

# EMMPRIN (OX114): sc-53064

## 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  $\beta$  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; Bsg (mouse) mapping to 10 C1.

## SOURCE

EMMPRIN (OX114) is a rat monoclonal antibody raised against EMMPRIN of mouse origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

EMMPRIN (OX114) is available conjugated to either phycoerythrin (sc-53064 PE) or fluorescein (sc-53064 FITC), 200  $\mu$ g/ml, for IF, IHC(P) and FCM.

## APPLICATIONS

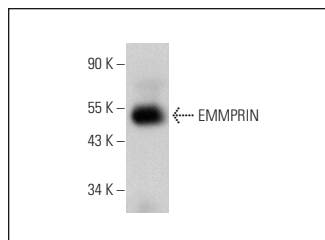
EMMPRIN (OX114) is recommended for detection of EMMPRIN of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1  $\mu$ g per  $1 \times 10^6$  cells).

Suitable for use as control antibody for EMMPRIN siRNA (h): sc-35298, EMMPRIN siRNA (m): sc-35299, EMMPRIN siRNA (r): sc-156103, EMMPRIN shRNA Plasmid (h): sc-35298-SH, EMMPRIN shRNA Plasmid (m): sc-35299-SH, EMMPRIN shRNA Plasmid (r): sc-156103-SH, EMMPRIN shRNA (h) Lentiviral Particles: sc-35298-V, EMMPRIN shRNA (m) Lentiviral Particles: sc-35299-V and EMMPRIN shRNA (r) Lentiviral Particles: sc-156103-V.

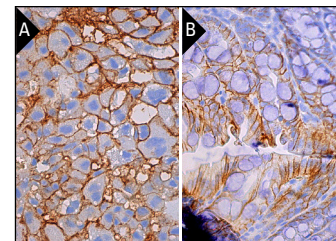
Molecular Weight of EMMPRIN: 55 kDa.

Positive Controls: 3611-RF whole cell lysate: sc-2215, HL-60 whole cell lysate: sc-2209 or RAW 264.7 whole cell lysate: sc-2211.

## DATA



EMMPRIN (OX114): sc-53064. Western blot analysis of EMMPRIN expression in HL-60 whole cell lysate.



EMMPRIN (OX114): sc-53064. Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse placenta tissue showing membrane staining of trophoblastic cells and decidual cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse colon tissue showing membrane staining of glandular cells (B).

## STORAGE

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

## 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.



See **EMMPRIN (B-5): sc-46700** for EMMPRIN antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647.