



Product Datasheet

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| Product Name | Matrix Metalloproteinase-7 Human Recombinant |
| Cata No | CB500450 |
| Source | <i>Escherichia Coli.</i> |
| Synonyms | Matrilysin, EC 3.4.24.23, Pump-1 protease, Uterine metalloproteinase, Matrix metalloproteinase-7, MMP-7, Matrin, MPSL1, PUMP-1, MMP7. |

Description

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.

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.

Physical Appearance

Sterile clear liquid solution.

Biological Activity

The specific activity was found to be 6,954 U/mg.

Purity

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The protein contains the following additives 10mM HEPES (pH 7.4), 5mM CaCl₂ and 150mM NaCl

Stability

Matrilysin although stable at 4°C for 3 weeks, should be stored desiccated below -18°C.

Please prevent freeze-thaw cycles.