

# Neudesin (T-16): sc-163130

## BACKGROUND

Neudesin, also known as CIR2 (cell immortalization-related protein 2), SPUF (secreted protein of unknown function), NENF (neuron-derived neurotrophic factor) or SCIRP10, is a 172 amino acid secreted protein that belongs to the cytochrome b5 family and MAPR subfamily. Neudesin possesses neurotrophic activity, which is enhanced by binding to heme, and may contribute to neuronal differentiation and neural cell proliferation. In primary cultured neurons, Neudesin has been observed to activate Akt1 and ERK 1 phosphorylation. Upregulated in immortal cells, Neudesin contains one cytochrome  $\beta 5$  heme-binding domain and is encoded by a gene that maps to human chromosome 1q32.3. Human chromosome 1 spans 260 million base pairs and comprises nearly 8% of the human genome. A large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome, map to chromosome 1.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: NENF (human) mapping to 1q32.3; Nenf (mouse) mapping to 1 H6.

## SOURCE

Neudesin (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Neudesin 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-163130 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Neudesin (T-16) is recommended for detection of Neudesin 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).

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

Suitable for use as control antibody for Neudesin siRNA (h): sc-88293, Neudesin siRNA (m): sc-149922, Neudesin shRNA Plasmid (h): sc-88293-SH, Neudesin shRNA Plasmid (m): sc-149922-SH, Neudesin shRNA (h) Lentiviral Particles: sc-88293-V and Neudesin shRNA (m) Lentiviral Particles: sc-149922-V.

Molecular Weight of Neudesin: 19 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.

## PROTOCOLS

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