# MIER2 (h): 293T Lysate: sc-114691



The Power to Question

### **BACKGROUND**

MIER2 (mesoderm induction early response 1, family member 2) is a 545 amino acid protein encoded by a gene that maps to human chromosome 19p13.3. Consisting of around 63 million bases with over 1,400 genes, chrmosome 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 lg-like receptors, a number of ICAMs, the CEACAM and PSG family, and Fc $\alpha$  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 Insulindependent diabetes have been linked to chromosome 19. Translocations with chromosome 19 and chromosome 14 can be seen in some lymphoproliferative disorders and typically involve the proto-oncogene BCL3.

### **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-Veber, P., Joly, G., Lemoine, F., Moirot, H., Rossi, A., Bachy, B., Cabot, A., Joly, P. and Frébourg, 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: MIER2 (human) mapping to 19p13.3.

#### **RESEARCH USE**

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

## **PRODUCT**

MIER2 (h): 293T Lysate represents a lysate of human MIER2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

### **APPLICATIONS**

MIER2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive MIER2 antibodies. Recommended use: 10-20 µl per lane.

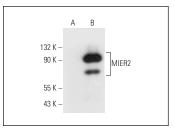
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

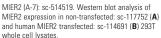
MIER2 (A-7): sc-514519 is recommended as a positive control antibody for Western Blot analysis of enhanced human MIER2 expression in MIER2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

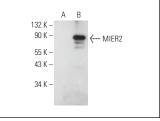
### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

#### DATA







MIER2 (E-2): sc-515332. Western blot analysis of MIER2 expression in non-transfected: sc-117752 (A) and human MIER2 transfected: sc-114691 (B) 293T whole rell lysates

#### **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

### **PROTOCOLS**

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