Product Information Sheet

Product Name: Human MMP-7, Recombinant
Catalog Number: 72007
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-NH$_2$ (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. The importance of MMPs in tumor development and invasion as well as other diseases is well known. MMP-7, (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 CaCl$_2$, 1 mg/mL BSA.

References