

Table 1. Classification and functions of matrix metalloproteinases (MMPs)

Group	Metalloproteinase	Substrates
Matrilysins		
The smallest among MMPs, lack of hemopexin domain	MMP-7 (matrilysin, metalloendopeptidase)	Collagen type IV, glycoproteins, gelatine
Collagenases		
Contain hemopexin domain and peptide linking with catalytic domain	MMP-1 (interstitial collagenase; collagenase 1) MMP-2, MMP-9, fibronectin MMP-8 (neutrophil collagenase; collagenase 2) MMP-13 (collagenase 3)	Collagen type I, II, III, V, VII, VIII, X, gelatine, IL-1 β , MMP-2, MMP-9, fibronectin
Stromelysins		
Metalloproteinases of stroma	MMP-3 (stromelysin 1) MMP-10 (stromelysin 2) MMP-11 (stromelysin 3) MMP-18 (collagenase 4)	Proteoglycans, fibronectin, laminin, elastine, gelatine, vitronectine, plasminogen, fibrinogen, fibrine, collagen type III, IV, V, antithrombin III, MMP-1, MMP-2, MMP-8, MMP-9, MMP-13
Gellatinases		
High substrate specificity to denatured collagen and gelatine	MMP-2 (gelatinase A; 72 KDa metalloproteinase) MMP-9 (gelatinase B; 92 KDa metalloproteinase)	Collagen type I, IV, V, VII, X, gelatine, elastine, laminin
Membrane-type MMPs		
(A) transmembrane-type MMPs	MMP-14 (MT1-MMP) MMP-15 (MT2-MMP) MMP-16 (MT3-MMP) MMP-24 (MT5-MMP)	Collagen type I, II, III, gelatine, elastine, laminin, fibronectin, fibrine, proMMP-2, -13
(B) GPI-anchored MMPs	MMP-17 (MT4-MMP) MMP-25 (MT6-MMP)	
Others MMPs		
MMPs which are not categorized in any of the previous groups	MMP-12 (macrophage metalloelastase) MMP-19 MMP-20 (enamelysin) MMP-23 MMP-27 MMP-28 (epilysin)	Amelagenine, aggrecans, elastine