

# NPDC-1 (16E4): sc-65387

## BACKGROUND

NPDC-1 (Neural Proliferation Differentiation and Control-1) is expressed in neurons once they have stopped dividing and begun to differentiate. NPDC-1 is transported from the Golgi apparatus via vesicles before becoming internalized by endosomes at the cell membrane. NPDC-1 interacts with Cdk2, D-type cyclins, and the transcription factor E2F1. This interaction can lead to an increased replication time, and might have implications in final neural differentiation and apoptosis. NPDC-1 has been shown to colocalize with synaptic vesicle proteins: synaptophysin, synaptobrevin 2 and Rab3 GEP (Rab3 GTP/GDP exchange protein). One function of NPDC-1 is to regulate retinoic acid-mediated events by directly interacting with retinoid receptors. The amino acid sequence of NPDC-1 is highly conserved between mouse, rat and human.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: NPDC-1 (human) mapping to 9q34.3.

## RESEARCH USE

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

## SOURCE

NPDC-1 (16E4) is a mouse monoclonal antibody raised against a peptide corresponding to amino acids 158-171 (SLGSPVSSDPVHMS) of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and < 1% glycerol.

## APPLICATIONS

NPDC-1 (16E4) is recommended for detection of NPDC-1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for NPDC-1 siRNA (h): sc-75951, NPDC-1 shRNA Plasmid (h): sc-75951-SH and NPDC-1 shRNA (h) Lentiviral Particles: sc-75951-V.

Molecular Weight of NPDC-1: 34 kDa.

## STORAGE

Store at 4° C, **\*\*DO 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](http://www.scbt.com) for detailed protocols and support products.