SANTA CRUZ BIOTECHNO

EMMPRIN (MEM-M6/1): sc-51591

BACKGROUND

Extracellular matrix metalloproteinase inducer (EMMPRIN), also designated basigin or CD147, is involved in the regulation of matrix remodeling at the epidermal-dermal interface. EMMPRIN stimulates the production of interstitial collagenase, gelatinase A, stromelysin-1 and various metalloproteinases (MMPs) by fibroblasts. These enzymes, which are typically increased during tissue degradation and wound healing, are important factors in cancer invasion and metastasis.

REFERENCES

1. Paterson, D.J., et al. 1987. Antigens of activated rat T lymphocytes including a molecule of 50,000 Mr detected only on CD4 positive T blasts. Mol. Immunol. 24: 1281-1290.
2. Miyauchi, T., et al. 1990. Basigin, a new, broadly distributed member of the immunoglobulin superfamily, has strong homology with both the immunoglobulin V domain and the β-chain of major histocompatibility complex class II antigen. J. Biochem. 107: 316-323.
3. Biswas, C., et al. 1995. The human tumor cell-derived collagenase stimulatory factor (renamed EMMPRIN) is a member of the immunoglobulin superfamily. Cancer Res. 55: 434-439.
4. DeCastro, R., et al. 1996. Human keratinocytes express EMMPRIN, an extracellular matrix metalloproteinase inducer. J. Invest. Dermatol. 106: 1260-1265.
5. Guo, H., et al. 1997. Stimulation of matrix metalloproteinase production by recombinant extracellular matrix metalloproteinase inducer from transfected Chinese hamster ovary cells. J. Biol. Chem. 272: 24-27.
6. Guo, H., et al. 1998. Characterization of the gene for human EMMPRIN, a tumor cell surface inducer of matrix metalloproteinases. Gene 220: 99-108.
7. Lim, M., et al. 1998. Tumor-derived EMMPRIN (extracellular matrix metalloproteinase inducer) stimulates collagenase transcription through MAPK p38. FEBS Lett. 441: 88-92.
8. Kahari, V.M. and Saarialho-Kere, U. 1999. Matrix metalloproteinases and their inhibitors in tumour growth and invasion. Ann. Med. 31: 34-45.

CHROMOSOMAL LOCATION

Genetic locus: BSG (human) mapping to 19p13.3.

SOURCE

EMMPRIN (MEM-M6/1) is a mouse monoclonal antibody raised against EMMPRIN of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

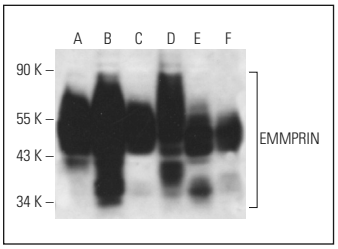
EMMPRIN (MEM-M6/1) is recommended for detection of an epitope in the N-terminal Ig domain (D_1) EMMPRIN of human origin by Western Blotting (non-reducing) (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and flow cytometry (1 µg per 1 x 10^6 cells).

Suitable for use as control antibody for EMMPRIN siRNA (h): sc-35298, EMMPRIN shRNA Plasmid (h): sc-35298-SH and EMMPRIN shRNA (h) Lentiviral Particles: sc-35298-V.

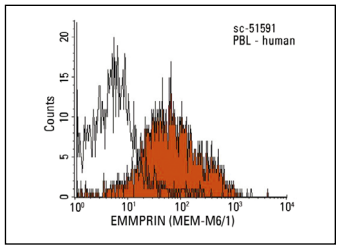
Molecular Weight of EMMPRIN: 55 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or SK-MEL-28 cell lysate: sc-2236.

DATA



EMMPRIN (MEM-M6/1): sc-51591. Western blot analysis of EMMPRIN expression in A-431 (**A**), HeLa (**B**), Jurkat (**C**), HuT 78 (**D**), SK-MEL-28 (**E**) and H4 (**F**) whole cell lysates.



EMMPRIN (MEM-M6/1): sc-51591. Indirect FCM analysis of human peripheral blood leukocytes stained with EMMPRIN (MEM-M6/1), followed by PE-conjugated goat anti-mouse IgG: sc-3738. Black line histogram represents the isotype control, normal mouse IgG_1: sc-3877.

SELECT PRODUCT CITATIONS

1. Melchior, A., et al. 2008. Cyclophilin B induces integrin-mediated cell adhesion by a mechanism involving CD98-dependent activation of protein kinase C-δ and p44/42 mitogen-activated protein kinases. Exp. Cell Res. 314: 616-628.
2. Jin, A., et al. 2014. Elevated expression of CD147 in patients with endometriosis and its role in regulating apoptosis and migration of human endometrial cells. Fertil. Steril. 101: 1681-1687.
3. Wang, C., et al. 2018. CD147 induces epithelial-to-mesenchymal transition by disassembling cellular apoptosis susceptibility protein/E-cadherin/β-catenin complex in human endometriosis. Am. J. Pathol. 188: 1597-1607.

STORAGE

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