# **Product** Data Sheet

# MMP-16 Protein, Human (I152N, His)

Cat. No.: HY-P79097

Synonyms: Matrix metalloproteinase-16; MMP16; MMP-16; MMP-X2; Membrane-type matrix

metalloproteinase 3; MT-MMP 3; MTMMP3; Membrane-type-3 matrix metalloproteinase; MT3-

MMP; MT3MMP; C8orf57; MMPX2; Matrix Metalloproteinase 16/Membrane Type 3 MMP

Species: Human E. coli Source:

Accession: P51512 (A32-G291, I152N)

Gene ID: 4325

Molecular Weight: Approximately 29 kDa

#### **PROPERTIES**

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ATVCGTEQYF	NVEVWLQKYG	YLPPTDPRMS	VLRSAETMQS
ALAAMQQFYG	$I\ N\ M\ T\ G\ K\ V\ D\ R\ N$	TIDWMKKPRC	GVPDQTRGSS
KFHIRRKRYA	LTGQKWQHKH	ITYSIKNVTP	KVGDPETRKA
$N\ R\ R\ A\ F\ D\ V\ W\ Q\ N$	VTPLTFEEVP	YSELENGKRD	VDITIIFASG
FHGDSSPFDG	EGGFLAHAYF	PGPGIGGDTH	FDSDEPWTLG
NPNHDGNDLF	LVAVHELGHA	LGLEHSNDPT	AIMAPFYQYM

ETDNFKLPND DLQGIQKIYG

**Biological Activity** 

Measured by its ability to cleave a fluorogenic peptide substrate Mca-KPLGL-Dpa-AR-NH2. The specific activity is >250 pmol/min/μg.

**Appearance** 

Solution

**Formulation** 

Liquid from sterile 50 mM Tris-HCL, 300 mM NaCl, 200 mM arginine, 0.4% SKL, 20% Glycerol, pH 8.0.

**Endotoxin Level** 

<1 EU/µg, determined by LAL method.

Reconsititution

N/A.

Storage & Stability

Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.

**Shipping** 

Shipping with dry ice

### **DESCRIPTION**

**Background** 

MMP-16 (Matrix Metalloproteinase-16) is an endopeptidase pivotal in the degradation of diverse extracellular matrix components, including collagen type III and fibronectin. It demonstrates the ability to activate progelatinase A, contributing to the regulation of matrix remodeling in blood vessels. The short isoform of MMP-16 is particularly notable for its cleavage

of fibronectin and collagen type III, albeit at a reduced rate, with no discernible effect on collagen types I, II, IV, and V. However, in the presence of CSPG4, MMP-16 may play a role in the degradation and invasion of type I collagen by melanoma cells. This dual functionality underscores the complex and context-dependent nature of MMP-16's involvement in extracellular matrix dynamics, highlighting its potential implications in physiological and pathological processes, including those associated with vascular remodeling and cancer progression. (

Caution: Product has not been fully validated for medical applications. For research use only.

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