

# N6AMT2 (C-20): sc-84219

## BACKGROUND

N6AMT2 (N-6 adenine-specific DNA methyltransferase 2), also known as ESP13, is a 214 amino acid protein that is encoded by a gene located on human chromosome 13q12.11. Comprising nearly 4% of the human genome, chromosome 13 contains around 114 million base pairs and encodes over 400 genes. Chromosome 13 houses key tumor suppressor genes, including BRCA2 and RB1, which are associated with breast cancer susceptibility and retinoblastoma, respectively. Trisomy 13, also known as Patau syndrome, is deadly and the few who survive past one year suffer from permanent neurologic defects, difficulty eating and vulnerability to serious respiratory infections.

## REFERENCES

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- Hall, H.E., et al. 2007. The origin of trisomy 13. *Am. J. Med. Genet. A* 143A: 2242-2248.
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- Hassler, M., et al. 2007. Crystal structure of the retinoblastoma protein N domain provides insight into tumor suppression, ligand interaction, and holoprotein architecture. *Mol. Cell* 28: 371-385.
- Thorslund, T. and West, S.C. 2007. BRCA2: a universal recombinase regulator. *Oncogene* 26: 7720-7730.

## CHROMOSOMAL LOCATION

Genetic locus: N6AMT2 (human) mapping to 13q12.11; N6amt2 (mouse) mapping to 14 C3.

## SOURCE

N6AMT2 (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of N6AMT2 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84219 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

N6AMT2 (C-20) is recommended for detection of N6AMT2 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).

N6AMT2 (C-20) is also recommended for detection of N6AMT2 in additional species, including canine, bovine and avian.

Suitable for use as control antibody for N6AMT2 siRNA (h): sc-106278, N6AMT2 siRNA (m): sc-149781, N6AMT2 shRNA Plasmid (h): sc-106278-SH, N6AMT2 shRNA Plasmid (m): sc-149781-SH, N6AMT2 shRNA (h) Lentiviral Particles: sc-106278-V and N6AMT2 shRNA (m) Lentiviral Particles: sc-149781-V.

Molecular Weight (predicted) of N6AMT2: 25 kDa.

Molecular Weight (observed) of N6AMT2: 33 kDa.

## 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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) 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™ Mounting Medium: sc-24941.

## 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.