SANTA CRUZ BIOTECHNOLOGY, INC.

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

- 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.
- 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.
- 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.
- DeCastro, R., et al. 1996. Human keratinocytes express EMMPRIN, an extracellular matrix metalloproteinase inducer. J. Invest. Dermatol. 106: 1260-1265.
- 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.
- Guo, H., et al. 1998. Characterization of the gene for human EMMPRIN, a tumor cell surface inducer of matrix metalloproteinases. Gene 220: 99-108.
- Lim, M., et al. 1998. Tumor-derived EMMPRIN (extracellular matrix metalloproteinase inducer) stimulates collagenase transcription through MAPK p38. FEBS Lett. 441: 88-92.
- 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 $\mu g~lgG_1$ 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 (D₁) EMMPRIN of human origin by Western Blotting (non-reducing) (starting dilution 1:200, dilution range 1:100-1:1000), immuno-precipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and flow cytometry (1 μ g per 1 x 10⁶ 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 IgG₁: 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.
- 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.
- 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.



See **EMMPRIN (B-5): sc-46700** for EMMPRIN antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor[®] 488, 546, 594, 647, 680 and 790.