SANTA CRUZ BIOTECHNOLOGY, INC.

EMMPRIN (8D6): sc-21746

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

SOURCE

EMMPRIN (8D6) is a mouse monoclonal antibody raised against human T-cell leukemic cell line, Peer.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

EMMPRIN (8D6) is available conjugated to agarose (sc-21746 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-21746 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-21746 PE), fluorescein (sc-21746 FITC), Alexa Fluor® 488 (sc-21746 AF488), Alexa Fluor® 546 (sc-21746 AF546), Alexa Fluor® 594 (sc-21746 AF594) or Alexa Fluor® 647 (sc-21746 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-21746 AF680) or Alexa Fluor® 790 (sc-21746 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

EMMPRIN (8D6) is recommended for detection of EMMPRIN of 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 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: Hep G2 cell ysate: sc-2227, Jurkat whole cell lysate: sc-2204 or HuT 78 whole cell lysate: sc-2208.

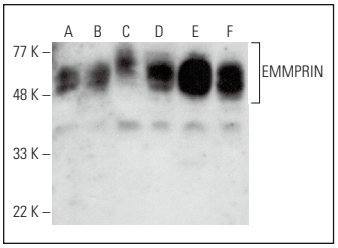
STORAGE

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

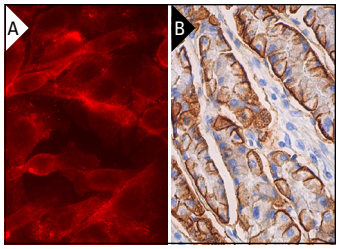
RESEARCH USE

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

DATA



EMMPRIN (8D6) HRP: sc-21746 HRP. Direct western blot analysis of EMMPRIN expression in Jurkat (**A**), A-431 (**B**), HL-60 (**C**), HuT 78 (**D**), Hep G2 (**E**) and HeLa (**F**) whole cell lysates.



EMMPRIN (8D6) PE: sc-21746 PE. Direct immunofluorescence staining of formalin-fixed SW480 cells showing membrane localization. Blocked with UltraCruz® Blocking Reagent: sc-516214 (**A**). EMMPRIN (8D6): sc-21746. Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing membrane staining of glandular cells (**B**).

SELECT PRODUCT CITATIONS

1. Ribeiro-Silva, A., et al. 2005. The differential regulation of human telomerase reverse transcriptase and vascular endothelial growth factor may contribute to the clinically more aggressive behavior of p63-positive breast carcinomas. Int. J. Biol. Markers 20: 227-234.
2. 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.
3. Eichner, R., et al. 2016. Immunomodulatory drugs disrupt the cereblon-CD147-MCT1 axis to exert antitumor activity and teratogenicity. Nat. Med. 22: 735-743.
4. Kendrick, A.A., et al. 2017. CD147: a small molecule transporter ancillary protein at the crossroad of multiple hallmarks of cancer and metabolic reprogramming. Oncotarget 8: 6742-6762.
5. Bersuker, K., et al. 2018. A proximity labeling strategy provides insights into the composition and dynamics of lipid droplet proteomes. Dev. Cell 44: 97-112.e7.
6. Zhu, Y.X., et al. 2019. Identification of lenalidomide resistance pathways in myeloma and targeted resensitization using cereblon replacement, inhibition of Stat3 or targeting of IRF4. Blood Cancer J. 9: 19.
7. Lucchetti, D., et al. 2020. CD147 promotes cell small extracellular vesicles release during colon cancer stem cells differentiation and triggers cellular changes in recipient cells. Cancers 12: 260.
8. Xuan, Y., et al. 2021. Inhibition of chaperone-mediated autophagy reduces tumor growth and metastasis and promotes drug sensitivity in colorectal cancer. Mol. Med. Rep. 23: 360.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.