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## Product Information

### Anti-Endostatin

produced in goat, affinity isolated antibody

Product Number **E3779**

### Product Description

Anti-Endostatin is produced in goat using a purified recombinant mouse endostatin expressed in the insect cell line Sf 21 as immunogen. Affinity isolated antigen specific antibody is obtained from goat anti-endostatin antiserum by immuno-specific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the peptide.

Anti-Endostatin recognizes recombinant mouse endostatin by various immunochemical techniques including immunoblotting, ELISA, and immuno-histochemistry.

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

### Reagent

The antibody is 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.

### 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 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 recombinant mouse endostatin is ~5 ng/lane and 2 ng/lane under non-reducing and reducing conditions, respectively.

For ELISAs, a working antibody concentration of 0.5-1.0 µg/mL is recommended. The detection limit for recombinant mouse endostatin is ~0.6 ng/well.

For immunohistochemistry, a working antibody concentration of 15 µg/mL is recommended using mouse frozen tissue sections and a chromogenic labeling detection system.

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

Endotoxin level is < 0.1 EU (endotoxin units) per 1 µg antibody as determined by the LAL (Limulus amoebocyte 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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