



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

Monoclonal Anti-Endostatin

Clone 91318

produced in rat, purified immunoglobulin

Catalog Number **E3904**

Product Description

Monoclonal Anti-Endostatin (rat IgG2B isotype) is produced from a mouse hybridoma elicited from a rat immunized with purified recombinant mouse endostatin, expressed in insect *Sf* 21 cells. The antibody is purified from the IgG fraction of ascities fluid using protein G.

Monoclonal Anti-Endostatin recognizes recombinant mouse endostatin by immunoblotting and ELISA.

Endostatin (20-22 kDa), a cleaved product of the C-terminal domain of collagen XVIII, is an endogenous angiogenesis inhibitor.^{1,2} It was originally found in conditioned media from a murine endothelial tumor cell line, hemangioendothelioma.^{3,4} Endostatin inhibits endothelial cell migration (*in vivo* and *in vitro*) and induces endothelial cell apoptosis.⁴ It inhibits tumor growth and impairs blood vessel maturation in wound healing.¹ Endostatin has an important role in endothelial cell adhesion and cytoskeletal organization.⁵ Endostatin can be found in vessel walls (elastic fibers) and basement membranes.^{3,6}

Reagent

Supplied as 500 µg of antiserum lyophilized from a 0.2 µm filtered solution of phosphate buffered saline containing 5% trehalose.

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.

Preparation Instructions

To one vial of lyophilized powder, add 1 ml of sterile phosphate buffered saline (PBS) to produce a 0.5 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

Immunoblotting: a working concentration of 1-2 µg/ml is recommended. The detection limit for recombinant mouse endostatin is ~50 ng/lane and ~5 ng/lane under non-reducing and reducing conditions, respectively.

ELISA: a working concentration of 0.5 to 1.0 µg/ml is recommended. The detection limit for recombinant mouse endostatin is ~6 ng/well.

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

Endotoxin level is <10 ng/mg antibody as determined by the LAL (Limulus ameobocyte lysate) method.

References

1. Bloch, W., et al., *FASEB J.*, **14**, 2373-2376 (2000).
2. Sasaki, T., et al., *J. Mol. Biol.*, **301**, 1179-1190 (2000).
3. Zatterstrom, U.K., et al., *Cell Struct. Funct.*, **25**, 97-101 (2000).
4. O'Reilly, M.S., et al., *Cell*, **88**, 277-285 (1997).
5. Dixelius, J., et al., *Cancer Res.*, **62**, 1944-1947 (2002).
6. Miosge, M., et al., *FASEB J.*, **13**, 1743-1750 (1999).

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