08/11 For research use only

# **BioVision**

# **Recombinant Human Endostatin**

**CATALOG #**: 4759-20 20 μg

4759-100 100 μg 4759-1000 1 mg

LOT #: \_\_\_\_\_\_

SOURCE: E. coli

**PURITY:** ≥ 95 % as determined by SDS-PAGE.

Endotoxin level is less than 0.1 ng/mg of Endostatin

PHYSICAL APPEARANCE: Sterile filtered and lyophilized from 50 mM Tris, pH 8.0

MOLECULAR WEIGHT: 20.5 kDa

# **BACKGROUND:**

Endostatin has been identified as a C-terminal fragment of Collagen type 18, a recently identified member of a family of collagen-like proteins referred to as multiplexin family Endostatin specifically inhibits proliferation of endothelial cells although it does not affect the proliferation of EOMA cells. Endostatin also potently inhibits angiogenesis and tumor growth. Endostatin has an important role in endothelial cell adhesion and cytoskeletal organization. Endostatin can be found in vessel walls (elastic fibers) and basement membranes. Recombinant human Endosatin expressed in yeast causes G1 arrest of endothelial cells, and endostatin treatment results in apoptosis of HUVE and HMVE cells.

# **DESCRIPTION:**

Recombinant Human Endostatin produced in E. coli is a single, non-glycosylated, polypeptide having a total molecular mass of 20.5 kDa comprising the C-terminal fragment of collagen XVIII (aa 1572-1754) that has been reported to act as a potent inhibitor of angiogenesis and tumor growth *in vitro* and *in vivo*. Induces tyrosine phosphorylation of Shc (SH2 domain adapter protein) leading to specific inhibition in endothelial cell proliferation.

#### RECONSTITUTION AND STORAGE CONDITIONS:

Reconstitute with sterile  $dH_2O$  to a concentration  $\geq 1.0$  mg/ml, aliquot and store at below  $-20^{\circ}$  C. Avoid freeze-thaw cycles.

FOR RESEARCH USE ONLY! Not to be used in humans.

#### **RELATED PRODUCTS:**

#### Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Additional Apoptosis Kits & Reagents

# Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

### Cell Proliferation & Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

# Cell Damage & Repair

- HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione Fluorometric & Colorimetric Assay Kits
- Nitric Oxide Fluorometric & Colorimetric Assay Kits

# Signal Transduction

- Camp & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

# Adipocyte & Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- Total Cholesterol Quantification Kit

# Molecular Biology & Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit

Antibodies & Recombinant Proteins (many)

