

Human CCN3 / NOV Protein (His Tag)

Catalog Number: 10264-H08B



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

NOV, CCN3, IGFBP9

Protein Construction:

A DNA sequence encoding the full length of human NOV (NP_002505.1) (Met 1-Met 357) was expressed, fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 94 % as determined by SDS-PAGE

Bio-Activity

Measured by the ability of the immobilized protein to support the adhesion of Balb/3T3 mouse embryonic fibroblast cells. When cells are added to CCN3 coated plates (10 µg/ml, 100 µl/well), >50% cells will adhere specifically after 60 minutes at 37 °C .

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Thr 32

Molecular Mass:

The secreted recombinant human NOV consists of 337 amino acids and predicts a molecular mass of 37 kDa. It migrates as an approximately 47 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 50mM Tris, 100mM NaCl, 0.5mM PMSF, 10mM Imidazole, 10% Glycerol, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

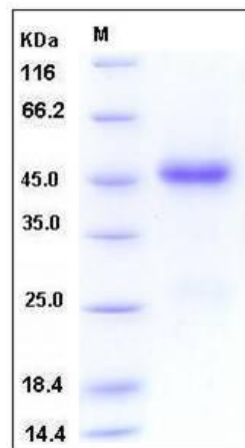
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Protein NOV homolog, also known as Nephroblastoma-overexpressed gene protein homolog, NOV, and CCN3, is secreted protein which belongs to the CCN family. CCN3 expression was observed in a broad variety of tissues from the early stage of development. It contains one CTCK (C-terminal cystine knot-like) domain, one IGFBP N-terminal domain, one TSP type-1 domain, and one VWFC domain. CCN3, a founding member of the CCN family of growth regulators, was linked with hematology in 2003 when it was detected in human serum. CCN3 acts through the core stem cell signalling pathways including Notch and Bone Morphogenic Protein, connecting CCN3 with the modulation of self-renewal and maturation of a number of cell lineages including hematopoietic, osteogenic and chondrogenic. Altered CCN3 expression is associated with numerous solid tumors including glioblastoma, melanoma, adrenocortical tumours, prostate cancer and bone malignancies including osteosarcoma. CCN3 may affect the extracellular environment of the niche for hematopoietic stem cells. CCN3 has emerged as a key player in stem cell regulation, hematopoiesis and a crucial component within the bone marrow microenvironment.

References

1. Lombet, A. et al., 2003, Cell Commun Signal. 1 (1): 1.
2. Katsube, K. et al., 2009, J Cell Commun Signal. 3 (2): 135-45.
3. McCallum, L. et al., 2009, Blood Rev. 23 (2): 79-85.
4. McCallum, L.J. et al., 2009, Cell Commun Signal. 3 (2): 115-24.

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Fax : +86-10-51029969 • Tel: +86-400-890-9989 • <http://www.sinobiological.com>