

## 32-8451: Recombinant Human Matrix Metalloproteinase-9/MMP-9 (C-6His)

**Gene :** MMP9  
**Gene ID :** 4318  
**Uniprot ID :** P14780

### Description

Source: Human Cells.  
MW :77.4kD.

Recombinant Human Matrix metalloproteinase-9 is produced by our Mammalian expression system and the target gene encoding Ala19-Asp707 is expressed with a 6His tag at the C-terminus. Matrix metalloproteinase 9 (MMP-9) is an enzyme encoded by the MMP9 gene. This protein, which is produced by normal alveolar macrophages and granulocytes, can be activated by 4-aminophenylmercuric acetate and phorbol ester and up-regulated by ARHGEF4, SPATA13 and APC via the JNK signaling pathway in colorectal tumor cells. MMP-9 is involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, angiogenesis, bone development, wound healing, cell migration, learning and memory, as well as in pathological processes, such as arthritis, intracerebral hemorrhage, and metastasis.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 2mM CaCl<sub>2</sub>, 150mM NaCl, 0.05% Brij35(w/v), pH 7.5.  
**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.  
**Amino Acid :** AAPRQRQSTLVLPGLDRLNLTDRQLAEEYLYRYGYTRVAEMRGESKSLGPALLLLQKQLSLPETGELDSATLKA  
MRTPRCGVPDLGRFQTFEGDLKWHHHNITYWIQNYSEDLPRVIDDAFARAFALWSAVTPLTFTRVYSRDADI  
VIQFGVAEHGDGYPFDGKDGLLAHAFPPGPGIQGDAHFDDELWSLGKGVVPTFRGNADGAACHFFPFIFEG  
RSYSACTTDGRSDGLPWCSTTANYDTDDRFGFCPSERLYTRDGNADGKPCQFPFIFQGSYSACTTDGRSDG  
YRWCATTANYDRDKLFGFCPTRADSTVMGGNSAGELCVFPFTFLGKEYSTCTSEGRGDGRLWCATTSNFSDS  
KKWGFCDQGYSLFLVAHEFGHALGLDHSSVPEALMYPMYRFTEGPPLHKDDVNGIRHLYGPRPEPEPRPPT  
TTTTPQPTAPPTVCPTGPPTVHPSERPTAGPTGPPSAGPTGPPTAGPSTATTVPLSPVDDACNVNIFDAIAEIGNQL  
YLFKDGKYWRFSEGRGSRPQGPFLIADKWPALPRKLDVFEELSKLFFSQRQVWVYTGASVLGPRRLDKL  
GLGADVAQVTGALRSRGRKMLLFSGRRLWRFVKAQMVDPRSASEVDRMFPGVPLDTHDVFQYREKAYFCQ  
DRFYWRVSSRSELNQVDQVGYVTDILQCPEDVDHHHHHH

### Application Note

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.  
**Biological Activity :** The specific activity is >1,100 pmol/min/µg. Measured by its ability to cleave the fluorogenic peptide substrate, Mca-PLGL-Dpa-AR-NH<sub>2</sub>.