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**Recombinant Mouse Collagen Alpha-1(XVIII) Chain/EndostatinProtein(C-6His)**

**Cat.NO.: TP04911**

3th Edition

**Synonyms:** antiangiogenic agent; COL18A1; collagen alpha-1(XVIII)chain; collagen; type XVIII; Endostatin

**Description:** 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.

**Form:** PBS

**Molecular Weight:** 21.2 kDa

**Sequences:** His1591-Lys1774

**Purity:** > 95% by HPLC

**Concentration:**

**Endotoxin Level:** <1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.