

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

Specification

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

Primary Accession [P48745](#)

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 [AP6537b](#) 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 ([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](http://www.uniprot.org/citations/12050162), PubMed:[12695522](http://www.uniprot.org/citations/12695522), PubMed:[15181016](http://www.uniprot.org/citations/15181016), PubMed:[15611078](http://www.uniprot.org/citations/15611078), PubMed:[21344378](http://www.uniprot.org/citations/21344378)). Acts by binding to integrins or membrane receptors such as NOTCH1 (PubMed:[12050162](#), PubMed:[12695522](#), PubMed:[15181016](#), PubMed:[15611078](#), PubMed:[21344378](#)).

href="http://www.uniprot.org/citations/12695522" target="_blank">>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). 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

NOV Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

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. CCN 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)