



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 



## KAI 1 (h): 293T Lysate: sc-171405

### BACKGROUND

The transmembrane 4 superfamily (TM4SF) is a family of leukocyte surface glycoproteins that presumably cross the cell membrane four times. These proteins may be involved in transmembrane signal transduction regulation of cell proliferation, differentiation and motility. Members of this family, which include CD9, CD37, CD53, CD63, CD82 and TAPA-1, share significant sequence homology and an extracellular N-glycosylated domain, implicating these proteins as metastasis suppressors. Only three members of this family have been correlated with metastasis: CD9, CD63 and CD82, also known as KAI 1. KAI 1 is evolutionarily conserved and expressed in a broad range of human tissues, but exhibits reduced expression in human cell lines derived from metastatic prostate tumors. It has been suggested that decreased KAI 1 expression may be involved in the malignant progression of prostate and perhaps other cancers.

### REFERENCES

1. Horejsi, V. and Vlcek, C. 1991. Novel structurally distinct family of leukocyte surface glycoproteins including CD9, CD37, CD53 and CD63. *FEBS Lett.* 288: 1-4.
2. Carmo, A.M. and Wright, M.D. 1995. Association of the transmembrane 4 superfamily molecule D53 with a Tyrosine phosphatase activity. *Eur. J. Immunol.* 25: 2090-2095.
3. Tomlinson, M.G., Hanke, T., Hughes, D.A., Barclay, A.N., Scholl, E., Hunig, T., and Wright, M.D. 1995. Characterization of mouse CD53: epitope mapping, cellular distribution and induction by T cell receptor engagement during repertoire selection. *Eur. J. Immunol.* 25: 2201-2205.
4. Dong, J.T., Lamb, P.W., Rinker-Schaeffer, C.W., Vukanovic, J., Ichikawa, T., Isaacs, J.T., and Barrett, J.C. 1995. KAI 1, a metastasis suppressor gene for prostate cancer on human chromosome 11p11.2. *Science* 268: 884-886.
5. Shaw, A.R., Domanska, A., Mak, A., Gilchrist, A., Dobler, K., Visser, L., Poppema, S., Fliegel, L., Letarte, M., and Willett, B.J. 1995. Ectopic expression of human and feline CD9 in a human B cell line confers  $\beta$ 1 integrin-dependent motility on Fibronectin and Laminin substrates and enhanced Tyrosine phosphorylation. *J. Biol. Chem.* 270: 24092-24099.
6. Radford, K.J., Mallesch, J., and Hersey, P. 1995. Suppression of human melanoma cell growth and metastasis by the melanoma-associated antigen CD63 (ME491). *Int. J. Cancer* 62: 631-635.

### CHROMOSOMAL LOCATION

Genetic locus: CD82 (human) mapping to 11p11.2.

### PRODUCT

KAI 1 (h): 293T Lysate represents a lysate of human KAI 1 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

### 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.

### APPLICATIONS

KAI 1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive KAI 1 antibodies. Recommended use: 10-20  $\mu$ l per lane.

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

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.