

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

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**Anti-NOV/CCN3 Picoband Antibody - Product Information**

Application	<b>WB, IHC-P</b>
Primary Accession	<a href="#">P48745</a>
Host	<b>Rabbit</b>
Reactivity	<b>Rat</b>
Clonality	<b>Polyclonal</b>
Format	<b>Lyophilized</b>

**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<br>Western blot, 0.1-0.5 µg/ml, Human, <br> <br>

**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 NaN3.

**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°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:<a href="http://www.uniprot.org/citations/12050162" target="\_blank">12050162</a>, PubMed:<a href="http://www.uniprot.org/citations/12695522" target="\_blank">12695522</a>, PubMed:<a href="http://www.uniprot.org/citations/15181016" target="\_blank">15181016</a>, PubMed:<a href="http://www.uniprot.org/citations/15611078" target="\_blank">15611078</a>, PubMed:<a href="http://www.uniprot.org/citations/21344378" target="\_blank">21344378</a>). Acts by binding to integrins or membrane receptors such as NOTCH1 (PubMed:<a href="http://www.uniprot.org/citations/12695522" target="\_blank">12695522</a>, PubMed:<a href="http://www.uniprot.org/citations/15611078" target="\_blank">15611078</a>, PubMed:<a href="http://www.uniprot.org/citations/21344378" target="\_blank">21344378</a>). Essential regulator of hematopoietic stem and progenitor cell function (PubMed:<a href="http://www.uniprot.org/citations/17463287" target="\_blank">17463287</a>). Inhibits myogenic differentiation through the activation of Notch-signaling pathway (PubMed:<a href="http://www.uniprot.org/citations/12050162" target="\_blank">12050162</a>). Inhibits vascular smooth muscle cells proliferation by increasing expression of cell-cycle regulators such as CDKN2B or CDKN1A independently of TGFB1 signaling (PubMed:<a href="http://www.uniprot.org/citations/20139355" target="\_blank">20139355</a>). 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:<a href="http://www.uniprot.org/citations/12695522" target="\_blank">12695522</a>). 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:<a href="http://www.uniprot.org/citations/15611078" target="\_blank">15611078</a>). Involved in bone regeneration as a negative regulator (By similarity). Enhances the articular chondrocytic phenotype, whereas it repressed the one representing endochondral ossification (PubMed:<a href="http://www.uniprot.org/citations/21871891" target="\_blank">21871891</a>). 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:<a href="http://www.uniprot.org/citations/21063504" target="\_blank">21063504</a>). 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:<a href="http://www.uniprot.org/citations/21871891" target="\_blank">21871891</a>).

target="\_blank">21871891</a>). Brain osteoanabolic hormone (By similarity). Drives osteogenesis in osteochondral skeletal stem cells (PubMed:<a href="http://www.uniprot.org/citations/38987585" target="\_blank">38987585</a>). 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**

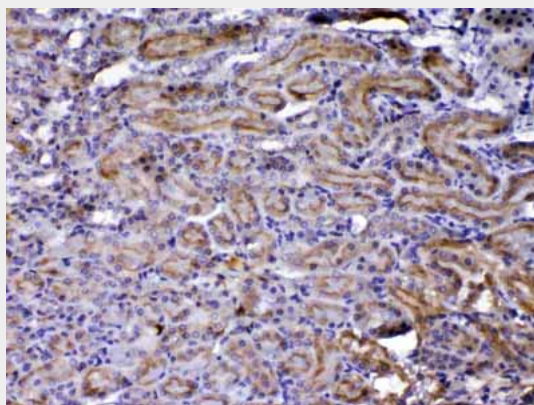
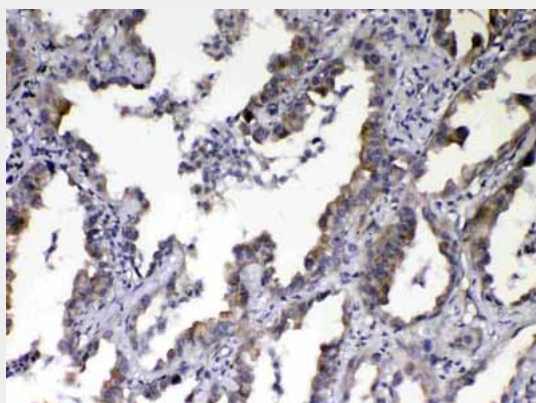
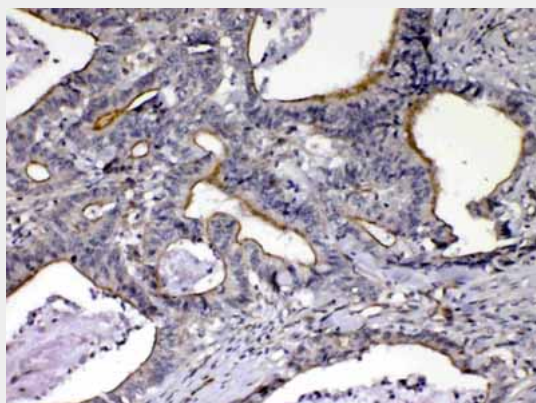
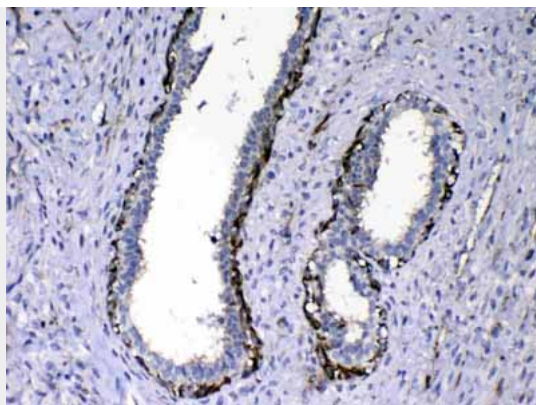


Figure 5. IHC analysis of NOV/CCN3 using anti-NOV/CCN3 antibody (ABO13050).





#### **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.