

Product Information Sheet

Product Name: Human MMP-7, Recombinant

Catalog Number: 72007

Size: $1 \mu g$

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#27076) per minute at pH 7.5 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} The importance of MMPs in tumor development and invasion as well as other diseases is well known. MMP-7,³ (matrilysin, PUMP-1) is proposed as a potential anti-cancer drug target.

Recombinant human MMP-7 was expressed in E.coli. The molecular mass of zymogen is approximately 28-kDa on SDS-PAGE and the active form is 19-kDa.

pro-MMP-7 can be fully activated by incubating with 1 mM APMA at 37°C for 1 hr. Its activity can be measured by FRET peptides (AnaSpec Cat#71132, Cat#71153). 5-10 ng of enzyme is sufficient for FRET-based assay.

MMP-7 is stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM CaCl₂, 1 mg/mL BSA.

References

- 1. Woessner, J. et al. J. Biol. Chem. 263, 16918 (1988).
- 2. Woessner, J. et al. FASEB. J. 5, 2145 (1991).