

CCN3 / NOV Antibody (clone 2G8)

Mouse Monoclonal Antibody Catalog # ALS14529

Specification

CCN3 / NOV Antibody (clone 2G8) - Product Information

WB, IP, IHC Application **Primary Accession** P48745 Reactivity Human Host Mouse Clonality **Monoclonal** Calculated MW 39kDa KDa

CCN3 / NOV Antibody (clone 2G8) - 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

Human NOV / CCN3

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions

CCN3 / NOV Antibody (clone 2G8) is for research use only and not for use in diagnostic or therapeutic procedures.

CCN3 / NOV Antibody (clone 2G8) - 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: 15181016, PubMed:15611078, PubMed:12695522, PubMed:21344378, PubMed:12050162). Acts by binding to integrins or membrane receptors such as NOTCH1 (PubMed:<a



Tel: 858.875.1900 Fax: 858.875.1999

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

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.

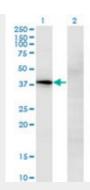
CCN3 / NOV Antibody (clone 2G8) - Protocols

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

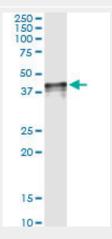
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CCN3 / NOV Antibody (clone 2G8) - Images

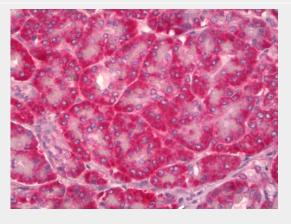




Western blot of NOV expression in transfected 293T cell line by NOV monoclonal antibody, clone 2G8.



Immunoprecipitation of NOV transfected lysate using anti-NOV monoclonal antibody and Protein A...



Anti-NOV / CCN3 antibody IHC of human pancreas.

CCN3 / NOV Antibody (clone 2G8) - Background

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

CCN3 / NOV Antibody (clone 2G8) - 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.



