

ProMatrilysin Recombinant Protein



RPPB1967

Product Information Protein Information

Product SKU:

RPPB1967

Host:

Escherichia Coli.

Protein 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.

Appearance:

Sterile clear liquid solution.

Formulation:

The protein contains the following additives 25mM Tris-HCl (pH 7.5), 150mM NaCl, 5mM CaCl₂, 0.01% Brij-35 and 0.02% NaN₃.

Purity:

Greater than 95.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Stability:

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Biological Activity:

The specific activity was found to be 1400 IU/mg.