

PrimeGene™ Recombinant Human Matrix metalloproteinase-14
a biotechne brand (rHuMMP-14)

PrimeGene Technical DataSheet

Catalog Number:	401-15
Source:	<i>Escherichia coli</i>
Molecular Weight:	Approximately 29.6 kDa, a single non-glycosylated polypeptide chain containing 264 amino acids.
Size:	10µg/ 100µg /500µg
AA Sequence:	ALASLGSAQS SSFSPEAWLQ QYGYLPPGDL RTHTQRSPQS LSAAIAAMQK FYGLQVTGKA DADTMKAMRR PRCGVPDKFG AEIKANVRRK RYAIQGLKWQ HNEITFCIQN YTPKVGEYAT YEAIRKAFRV WESATPLRFR EVPYAYIREG HEKQADIMIF FAEGFHGDST PFDGEGGFLA HAYFPGPNIG GDTHFDSAEP WTVRNEDLNG NDIFLVAVHE LGHALGLEHS SDPSAIMAPF YQWMDTENFV LPDDDRRGIQ QLYG
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Bioassay data are not available.
Physical Appearance:	Sterile colorless liquid.
Formulation:	Supplied as a 0.2 µm filtered solution in 20 mM Tris-HCl, pH 7.4, 300 mM NaCl, 3 mM CaCl ₂ , 10 µM ZnCl ₂ , with 30 % glycerol.
Endotoxin:	Less than 1 EU/µg of rHuMMP-14 as determined by LAL method.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 6 months from date of receipt, -20 to -70 °C as supplied.● 3 months, -20 to -70 °C under sterile conditions after opening.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Human Matrix metalloproteinase-14

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 Human MMP-14 consists of the pro and catalytic domains, which can be activated by treatment with furin as described in Activity Assay Protocol.