

# **CCN3 / NOV Antibody (C-Terminus)**

Rabbit Polyclonal Antibody Catalog # ALS11958

# **Specification**

# CCN3 / NOV Antibody (C-Terminus) - Product Information

Application IHC
Primary Accession P48745
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 39kDa KDa

### CCN3 / NOV Antibody (C-Terminus) - 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

# **Target/Specificity**

synthetic peptide corresponding to C-terminal residues of human NOV protein homolog precursor (NovH) (Nephroblastoma overexpressed gene protein homolog)

#### **Reconstitution & Storage**

+4°C or -20°C, Avoid repeated freezing and thawing.

#### **Precautions**

CCN3 / NOV Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

# CCN3 / NOV Antibody (C-Terminus) - 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

 $href="http://www.uniprot.org/citations/15181016" target="\_blank">15181016</a>, PubMed:<a href="http://www.uniprot.org/citations/15611078" target="\_blank">15611078</a>, PubMed:<a href="http://www.uniprot.org/citations/12695522" target="\_blank">12695522</a>, PubMed:<a href="http://www.uniprot.org/citations/21344378" target="_blank">21344378</a>, PubMed:<a href="http://www.uniprot.org/citations/12050162" target="_blank">12050162</a>). Acts by binding to integrins or membrane receptors such as NOTCH1 (PubMed:<a href="http://www.uniprot.org/citations/12050162" target="_blank">12050162</a>).$ 



Tel: 858.875.1900 Fax: 858.875.1999

href="http://www.uniprot.org/citations/12695522" target=" blank">12695522</a>, PubMed:<a href="http://www.uniprot.org/citations/21344378" target="\_blank">21344378</a>, PubMed:<a href="http://www.uniprot.org/citations/15611078" target="blank">15611078</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="mailto:red"><a href="mailto:red">red</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" 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>).

#### **Cellular Location**

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

# **Tissue Location**

Expressed in endiothelial cells (at protein level) (PubMed:21063504). Expressed in bone marrow, thymic cells and nephroblastoma. Increased expression in Wilms tumor of the stromal type.

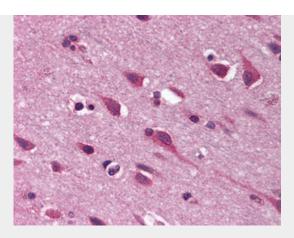
# CCN3 / NOV Antibody (C-Terminus) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# CCN3 / NOV Antibody (C-Terminus) - Images





Anti-NOV / CCN3 antibody IHC of human brain, cortex.

# CCN3 / NOV Antibody (C-Terminus) - Background

Immediate-early protein likely to play a role in cell growth regulation.

# CCN3 / NOV Antibody (C-Terminus) - References

Martinerie C., et al. Oncogene 9:2729-2732(1994).

Martinerie C., et al. Oncogene 12:1479-1492(1996).

Jiang D., et al. Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.

Ota T., et al. Nat. Genet. 36:40-45(2004).

Ebert L., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.