NOV Human E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: Nephroblastoma Overexpressed gene, CCN3, IGFBP9, NovH

Cat. No.:

RBG10250005	(5 µg)
RBG10250020	(20 µg)
RBG10250100	(100 µg)

Description

NOV is a member of the CCN family of secreted, cysteine-rich regulatory proteins. The full length NOV protein contains four structural domains that confer distinct, and sometimes opposing, biological activities. Elevated expression of NOV is associated with certain tumors, including Wilm's tumor and most nephroblastomas. However, in other tumor types and certain cancer cell lines, increased tumorgenicity and proliferation is correlated with decreased NOV expression. Additionally, NOV induces cell adhesion and cell migration by signaling through specific cell surface integrins, and by binding to heparin sulfate proteoglycans and to fibulin 1C. NOV has also been reported to exert proangiogenic activities. Recombinant Human NOV is a 36.2 kDa protein containing 331 amino acid residues. It is composed of four distinct structural domains (modules): the IGF binding protein (IGFBP) domain; the von Willebrand Factor C (VWFC) domain; the Thrombospondin type-I (TSP type-1) domain; and a C-terminal cysteine knot-like domain (CTCK).

Research topic

Cardiovascular disease, Coronary artery disease, Oncology

Amino Acid Sequence

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MQVAATQRCP PQCPGRCPAT PPTCAPGVRA VLDGCSCCLV CARQRGESCS DLEPCDESSG LYCDRSADPS NQTGICTAVE
GDNCVFDGVI YRSGEKFQPS CKFQCTCRDG QIGCVPRCQL DVLLPEPNCP APRKVEVPGE CCEKWICGPD EEDSLGGLTL
AAYRPEATLG VEVSDSSVNC IEQTTEWTAC SKSCGMGFST RVTNRNRQCE MLKQTRLCMV RPCEQEPEQP TDKKGKKCLR
TKKSLKAIHL QFKNCTSLHT YKPRFCGVCS DGRCCTPHNT KTIQAEFQCS PGQIVKKPVM VIGTCTCHTN CPKNNEAFLQ
ELELKTTRGK M
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Source

E. coli

Purity

95%

Biological Activity

Determined by a cell proliferation assay using BALB/c 3T3 cells. The expected ED_{50} for this effect is 1.0-2.0 µg/ml.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein, (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

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