

Product Specification Sheet

Endostatin Antibodies and Positive Controls

Cat. ENST11-S	Rabbit Anti-Human Endostatin antiserum	SIZE: 100 ul
Cat. ENST11-A	Rabbit Anti-Human Endostatin IgG, aff pure	SIZE: 100 ug
Cat. ENST11-C	Human Endostatin Protein W. Blot +ve control	SIZE: 100 ul
Cat. ENST12-C	Mouse Endostatin Protein W. Blot +ve control	SIZE: 100 ul

Recent studies have identified several proteolytic fragments or cryptic domains of proteins that act as inhibitors of angiogenesis. These include fragments of plasminogen such as **Angiostatin** protein (kringles 1-4) and kringles 1-5, C-terminal proteolytic fragment of Collagen XVIII (**Endostatin** protein), the NC10 domain of collagen 15 (**Restin**), the C-terminal hemopexin-like domain of MMP-2 (**PEX**), the N-terminal fragment of prolactin, and the N-terminally truncated platelet factor. The 20 kDa fragment of Collagen XVIII known as **Endostatin** protein inhibits tumor progression and induction of endothelial cell apoptosis. Administration of Endostatin protein to mice bearing certain tumors caused tumor regression without the development of drug resistance. Endostatin protein also inhibited systemic angiogenesis, primary tumor growth, and the development of primary metastatic lesions. It also reduced the levels of antiapoptotic proteins Bcl-2 and Bcl-xL and an increase in apoptosis of endothelial cells. *in vitro*.

Source of Antigen and Antibodies

Antigen	Purified human endostatin protein (~20 Kda)
Ab Host/type	Rabbit, Polyclonal antiserum (cat # ENST11-S) and IgG purified over recombinant human endostatin-Agarose column affinity chromatography (Cat # ENST11-A)
2-Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
-ve control IgG	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

Purified human ((**Cat # ENST11-C**) and mouse ((**Cat # ENST12-C**) ENST proteins for Western blot +ve control are supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of **ENST12-C** for good visibility with antibody Cat # **ENST11-S**. Store at -20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the **ENST12-C** solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. This preparation is intended for qualitative purpose and not to serve as standard of known concentration. Do not freeze, thaw, or heat repeatedly

Form & Storage of Antibodies/Peptide Control

Antiserum (unpurified)

100ul solution lyophilized powder
Supplied 0.05% azide, **Reconstitute** powder in 100 ul PBS

Affinity pure IgG

100 ug/100ul solution lyophilized powder
Supplied in **Buffer:** PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Storage

Short-term: unopened, undiluted liquid vials at -20oC and powder at 4oC or -20oC..

Long-term: at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Shipping: 4oC for solutions and room temp for powder

Recommended Usage

Western Blotting (1:1K-5K for neat serum and 1-10 ug/ml for affinity pure using Chemiluminescence technique). Human and mouse endostatins are ~ 20 kDa.

ELISA (1:10K-1:100K; using 50-100 ng of control peptide/well).

Histochemistry & Immunofluorescence: not tested. We recommend the use of affinity pure antibody at 2-20 ug/ml in formaldehyde fixed tissue.

Specificity & Cross-reactivity

Anti-human endostatin crossreact with mouse and rat protein. Antibody crossreactivity in various other species is not established. Human endostatin W. blot +ve control should be used as a control. A detailed protocol is available at our web-site.

General References: (1) Peterson Te et al (1990) JBC 265, 6104-6111; Forsgren m et al (1987) FEBS Lett. 213, 254-260; Malinowski DP et al (1984) Biochemistry 23, 4243-4250; O'Reilly MS et al (1994) Cell 79, 315-328; Sim BK et al (1997) Cancer Res. 57, 1329-1334; Wu Z et al (1997) BBRC 236, 651.

**This product is for in vitro research use only.*

Related material available from ADI

Antibodies to Ang-1-2, Angiostatin, Endostatin, VEGFs, Ties

ENST11-S-A-C-12-C 71212S