

GTL3 (Y-19): sc-82622

BACKGROUND

GTL3 (gene trap locus 3), also known as EVORF, fSAP23, C16orf80 or transcription factor IIB, is a 193 amino acid protein belonging to the UPF0468 family and may be involved in transcriptional regulation. The gene encoding GTL3 maps to human chromosome 16, which is associated with a variety of genetic disorders, encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

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2. Demir, E., et al. 2005. Giant axonal neuropathy: clinical and genetic study in six cases. *J. Neurol. Neurosurg. Psychiatr.* 76: 825-832.
3. Deng, W. and Roberts, S.G. 2006. Core promoter elements recognized by transcription factor IIB. *Biochem. Soc. Trans.* 34: 1051-1053.
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5. Rakha, E.A., et al. 2006. Chromosome 16 tumor-suppressor genes in breast cancer. *Genes Chromosomes Cancer* 45: 527-535.
6. Hartman, W.R., et al. 2007. Presence of the anti-leukemic nucleotide analog, 2-chloro-2'-deoxyadenosine-5'-monophosphate, in a promoter sequence alters DNA binding of TATA-binding protein (TBP). *Arch. Biochem. Biophys.* 459: 223-232.
7. Martianov, I., et al. 2007. Repression of the human dihydrofolate reductase gene by a non-coding interfering transcript. *Nature* 445: 666-670.
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CHROMOSOMAL LOCATION

Genetic locus: C16orf80 (human) mapping to 16q21; Gtl3 (mouse) mapping to 8 D1.

SOURCE

GTL3 (Y-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GTL3 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-82622 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

GTL3 (Y-19) is recommended for detection of GTL3 of mouse 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).

GTL3 (Y-19) is also recommended for detection of GTL3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for GTL3 siRNA (h): sc-75211, GTL3 siRNA (m): sc-75212, GTL3 shRNA Plasmid (h): sc-75211-SH, GTL3 shRNA Plasmid (m): sc-75212-SH, GTL3 shRNA (h) Lentiviral Particles: sc-75211-V and GTL3 shRNA (m) Lentiviral Particles: sc-75212-V.

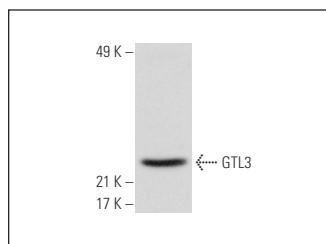
Molecular Weight of GTL3: 23 kDa.

Positive Controls: mouse pituitary gland extract: sc-364246.

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.

DATA



GTL3 (Y-19): sc-82622. Western blot analysis of GTL3 expression in mouse pituitary gland tissue extract.

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.