3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Anti-EMMPRIN

produced in goat, affinity isolated antibody

Catalog Number **E4029**

Product Description

Anti-EMMPRIN is produced in goat using as immunogen a purified recombinant human extracellular matrix metalloproteinase inducer (EMMPRIN) extracellular domain expressed in mouse myeloma NSO cells. Affinity isolated antibody is obtained from goat Anti-EMMPRIN antiserum by immuno-specific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the peptide.

Anti-EMMPRIN recognizes recombinant human EMMPRIN by immunoblotting (~58 kDa)¹. The antibody shows less than 5% cross-reactivity with recombinant mouse EMMPRIN.

EMMPRIN (extracellular matrix metalloproteinase inducer), also called CD147, basigin, and M6 in humans, is a member of the immunoglobulin superfamily. It is a glycoprotein containing two immunoglobulin domains. EMMPRIN is present on the surface of tumor cells and macrophages and stimulates fibroblasts to produce matrix metalloproteinases (MMPs). The expression of EMMPRIN is different from that in normal human brain. Human keratinocytes express EMMPRIN suggesting the possibility of its involvement in the regulation of matrix remodeling at the epidermal-dermal junction.

Reagent

Supplied as ~100 μg of antiserum lyophilized from a 0.2 μm filtered solution of phosphate buffered saline with 5% trehalose.

Preparation Instructions

To one vial of lyophilized powder, add 1 ml of sterile phosphate buffered saline to produce a 0.1 mg/ml stock solution of antibody.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Prior to reconstitution, store at -20 °C. Reconstituted product may be stored at 2-8 °C for up to one month. For prolonged storage, freeze in working aliquots. Avoid repeated freezing and thawing. Do not store in frost-free freezer.

Product Profile

 $\underline{Immunoblotting} \hbox{: a working antibody concentration of } 0.1-0.2~\mu g/ml \hbox{ is recommended. The detection limit for human EMMPRIN is ~1 ng/lane under non-reducing and reducing conditions.}$

Note: In order to obtain the best results in various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

- Biswas, C., et al., The human tumor cell-derived collagenase stimulatory factor (renamed EMMPRIN) is a member of the immunoglobulin superfamily. *Cancer Res.*, 55, 434-439 (1995).
- Sameshima, T., et al., Expression of EMMPRIN (CD147), a cell surface inducer of matrix metalloproteinases, in normal human brain and gliomas. *Int. J. Cancer*, 88, 21-27 (2000).
- Kanekura, T., et al., Basigin (CD147) is expressed on melanoma cells and induces tumor cell invasion by stimulating production of matrix metalloproteinases by fibroblasts. *Int. J. Cancer*, 99, 520-528 (2002).
- 4. Liang, L., et al., Characterization of the promoter of human extracellular matrix metalloproteinase inducer (EMMPRIN). *Gene*, **282**, 75-86 (2002).
- 5. Zucker, S., et al., Tumorigenic potential of extracellular matrix metalloproteinase inducer. Am. J. Pathol., **158**, 1921-1928 (2001).
- DeCastro, R., et al., Human keratinocytes express EMMPRIN, an extracellular matrix metalloproteinase inducer. *J. Invest. Dermatol.*, **106**, 1260-1265 (1996).

ADM,PHC 03/11-1