

TMED6 (N-20): sc-241015

BACKGROUND

TMED6 (transmembrane emp24 domain-containing protein 6) is a 240 amino acid single-pass type I membrane protein that belongs to the EMP24/GP25L family and contains one GOLD domain. The gene that encodes TMED6 contains around 8,564 bases and maps to human chromosome 16q22.1. Encoding over 900 genes and consisting of approximately 90 million base pairs, chromosome 16 makes up nearly 3% of the human genome and is associated with a variety of genetic disorders. The GAN gene is located on chromosome 16 and, when mutated, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. Alterations in the CREB gene and NOD2 gene, both of which are located on chromosome 16, result in Rubinstein-Taybi syndrome and Crohn's disease, respectively. An association with systemic lupus erythematosus and a number of other autoimmune disorders with the pericentromeric region of chromosome 16 has led to the identification of SLC5A11 as a potential autoimmune modifier.

REFERENCES

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2. Breuning, M.H., et al. 1993. Rubinstein-Taybi syndrome caused by submicroscopic deletions within 16p13.3. *Am. J. Hum. Genet.* 52: 249-254.
3. Ohmen, J.D., et al. 1996. Susceptibility locus for inflammatory bowel disease on chromosome 16 has a role in Crohn's disease, but not in ulcerative colitis. *Hum. Mol. Genet.* 5: 1679-1683.
4. Bomont, P., et al. 2000. The gene encoding gigaxonin, a new member of the cytoskeletal BTB/kelch repeat family, is mutated in giant axonal neuropathy. *Nat. Genet.* 26: 370-374.
5. Kuhlénbäumer, G., et al. 2002. Giant axonal neuropathy (GAN): case report and two novel mutations in the gigaxonin gene. *Neurology* 58: 1273-1276.
6. Cho, J.H. 2004. Advances in the genetics of inflammatory bowel disease. *Curr. Gastroenterol. Rep.* 6: 467-473.
7. Mathew, C.G., et al. 2004. Genetics of inflammatory bowel disease: progress and prospects. *Hum. Mol. Genet.* 13: R161-R168.

CHROMOSOMAL LOCATION

Genetic locus: TMED6 (human) mapping to 16q22.1.

SOURCE

TMED6 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TMED6 of human origin.

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 or our catalog for detailed protocols and support products.

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-241015 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TMED6 (N-20) is recommended for detection of TMED6 of 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); non cross-reactive with other TMED family members.

TMED6 (N-20) is also recommended for detection of TMED6 in additional species, including equine and canine.

Suitable for use as control antibody for TMED6 siRNA (h): sc-93199, TMED6 shRNA Plasmid (h): sc-93199-SH and TMED6 shRNA (h) Lentiviral Particles: sc-93199-V.

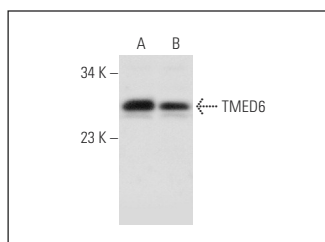
Molecular Weight of TMED6: 28 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

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



TMED6 (N-20): sc-241015. Western blot analysis of TMED6 expression in Jurkat (A) and K-562 (B) whole cell lysates.

RESEARCH USE

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