

# NPRL2 (N-18): sc-54487

## BACKGROUND

NPRL2, also known as TUSC4 (tumor suppressor candidate 4), is a 380 amino acid protein that contains a bipartite nuclear localization signal and a granulin protein-binding domain. It is highly expressed in >skeletal muscle, followed by brain, liver and pancreas, with lower expression in lung, kidney, placenta and heart. NPRL2 is also expressed in most lung cancer cell lines and may be involved in tumor suppression. NPRL2 may play a role in mismatch repair, cell cycle checkpoint signaling and activation of apoptotic pathways. It may also enhance the therapeutic efficacy of chemotherapy drugs such as *cis*-platin by resensitizing patients resistant to cisplatin treatment. The gene encoding NPRL2 is conserved between species and is expressed as two isoforms due to alternative splicing events.

## CHROMOSOMAL LOCATION

Genetic locus: NPRL2 (human) mapping to 3p21.31; Nprl2 (mouse) mapping to 9 F1.

## SOURCE

NPRL2 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of NPRL2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-54487 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

NPRL2 (N-18) is recommended for detection of NPRL2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

NPRL2 (N-18) is also recommended for detection of NPRL2 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for NPRL2 siRNA (h): sc-62699, NPRL2 siRNA (m): sc-62700, NPRL2 shRNA Plasmid (h): sc-62699-SH, NPRL2 shRNA Plasmid (m): sc-62700-SH, NPRL2 shRNA (h) Lentiviral Particles: sc-62699-V and NPRL2 shRNA (m) Lentiviral Particles: sc-62700-V.

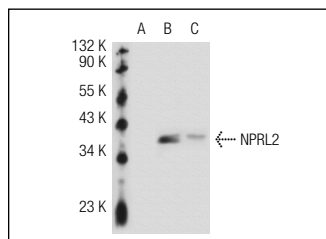
Molecular Weight of NPRL2: 44 kDa.

Positive Controls: NPRL2 (h): 293T Lysate: sc-116608, MIA PaCa-2 cell lysate: sc-2285 or rat lung extract: sc-2396.

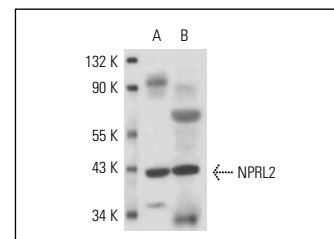
## RECOMMENDED SECONDARY REAGENTS

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™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ 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 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™ Mounting Medium: sc-24941.

## DATA



NPRL2 (N-18): sc-54487. Western blot analysis of NPRL2 expression in non-transfected 293T: sc-117752 (A), human NPRL2 transfected 293T: sc-116608 (B) and MIA PaCa-2 (C) whole cell lysates.



NPRL2 (N-18): sc-54487. Western blot analysis of NPRL2 expression in MIA PaCa-2 whole cell lysate (A) and rat lung tissue extract (B).

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **NPRL2 (F-3): sc-376986** or **NPRL2 (H-8): sc-166969**, our highly recommended monoclonal alternatives to NPRL2 (N-18).