# SANTA CRUZ BIOTECHNOLOGY, INC.

# nov (H-71): sc-50304



#### BACKGROUND

The CCN (CTGF/Cyr61/nov) family of genes presently consists of six distinct members, which encode proteins that participate in fundamental biological processes such as cell proliferation, adhesion, migration, differentiation, wound healing, angiogenesis and several pathologies including fibrosis and tumorigenesis. Whereas Cyr61 and CTGF act as positive regulators of cell growth, nov (nephroblastoma overexpressed, CCN3 or novH) provides the first example of a CCN protein with negative regulatory properties and the first example of aberrant expression being associated with tumor development. In animals and humans, increased expression of nov is detected in tissues where calcium is a key regulator, such as the adrenal gland, central nervous system, bone and cartilage, heart muscle and kidney. The nov protein associates with the Notch1 extracellular domain and inhibits myoblast differentiation via the Notch signaling pathway. The gene that expresses nov is located on human chromosome 8q24.1 and was originally cloned following discovery of its avian homolog as a consequence of overexpression in virally induced nephroblastoma.

# CHROMOSOMAL LOCATION

Genetic locus: NOV (human) mapping to 8q24.12; Nov (mouse) mapping to 15 D1.

### SOURCE

nov (H-71) is a rabbit polyclonal antibody raised against amino acids 48-118 mapping near the N-terminus of nov of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

# **APPLICATIONS**

nov (H-71) is recommended for detection of nov of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

nov (H-71) is also recommended for detection of nov in additional species, including equine and bovine.

Suitable for use as control antibody for nov siRNA (h): sc-39333, nov siRNA (m): sc-39334, nov shRNA Plasmid (h): sc-39333-SH, nov shRNA Plasmid (m): sc-39334-SH, nov shRNA (h) Lentiviral Particles: sc-39333-V and nov shRNA (m) Lentiviral Particles: sc-39334-V.

Molecular Weight of glycosylated nov: 44-48 kDa.

Positive Controls: nov (m): 293T Lysate: sc-122098 or HeLa whole cell lysate: sc-2200.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz<sup>™</sup>: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

# DATA





nov (H-71): sc-50304. Western blot analysis of nov expression in non-transfected: sc-117752  $(\mathbf{A})$  and mouse nov transfected: sc-122098  $(\mathbf{B})$  293T whole cell lysates.

nov (H-71): sc-50304. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lower stomach tissue showing cytoplasmic and membrane staining of glandular cells.

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

# MONOS Satisfation Guaranteed

Try **nov (D-9): sc-136967** or **nov (F-8): sc-136966**, our highly recommended monoclonal aternatives to nov (H-71).