

Product Information

Anti-EMMPRIN

Developed in Goat
Affinity Isolated Antibody

Product Number **E 4154**

Product Description

Anti-Mouse EMMPRIN is developed in goat using a purified recombinant mouse extracellular matrix metalloproteinase inducer (EMMPRIN) extracellular domain (amino acids 22-209) expressed in mouse myeloma NSO cells as immunogen. Affinity isolated antigen specific 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-Mouse EMMPRIN recognizes recombinant mouse EMMPRIN by immunoblotting (approximately 58 kDa)¹ and ELISA. The antibody shows approximately 5% cross-reactivity (in immunoblotting) with recombinant human EMMPRIN.

EMMPRIN (extracellular matrix metalloproteinase inducer), also called CD147, basigin, and M6 in humans, is a member of the immunoglobulin superfamily.² Murine basigin/EMMPRIN and human M6/EMMPRIN have similar MMP-inducing activities and are functional homologs.¹ 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).²⁻⁴

Reagent

Anti-Mouse EMMPRIN is supplied as approximately 100 µg of antiserum lyophilized from a 0.2 µm filtered solution of phosphate buffered saline.

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.

Storage/Stability

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

Product Profile

For immunoblotting, a working antibody concentration of 0.1-0.2 µg/ml is recommended. The detection limit for mouse EMMPRIN is approximately 2 ng/lane under non-reducing and reducing conditions.

For ELISAs, a working antibody concentration of 0.5-1.0 µg/ml is recommended. The detection limit for recombinant mouse EMMPRIN is approximately 0.16 ng/well.

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

Endotoxin level is < 15 ng/mg antibody as determined by the LAL (*Limulus amebocyte lysate*) method.

References

1. Li, R., et al., Basigin (murine EMMPRIN) stimulates matrix metalloproteinase production by fibroblasts. *J. Cell Physiol.*, **186**, 371-379 (2001).
2. 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).

3. 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. Zucker, S., et al., Tumorigenic potential of extracellular matrix metalloproteinase inducer. *Am. J. Pathol.*, **158**, 1921-1928 (2001).

kaa 02/03

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.