

MLKL (N-21): sc-130172

BACKGROUND

MLKL (mixed lineage kinase domain-like) is a 471 amino acid protein that contains one protein kinase domain which is thought to be catalytically inactive. The gene encoding MLKL maps to chromosome 16 and is expressed as two isoforms which are produced by alternative splicing events. 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

1. Gilbert, F. 1999. Disease genes and chromosomes: disease maps of the human genome. *Chromosome 16. Genet. Test.* 3: 243-254.
2. Manning, G., et al. 2002. The protein kinase complement of the human genome. *Science* 298: 1912-1934.
3. Coupry, I., et al. 2004. Analysis of CBP (CREBBP) gene deletions in Rubinstein-Taybi syndrome patients using real-time quantitative PCR. *Hum. Mutat.* 23: 278-284.
4. Martin, J., et al. 2004. The sequence and analysis of duplication-rich human chromosome 16. *Nature* 432: 988-994.
5. Demir, E., et al. 2005. Giant axonal neuropathy: clinical and genetic study in six cases. *J. Neurol. Neurosurg. Psychiatr.* 76: 825-832.
6. Rakha, E.A., et al. 2006. Chromosome 16 tumor-suppressor genes in breast cancer. *Genes Chromosomes Cancer* 45: 527-535.
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CHROMOSOMAL LOCATION

Genetic locus: MLKL (human) mapping to 16q22.3; Mlkl (mouse) mapping to 8 E1.

SOURCE

MLKL (N-21) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of MLKL of human origin.

PRODUCT

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

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

MLKL (N-21) is recommended for detection of MLKL of mouse and 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MLKL siRNA (h): sc-93430, MLKL siRNA (m): sc-149468, MLKL shRNA Plasmid (h): sc-93430-SH, MLKL shRNA Plasmid (m): sc-149468-SH, MLKL shRNA (h) Lentiviral Particles: sc-93430-V and MLKL shRNA (m) Lentiviral Particles: sc-149468-V.

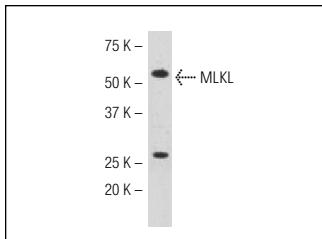
Molecular Weight of MLKL: 54 kDa.

Positive Controls: mouse kidney extract: sc-2255 or Caki-1 cell lysate: sc-2224.

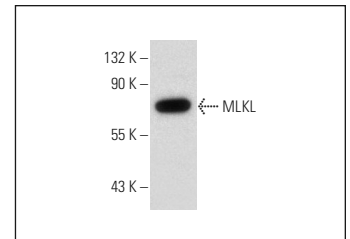
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



MLKL (N-21): sc-130172. Western blot analysis of MLKL expression in mouse kidney tissue extract.



MLKL (N-21): sc-130172. Western blot analysis of MLKL expression in Caki-1 whole cell lysate.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.