Recombinant Protein Technical Manual

Recombinant Mouse COL18A1/Endostatin Protein (His Tag)

RPES0100

Product Data:

Product SKU: RPES0100

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: P39061

Protein Information:

Molecular Mass: 21.2 kDa

AP Molecular Mass: 18 kDa

Tag: C-6His

Bio-activity:

Purity: > 90 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4 .

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: antiangiogenic agent;COL18A1;collagen alpha(XVIII)chain; collagen;type XVIII;Endostatin

Immunogen Information:

Sequence: His1591-Lys1774

Background:

Endostatin, an endogenous non-glycosylated inhibitor of endothelial cell proliferation and angiogenesis. It is produced and/or trimmed by metalloproteinases such as MMP-2 and MMP-9, and cathepsins S, B and L. The N-terminal ~27 aa of Endostatin appear to contain the majority of its activity. This region contains zinc binding sites that are thought to be critical for its anti-endothelial and anti-tumor effects, as well as multiple cleavage sites that, when used, can modify its activity. Mouse Endostatin shares 96% aa sequence identity with rat and 85-87% with human, bovine and equine Endostatin. It is predominantly expressed in liver, kidney, lung, skeletal muscle and testis. Endostatin inhibits endothelial cell growth by inducing cell cycle arrest in G1 phase and initiating apoptosis. It is also thought to down-regulate angiogenesis by blocking VEGF-induced endothelial cell migration. Endostatin may also be involved with down-regulation of angiogenesis after establishment of placental circulation in the pregnant uterus.