gap junction in presence of GJA1. {ECO:0000250|UniProtKB:Q9QZQ5}

Tissue Location

Expressed in endothelial cells (at protein level) (PubMed:21063504). Expressed in bone marrow and thymic cells

Anti-NOV/CCN3 Picoband Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-NOV/CCN3 Picoband Antibody - Images

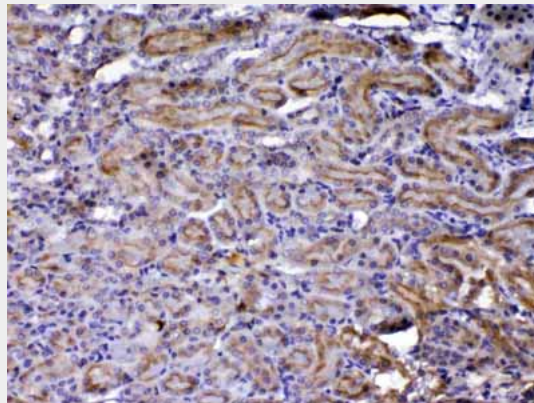
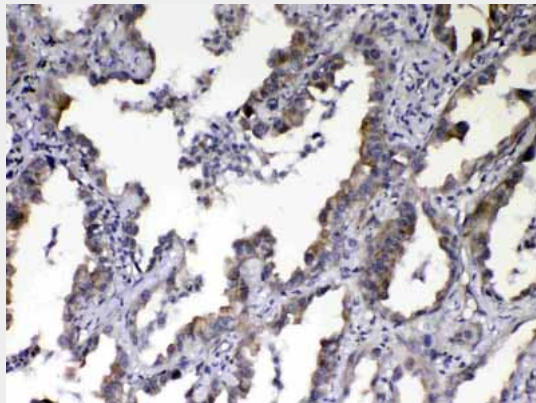
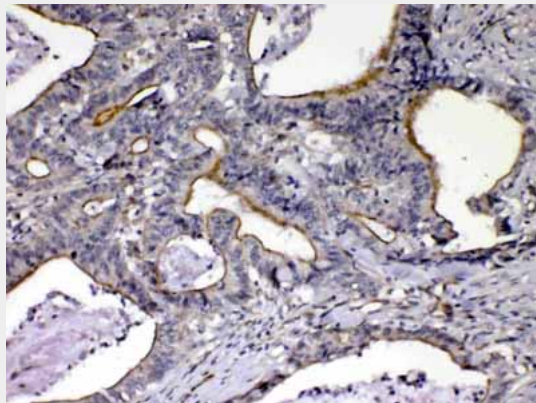
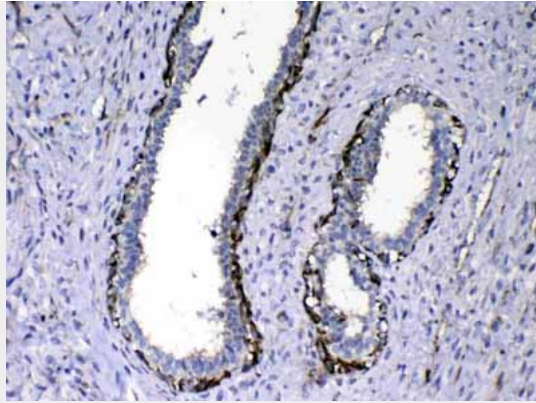
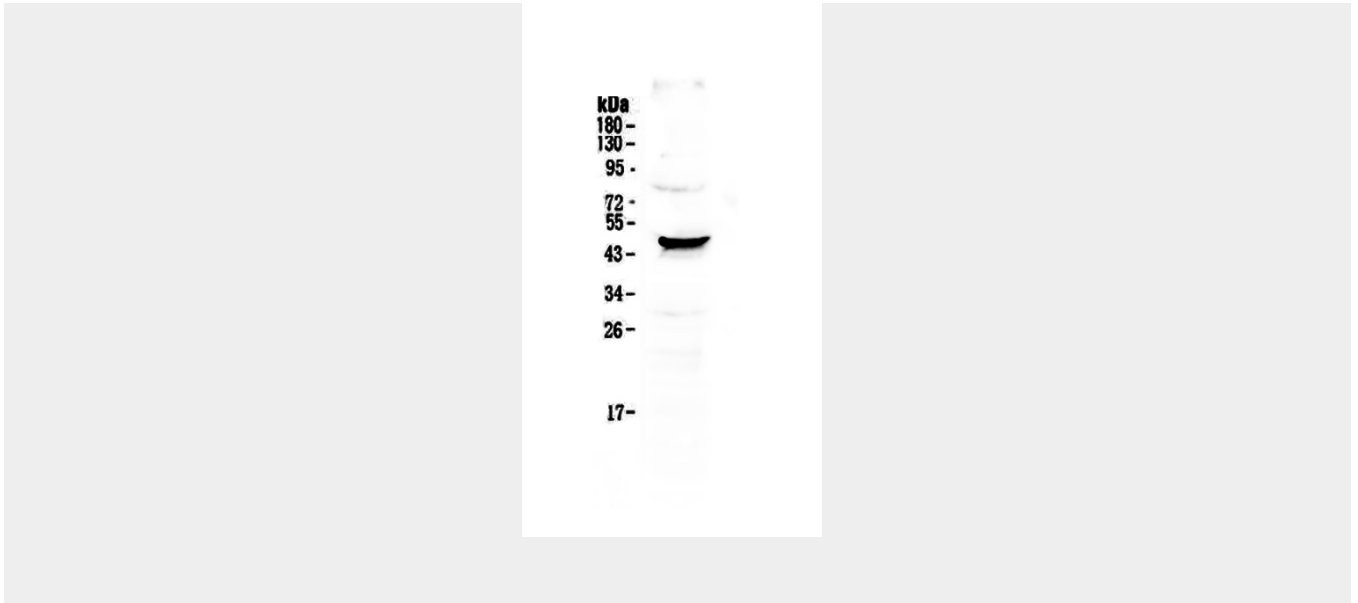


Figure 5. IHC analysis of NOV/CCN3 using anti-NOV/CCN3 antibody (ABO13050).





Anti-NOV/CCN3 Picoband Antibody - Background

NOV (nephroblastoma overexpressed), also known as CCN3, is a matricellular protein that in humans is encoded by the NOV gene. The protein encoded by this gene is a small secreted cysteine-rich protein and a member of the CCN family of regulatory proteins. CNN family proteins associate with the extracellular matrix and play an important role in cardiovascular and skeletal development, fibrosis and cancer development.