

# Recombinant Human Angiopoietin-1

**CATALOG #:** 4921-10 10 µg  
4921-1000 1 mg

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

## BACKGROUND:

The angiopoietin (Ang) family of growth factors includes four members. Angiopoietin-1 (Ang-1) is a secreted growth factor that binds to and activates the Tie-2 receptor tyrosine kinase. The factor enhances endothelial cell survival and capillary morphogenesis, and also limits capillary permeability. Ang-2 binds the same receptor but fails to activate it: hence, it is a natural inhibitor of Ang-1. Ang-2 destabilizes capillary integrity, facilitating sprouting when ambient vascular endothelial growth factor (VEGF) levels are high, but causing vessel regression when VEGF levels are low. All together, existing data suggest that VEGF-A and Angiopoietins not only have quite different roles during vascular development, but also very complementary and coordinated roles.

## SOURCE:

Recombinant human angiopoietin-1 produced from insect cells. 476 amino acids (21-496) is fused at the N-terminus with a myc-Tag.

**MOL. WEIGHT:** 66 kDa

**PURITY:** >95% by SDS-PAGE, HPLC

**ENDOTOXIN:** ≤0.1 EU/µg protein

**FORM:** Clear solution in 50mM Tris-HCL, pH 7.5, 150mM NaCl, 0.05% CHAPS and BSA.

**SHIPPING:** Ship on blue ice

**STORAGE:** -20°C

## HANDLING:

For maximum product recovery, centrifuge the vial prior to opening. After reconstitution, aliquote and store at -20°C. Stable for up to 3 months. Avoid freeze/thaw cycle.

## BIOLOGICAL ACTIVITY:

The biological activity was determined by the induction of endothelial cell sprouting as described in Korff et al., 2001.

**For Research Use Only! Not for Use 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
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

### 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 & 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
- PLTP 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
- β-Galactosidase Staining Kit & Luciferase Reporter Assay Kit

### Growth Factors and Cytokines

### Monoclonal and Polyclonal Antibodies