

LMTK3 (D-14): sc-168439

BACKGROUND

The phosphorylation of proteins by protein kinases and protein phosphatases is a key event in most nuclear and cytoplasmic processes. The ability to activate and deactivate proteins via phosphorylation or dephosphorylation is important for cell division, cell differentiation, DNA repair and transcription. LMTK3 (lemur tyrosine kinase 3), also known as LMR3 or TYKLM3, is a 1,460 amino acid protein that contains one protein kinase domain. One of several members of the protein kinase superfamily, LMTK3 is expressed at low levels in brain and testes where it catalyzes the ATP-dependent phosphorylation of target proteins, thereby modifying their function.

REFERENCES

1. Bairoch, A. and Claverie, J.M. 1988. Sequence patterns in protein kinases. *Nature* 331: 22.
2. Hanks, S.K., et al. 1988. The protein kinase family: conserved features and deduced phylogeny of the catalytic domains. *Science* 241: 42-52.

CHROMOSOMAL LOCATION

Genetic locus: LMTK3 (human) mapping to 19q13.33; Lmtk3 (mouse) mapping to 7 B4.

SOURCE

LMTK3 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of LMTK3 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-168439 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LMTK3 (D-14) is recommended for detection of LMTK3 of mouse, rat 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)], 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).

LMTK3 (D-14) is also recommended for detection of LMTK3 in additional species, including bovine and porcine.

Suitable for use as control antibody for LMTK3 siRNA (h): sc-97567, LMTK3 siRNA (m): sc-146769, LMTK3 shRNA Plasmid (h): sc-97567-SH, LMTK3 shRNA Plasmid (m): sc-146769-SH, LMTK3 shRNA (h) Lentiviral Particles: sc-97567-V and LMTK3 shRNA (m) Lentiviral Particles: sc-146769-V.

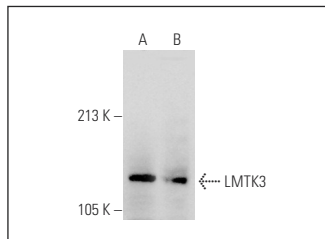
Molecular Weight of LMTK3: 154 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or HEK293 whole cell lysate: sc-45136.

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



LMTK3 (D-14): sc-168439. Western blot analysis of LMTK3 expression in Hep G2 (A) and HEK293 (B) whole cell lysates.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **LMTK3 (I-17): sc-100418**, our highly recommended monoclonal alternative to LMTK3 (D-14).