

# NELL2 (K-16): sc-54636

## BACKGROUND

NELL2 (neural epidermal growth factor-like 2), also known as NEL-related protein 2 (NRP2), is a secreted glycoprotein with one N-terminal TSP-like domain, five WWFC (von Willebrand factor C) domains and six EGF-like repeats that participate in calcium binding. NELL2 exists as a homotrimer associated with the endoplasmic reticulum (ER) and is specifically expressed in neurons playing a role in calcium-dependent intracellular events. NELL2 may act as a trophic factor in addition to its role as a signaling molecule implicated in the regulation of cell growth and differentiation. Due to alternative splicing, an additional NELL2 isoform exists that is identical to full length NELL2 except that it lacks the signal peptide that directs secretion. The additional isoform is therefore retained in the cytosol and functions as a non-secreted cytoplasmic protein that interacts with PKC  $\beta$ l.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: NELL2 (human) mapping to 12q12; Nell2 (mouse) mapping to 15 E3.

## SOURCE

NELL2 (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NELL2 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.

Blocking peptide available for competition studies, sc-54636 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

NELL2 (K-16) is recommended for detection of NELL2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

NELL2 (K-16) is also recommended for detection of NELL2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NELL2 siRNA (h): sc-62673, NELL2 siRNA (m): sc-62674, NELL2 shRNA Plasmid (h): sc-62673-SH, NELL2 shRNA Plasmid (m): sc-62674-SH, NELL2 shRNA (h) Lentiviral Particles: sc-62673-V and NELL2 shRNA (m) Lentiviral Particles: sc-62674-V.

Molecular Weight of EXOSC9 secreted monomer: 130 kDa.

Molecular Weight of EXOSC9 cytoplasmic monomer: 90 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## STORAGE

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

## RESEARCH USE

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



Try **NELL2 (E-9): sc-390173**, our highly recommended monoclonal alternative to NELL2 (K-16).