



碧云天生物技术/Beyotime Biotechnology
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Recombinant Human mMP-14

产品编号	产品名称	包装
P7025-10μg	Recombinant Human mMP-14	10μg
P7025-100μg	Recombinant Human mMP-14	100μg
P7025-500μg	Recombinant Human mMP-14	500μg

产品简介:

Species	Gene ID	Accession	Source	Length	MW	Tag
Human	4323	P50281	<i>E. coli</i>	264aa	29.6kDa	—

About this protein	
Name	Recombinant Human mMP-14 (Recombinant Human Matrix metalloproteinase-14; rHuMMP-14); 重组人基质金属蛋白酶-14
Synonyms	MMP-14;mMP-X1; MT-MMP; MT1MMP; MTMMP1; WNCHRS; MT1-MMP; MT-MMP 1
Purity	>95% by SDS-PAGE and HPLC analyses.
Biological Activity	Test in Process.
Physical Appearance	Sterile colorless liquid.
Formulation	Supplied as a 0.2μM filtered solution in 20mM Tris-HCl, pH7.4, 300mM NaCl, 3mM CaCl ₂ , 10μM ZnCl ₂ , with 30% glycerol.
Endotoxin	Less than 1EU/μg of rHuMMP-14 as determined by LAL method.
Reconstitution	As the first member of membrane type (MT)mMPs,mMP-14, also known as MT1-MMP, plays an important role in extracellular matrix (ECM) remodeling by being able to degrade type I collagen, activate pro-MMP-2 and process cell adhesion molecules such as CD44 and integrin alpha V.mMP-14 is therefore a key enzyme in many physiological and pathological processes such as angiogenesis and tumor invasion. Structurally,mMP-14 consists of the following domains: a pro domain containing the furin cleavage site, a catalytic domain containing the zinc-binding site, a hinge region, a hemopexin-like domain, a transmembrane domain, and a cytoplasmic tail. Recombinant HumanmMP-14 consists of the pro and catalytic domains, which can be activated by treatment with furin as described in Activity Assay Protocol.
Category	Enzymes
Background	Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. MostmMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. However, the protein encoded by this gene is a member of the membrane-typemMP (MT-MMP) subfamily; each member of this subfamily contains a potential transmembrane domain suggesting that these proteins are expressed at the cell surface rather than secreted. This protein activatesmMP2 protein, and this activity may be involved in tumor invasion.
Amino Acid Sequence	ALASLGSQAQS SSFSPEAWLQ QYGYLPPGD L RTHTQRSPQS LSAAIAAMQK FYGLQVTGKA DADTMKAMRR PRCGVPDKFG AEIKANVRRK RYAIQGLKWQ HNEITFCIQN YTPKVG EYAT YEAIRKAFRV WESATPLRFR EVPYAYIREG HEKQADIMIF FAEGFHGDST PFDGEGGFLA HAYFPGPNIG GDTHFDSAEP WTVRNEDLNG NDIFLVAVHE LGHALGLEHS SDPSAIMAPF YQWMDTENFV LPDDDRRGIQ QLYG

包装清单:

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—	说明书	1份

保存条件：

-20°C或更低温度保存，至少一年有效。由于蛋白的每次冻融均会引起部分失活，所以首次配制成相应浓度的储存液后(请根据产品简介中Reconstitution一栏的信息配制储存液)，须分装后-20°C或更低温度冻存，以避免反复冻融。

注意事项：

- 由于有些塑料管壁对某些蛋白有较强的吸附作用，溶液中的蛋白很容易粘附在管壁上，并且粘附后的蛋白很难与管壁分离。而载体蛋白(Carrier protein, 如0.1% BSA等)的主要作用是预先封闭塑料管壁上的蛋白结合位点，使细胞因子或重组蛋白不会粘附于管壁。所以一定要使用产品简介中Reconstitution一栏的信息配制储存液。
- 本产品仅限于专业人员的科学研究用，不得用于临床诊断或治疗，不得用于食品或药品，不得存放于普通住宅内。
- 为了您的安全和健康，请穿实验服并戴一次性手套操作。

使用说明：

1. 收到产品后请立即按照说明书推荐的条件保存。除非特别注明，碧云天相关产品均为冻干粉，由于微量的蛋白在冻干过程中沉积在管内，形成很薄或不可见的蛋白层，所以在打开管盖前，我们建议在离心机中约8,000-12,000g离心10-30秒，使附着在管盖或管壁上的蛋白聚集于管底。
2. 请根据实验目的并按照产品简介中Reconstitution一栏中的信息配制储存液。大多数细胞因子或重组蛋白的冻干粉是非常容易溶解的，一般用移液枪的枪头轻吹几下或者轻轻摇晃瓶子，即可使细胞因子或重组蛋白完全溶解。请勿用vortex剧烈振荡，以免蛋白变性而失活。
3. 具体的最佳工作浓度请自行参考相关文献，或者根据实验目的，以及特定细胞和动物，通过实验进行摸索和优化。

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