

MOBKL2A (E-14): sc-138994

BACKGROUND

MOBKL2A (Mps one binder kinase activator-like 2A), also known as MOB-LAK or MOB3A, is a 217 amino acid protein that regulates kinase activity. A member of the MOB1/phoecin family, MOBKL2A is encoded by a gene that maps to human chromosome 19. Consisting of around 63 million bases with over 1,400 genes, chromosome 19 makes up over 2% of human genomic DNA. Chromosome 19 includes a diversity of interesting genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family, and Fc α receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and insulin-dependent diabetes have been linked to chromosome 19.

REFERENCES

- Olsen, A., Teglund, S., Nelson, D., Gordon, L., Copeland, A., Georgescu, A., Carrano, A. and Hammarström, S. 1994. Gene organization of the pregnancy-specific glycoprotein region on human chromosome 19: assembly and analysis of a 700-kb cosmid contig spanning the region. *Genomics* 23: 659-668.
- Teglund, S., Olsen, A., Khan, W.N., Frängsmyr, L. and Hammarström, S. 1994. The pregnancy-specific glycoprotein (PSG) gene cluster on human chromosome 19: fine structure of the 11 PSG genes and identification of 6 new genes forming a third subgroup within the carcinoembryonic antigen (CEA) family. *Genomics* 23: 669-684.
- Wang, L., Lin, S.H., Wu, W.G., Kemp, B.L., Walsh, G.L., Hong, W.K. and Mao, L. 2000. C-CAM1, a candidate tumor suppressor gene, is abnormally expressed in primary lung cancers. *Clin. Cancer Res.* 6: 2988-2993.
- Trowsdale, J., Barten, R., Haude, A., Stewart, C.A., Beck, S. and Wilson, M.J. 2001. The genomic context of natural killer receptor extended gene families. *Immunol. Rev.* 181: 20-38.
- Le Meur, N., Martin, C., Saugier-Verber, P., Joly, G., Lemoine, F., Moirot, H., Rossi, A., Bachy, B., Cabot, A., Joly, P. and Frebourg, T. 2004. Complete germline deletion of the STK11 gene in a family with Peutz-Jeghers syndrome. *Eur. J. Hum. Genet.* 12: 415-418.
- Leeb, T. and Müller, M. 2004. Comparative human-mouse-rat sequence analysis of the ICAM gene cluster on HSA 19p13.2 and a 185-kb porcine region from SSC 2q. *Gene* 343: 239-244.
- Barrow, A.D. and Trowsdale, J. 2008. The extended human leukocyte receptor complex: diverse ways of modulating immune responses. *Immunol. Rev.* 224: 98-123.

CHROMOSOMAL LOCATION

Genetic locus: MOBKL2A (human) mapping to 19p13.3; Mobkl2a (mouse) mapping to 10 C1.

STORAGE

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

SOURCE

MOBKL2A (E-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of MOBKL2A of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-138994 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MOBKL2A (E-14) is recommended for detection of MOBKL2A of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with MOBKL2B or MOBKL2C.

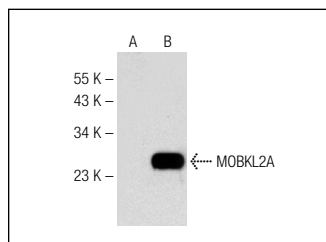
MOBKL2A (E-14) is also recommended for detection of MOBKL2A in additional species, including equine.

Suitable for use as control antibody for MOBKL2A siRNA (h): sc-97496, MOBKL2A siRNA (m): sc-149491, MOBKL2A shRNA Plasmid (h): sc-97496-SH, MOBKL2A shRNA Plasmid (m): sc-149491-SH, MOBKL2A shRNA (h) Lentiviral Particles: sc-97496-V and MOBKL2A shRNA (m) Lentiviral Particles: sc-149491-V.

Molecular Weight of MOBKL2A: 25 kDa.

Positive Controls: MOBKL2A (h2): 293T Lysate: sc-112219.

DATA



MOBKL2A (E-14): sc-138994. Western blot analysis of MOBKL2A expression in non-transfected: sc-117752 (A) and human MOBKL2A transfected: sc-112219 (B) 293T whole cell lysates.

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.