

# Datasheet for ABIN5510592

## **NOV ELISA Kit**





### Overview

96 tests
NOV
AA 22-354
Mouse
Sandwich ELISA
ELISA

Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse NOV/CCN3

#### **Product Details**

Purpose:

Brand:	PicoKine™
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	Expression system for standard: NSO
	Immunogen sequence: Q22-I354
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Characteristics:	Tissue Specificity: Expressed in large vessels including the ascending aorta, carotid arteries,
	and the thoracic aorta, in medium-sized vessels such as coronary arteries and small pulmonary
	veins and also in small vessels. In addition, also found to be present in the heart (at protein
	level) (PubMed:21063504). Expressed in astrocytes (at protein level) (PubMed:15213231).
	Detected in brain, bone, lung and muscle tissues (PubMed:20139355, PubMed:23653360).
	Expressed in skin, expression highly increases 5 days post-wounding, peaking on the 7th day to

decline after 9 days (PubMed:15611078). Expressed in pancreatic ducts and beta-cell islets (PubMed:23705021). .

### Target Details

Target: NOV

Alternative Name: Nov (NOV Products)

Background:

Protein Function: Immediate-early protein playing a role in various cellular processes including proliferation, adhesion, migration, differentiation and survival. Acts by binding to integrins or membrane receptors such as NOTCH1. Essential regulator of hematopoietic stem and progenitor cell function. Inhibits myogenic differentiation through the activation of Notchsignaling pathway. Inhibits vascular smooth muscle cells proliferation by increasing expression of cell-cycle regulators such as CDKN2B or CDKN1A independently of TGFB1 signaling. Ligand of integrins ITGAV:ITGB3 and ITGA5:ITGB1, acts directly upon endothelial cells to stimulate proangiogenic activities and induces angiogenesis. In endothelial cells, supports cell adhesion, induces directed cell migration (chemotaxis) and promotes cell survival. Plays also 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 (By similarity). Involved in bone regeneration as a negative regulator (PubMed:23653360). Enhances the articular chondrocytic phenotype, whereas it repressed the one representing endochondral ossification (By similarity). Impairs pancreatic beta-cell function, inhibits beta-cell proliferation and insulin secretion (PubMed:23705021). Plays a role as negative regulator of endothelial proinflammatory activation reducing monocyte adhesion, its anti-inflammatory effects occur secondary to the inhibition of NF-kappaB signaling pathway (By similarity). Contributes to the control and coordination of inflammatory processes in atherosclerosis (PubMed:24722330). Attenuates inflammatory pain through regulation of IL1B- and TNF-induced MMP9, MMP2 and CCL2 expression. Inhibits MMP9 expression through ITGB1 engagement (By similarity). . Background: NOV (nephroblastoma overexpressed), also known as CCN3, is a matricellular protein that in humans is encoded by the NOV gene. The protein encoded by this gene is a small secreted cysteine-rich protein and a member of the CCN family of regulatory proteins. This gene is mapped to 8q24.12. NOV is a potentially useful marker for the diagnosis of adrenal gland diseases, malignant adrenocortical tumors, multiple sclerosis and so on. Moreover, reduced expression of NOV in ACTs may play an important role in the process of childhood ACT tumorigenesis. Though studying, it identified Nov as a regulator of human hematopoietic stem or progenitor cells.

 $Synonyms: Protein \ NOV \ homolog, NovH, CCN \ family \ member \ 3, Nephroblastom a-over expressed$ 

gene protein homolog,Nov,Ccn3,

Full Gene Name: Protein NOV homolog

Cellular Localisation: Secreted . Cytoplasm . Cell junction, gap junction . Localizes at the Gap

junction in presence of GJA1/CX43..

UniProt: Q64299

Pathways: Smooth Muscle Cell Migration, Growth Factor Binding

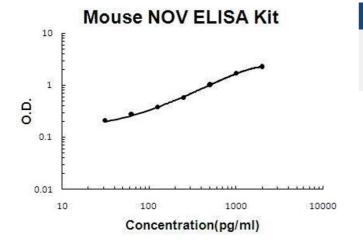
### **Application Details**

Plate:	Pre-coated
Restrictions:	For Research Use only

## Handling

Storage:	4 °C,-20 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles(Shipped with wet ice.)
Expiry Date:	12 months

#### **Images**



#### **ELISA**

Image 1. Mouse NOV/CCN3 PicoKine ELISA Kit standard curve