

# NTT4 (F-17): sc-243633

## BACKGROUND

NTT4, also known as SLC6A17, is a 727 amino acid multi-pass membrane protein that belongs to the sodium:neurotransmitter symporter (SNF) family and the SLC6A17 subfamily. While it functions as a sodium-dependent vesicular transporter selective for proline, glycine, leucine and alanine, NTT4 does not, in contrast to its family members, appear to be chloride-dependent. The gene that encodes NTT4 consists of approximately 51,717 bases and maps to human chromosome 1p13.3. Comprising nearly 8% of the human genome, chromosome 1 spans 260 million base pairs, contains over 3,000 genes and houses 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.

## REFERENCES

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7. Holliday, E.G., et al. 2009. Strong evidence for a novel schizophrenia risk locus on chromosome 1p31.1 in homogeneous pedigrees from Tamil Nadu, India. *Am. J. Psychiatry* 166: 206-215.
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## CHROMOSOMAL LOCATION

Genetic locus: SLC6A17 (human) mapping to 1p13.3; Slc6a17 (mouse) mapping to 3 F2.3.

## SOURCE

NTT4 (F-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of NTT4 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-243633 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

NTT4 (F-17) is recommended for detection of NTT4 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); non cross-reactive with NTT5.

NTT4 (F-17) is also recommended for detection of NTT4 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for NTT4 siRNA (h): sc-78642, NTT4 siRNA (m): sc-150088, NTT4 shRNA Plasmid (h): sc-78642-SH, NTT4 shRNA Plasmid (m): sc-150088-SH, NTT4 shRNA (h) Lentiviral Particles: sc-78642-V and NTT4 shRNA (m) Lentiviral Particles: sc-150088-V.

Molecular Weight of NTT4: 81 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™ 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) 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.

## 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.