

EMMPRIN (F-5): sc-374101

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.

CHROMOSOMAL LOCATION

Genetic locus: BSG (human) mapping to 19p13.3; Bsg (mouse) mapping to 10 C1.

SOURCE

EMMPRIN (F-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 13-51 near the N-terminus of EMMPRIN of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-374101 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

EMMPRIN (F-5) 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 µg per 100-500 µg 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

EMMPRIN (F-5) is also recommended for detection of EMMPRIN in additional species, including bovine.

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: A-431 whole cell lysate: sc-2201, HeLa whole cell lysate: sc-2200 or WI-38 whole cell lysate: sc-364260.

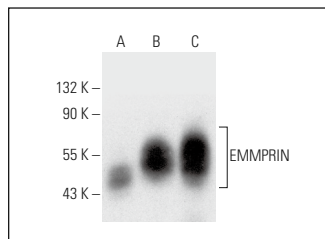
STORAGE

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

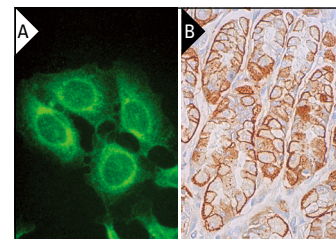
RESEARCH USE

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

DATA



EMMPRIN (F-5): sc-374101. Western blot analysis of EMMPRIN expression in WI-38 (A), A-431 (B) and HeLa (C) whole cell lysates.



EMMPRIN (F-5): sc-374101. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human stomach tissue showing membrane and cytoplasmic staining of glandular cells. Blocked with 0.25X UltraCruz® Blocking Reagent: sc-516214. Detected with m-IgGκ BP-B: sc-516142 and ImmunoCruz® ABC Kit: sc-516216 (B).

SELECT PRODUCT CITATIONS

- McNally, A.K. and Anderson, J.M. 2015. Phenotypic expression in human monocyte-derived interleukin-4-induced foreign body giant cells and macrophages *in vitro*: dependence on material surface properties. *J. Biomed. Mater. Res. A* 103: 1380-1390.
- Shang, J., et al. 2015. The role of mechano-growth factor E peptide in the regulation of osteosarcoma. *Oncol. Lett.* 10: 697-704.
- Bhat, N.M., et al. 2015. Identification of cell surface straight chain poly-N-acetyl-lactosamine bearing protein ligands for VH4-34-encoded natural IgM antibodies. *J. Immunol.* 195: 5178-5188.
- Wu, X., et al. 2015. Upregulation of extracellular matrix metalloproteinase inducer promotes hypoxia-induced epithelial-mesenchymal transition in esophageal cancer. *Mol. Med. Rep.* 12: 7419-7424.
- Gao, H., et al. 2016. Hispidulin induces mitochondrial apoptosis in acute myeloid leukemia cells by targeting extracellular matrix metalloproteinase inducer. *Am. J. Transl. Res.* 8: 1115-1132.
- Chen, Y., et al. 2017. Ovarian carcinoma glyco-antigen targeted by human IgM antibody. *PLoS ONE* 12: e0187222.
- Ames, S., et al. 2020. CAIX forms a transport metabolon with monocarboxylate transporters in human breast cancer cells. *Oncogene* 39: 1710-1723.
- Wu, Q., et al. 2021. Downregulation of caveolin-1 promotes murine breast cancer cell line progression by highly glycosylated CD147. *Anticancer Drugs* 32: 626-634.



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.