Product Information Sheet

Product Name: MMP-2 enzyme, Human
Catalog Number: 72005
Size: 1 μg
Concentration: 10 μg/mL
Activity (Unit/μg): Provided on the label
Unit definition: One unit of protease hydrolyzes 1 picomole of Mca-Pro-Leu-Gly-Leu-Dap(Dnp)-Ala-Arg-NH₂ (AnaSpec Cat#27077) per minute at pH 7.4 at 25° C.
Storage: Store at -80°C. Avoid multiple thaw-freeze cycles.

Instruction:

Matrix metalloproteinases (MMPs) belong to a family of secreted or membrane-associated zinc endopeptidases capable of digesting extracellular matrix components.1,2. MMP-2 (72-kDa gelatinase-A) is involved in tumor development and metastasis.3-5. It is proposed as a therapeutic target for cancer.

Recombinant human MMP-2 was expressed as a pro-enzyme from its DNA sequence, transfected into CHO cells. The pro-MMP-2 can be fully activated by incubating with 1 mM APMA at 37°C for 20 min to 1 hr.6. Its activity can be measured in FRET-based enzymatic assays (AnaSpec Cat#71129, Cat#71151). 10-20 ng of enzyme is sufficient for FRET-based assay.

The MMP-2 is stored in 50mM Tris-HCl at pH 7.5, 0.2M NaCl, 5mM CaCl₂, 1μM ZnCl₂, 0.05% Brij35 and 1mg/ml BSA.

References