

NOV Antibody (C-term) Blocking Peptide Synthetic peptide Catalog # BP6537b

## **Specification**

# NOV Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>P48745</u>

## NOV Antibody (C-term) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody <a href=/products/AP6537b>AP6537b</a> was selected from the C-term region of human NOV. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

## NOV Antibody (C-term) Blocking Peptide - Protein Information

Name CCN3 (<u>HGNC:7885</u>)

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/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/21344378" target="\_blank">12050162</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/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/pre>

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>).

#### **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.

## NOV Antibody (C-term) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

# NOV Antibody (C-term) Blocking Peptide - Images

## NOV Antibody (C-term) Blocking Peptide - Background

NOV 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.

## NOV Antibody (C-term) Blocking Peptide - References

Ghayad, S.E., J. Mol. Endocrinol. 42 (2), 87-103 (2009) Perbal, B., Clin. Cancer Res. 14 (3), 701-709



(2008)Vallacchi,V., Cancer Res. 68 (3), 715-723 (2008)