# PRODUCT INFORMATION SUMMARY

# Human MMP-1

Purified Factor Product Number HC711221B 10.0 ug Product Number HC711221A 2.0 ug

### DESCRIPTION:

Human MMP-1, known as Matrix Metalloproteinase-1 or Fibroblast Collagenase, is a catalytic protease dependant upon calcium and zinc for their activity. This and related enzymes are involved in extracellular matrix stability. Elevated expression of these enzymes have been implicated in various degenerative disorders including cardiovascular disease, cancer, bone growth plate disorders, and arthritis. Human MMP-1 expressed as 42.7 kDa protein with both the catalytic N-terminal and the C-terminal domains.

## **SOURCE:** E. Coli

Purity > 98% by HPLC analysis Endotoxin < 0.1 ng per ug MMP-1 Sterile filtered and lyophilized.

### **BIOLOGICAL ACTIVITY:**

Measured ability to cleave MMP-1 substrate in chromogenic assay at room temp. 50% cleavage achieved at 2.6 ug/mL MMP-1 concentration with 25 minute incubation.

### HANDLING AND STORAGE:

Purified MMP-1 factor is provided lyophilized with no additives. Store lyophilized, at -20  $^{\circ}$  C. Upon reconstitution with distilled (or sterile) water to concntration of approx. 100.0 ug/mL, ( **NOTE: slow** to **dissolve**) **shake** to achieve **better solubilty** -further dilute in PBS or other buffered solutions. Store small aliquots at -20 C, with addition of 0.1% BSA, for long-term storage- up to 3 months, at high concentration.

Before opening vial, it is recommended to microcentrifuge vial for 30 seconds to spin-down any lyophilized material that may adhere to top of vial. The small amounts of protein may adhere to the vial as a very thin coat of lyophilized material, and may be difficult to see as a pellet.

RESEARCH USE ONLY -NOT for DRUG USE