

32-2551: MMP 7 Recombinant Protein

Alternative Name : Matrilysin, EC 3.4.24.23, Pump-1 protease, Uterine metalloproteinase, Matrix metalloproteinase-7, MMP-7, Matrin, MP-1, PUMP-1, MMP7.

Description

Source : Escherichia Coli. Matrix Metalloproteinase-7 Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing having a molecular mass of 19.13 kDa. The MMP-7 is purified by proprietary chromatographic techniques. Matrix metalloproteinase-7 (MMP-7) also known as matrilysin and PUMP (EC 3.4.24.23) cleaves a number of substrates including collagen types IV and X, elastin, fibronectin, gelatin, laminin and proteoglycans. MMP-7 is closely related to the stromelysin family members but is encoded by a different gene. MMP-7 is the smallest of all the MMPs consisting of a pro-peptide domain and a catalytic domain. It lacks the hemopexin-like domain common to other members of the MMPs. MMP-7 is secreted as a 28 kDa proenzyme and can be activated in vitro by organomercurials and trypsin and in vivo by MMP-3 to a 18 kDa active MMP-7 enzyme. Once activated, MMP-7 can activate pro-MMP-1 and pro-MMP-9 but not pro-MMP-2. MMP-7 is widely expressed having been reported in elevated levels in cycling endometrium as well as in colorectal cancers and adenomas, hepatocellular carcinomas, rectal carcinomas, and approximately 50% of gliomas.

Product Info

Amount :	20 µg
Purification :	Greater than 95.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Content :	The protein contains the following additives 10mM HEPES (pH 7.4), 5mM CaCl ₂ and 150mM NaCl.
Storage condition :	Matrilysin although stable at 4°C for 3 weeks, should be stored desiccated below -18°C. Please prevent freeze-thaw cycles.

Application Note

The specific activity was found to be 6,200 U/mg.