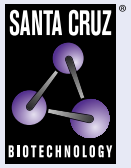
SANTA CRUZ BIOTECHNOLOGY, INC.

EMMPRIN (B-5): sc-46700



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 (mouse) mapping to 10 C1.

SOURCE

EMMPRIN (B-5) is a mouse monoclonal antibody raised against amino acids 1-190 of EMMPRIN of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

EMMPRIN (B-5) is available conjugated to agarose (sc-46700 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-46700 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-46700 PE), fluorescein (sc-46700 FITC), Alexa Fluor® 488 (sc-46700 AF488), Alexa Fluor® 546 (sc-46700 AF546), Alexa Fluor® 594 (sc-46700 AF594) or Alexa Fluor® 647 (sc-46700 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-46700 AF680) or Alexa Fluor® 790 (sc-46700 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

EMMPRIN (B-5) is recommended for detection of EMMPRIN of mouse and rat 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for EMMPRIN siRNA (m): sc-35299, EMMPRIN siRNA (r): sc-156103, EMMPRIN shRNA Plasmid (m): sc-35299-SH, EMMPRIN shRNA Plasmid (r): sc-156103-SH, 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: RAW 264.7 whole cell lysate: sc-2211, CTLL-2 cell lysate: sc-2242 or PC-12 cell lysate: sc-2250.

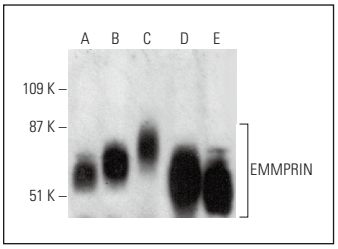
STORAGE

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

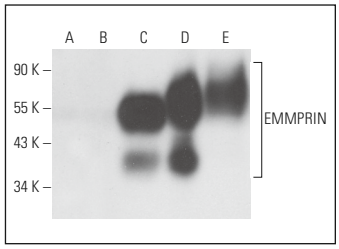
RESEARCH USE

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

DATA



EMMPRIN (B-5) HRP: sc-46700 HRP. Direct western blot analysis of EMMPRIN expression in Hs68 (**A**), RAW 264.7 (**B**), CTLL-2 (**C**), c4 (**D**) and BYDP (**E**) whole cell lysates.



EMMPRIN (B-5): sc-46700. Western blot analysis of EMMPRIN expression in Jurkat (**A**), Hs68 (**B**), RAW 264.7 (**C**), CTLL-2 (**D**) and PC-12 (**E**) whole cell lysates. Note lack of reactivity with human EMMPRIN in lanes **A** and **B**.

SELECT PRODUCT CITATIONS

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2. Dang, B., et al. 2015. Cyclophilin A/cluster of differentiation 147 interactions participate in early brain injury after subarachnoid hemorrhage in rats. Crit. Care Med. 43: e369-e381.
3. McGinley, C. and Bishop, D.J. 2016. Influence of training intensity on adaptations in acid/base transport proteins, muscle buffer capacity, and repeated-sprint ability in active men. J. Appl. Physiol. 121: 1290-1305.
4. Yang, S., et al. 2017. CD147 promotes the proliferation, invasiveness, migration and angiogenesis of human lung carcinoma cells. Oncol. Lett. 13: 898-904.
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6. Pahk, K., et al. 2019. SP-8356, a novel inhibitor of CD147-cyclophilin A interactions, reduces plaque progression and stabilizes vulnerable plaques in apoE-deficient mice. Int. J. Mol. Sci. 21: 95.
7. Miyata, H., et al. 2021. SPATA33 localizes calcineurin to the mitochondria and regulates sperm motility in mice. Proc. Natl. Acad. Sci. USA 118: e2106673118.
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9. Rupar, K., et al. 2023. Full activation of thermogenesis in brown adipocytes requires Basigin action. FEBS J. 290: 2673-2691.

PROTOCOLS

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