

**Suppl. Table S1.** Different factors regulate cathepsin expression in cardiovascular system

Target cells	IL-8, Insulin-like growth factor II receptor	Target cathepsins (CTSs)	Expression change	Refs.
Endothelial cells	PPAR- $\alpha$ agonist Wy14643	Cathepsin B	Increase	1, 2
	Advanced glycation end products	Cathepsin B	Decrease	3
	FGF2, IFN- $\gamma$ , IL-1 $\beta$ , IL-6, LPS, TNF- $\alpha$	Cathepsin D	Decrease	4
	Oscillatory shear stress	Cathepsins S, K, L	Increase	5, 6
	FGF2, IFN- $\gamma$ , IL-1 $\beta$ , TNF- $\alpha$	Cathepsins K, L	Increase	6, 7
Vascular smooth muscle	TIN-ag-RP	Cathepsins L, S	Increase	5, 8
	Advanced glycation end products	Cathepsin B	Decrease	9
	CpG ODNs, IFN- $\gamma$ , IL-1 $\beta$ , IL-6, LPS, TNF- $\alpha$	Cathepsin D	Decrease	10
Macrophages	Angiotensin II	Cathepsins S, K, L	Increase	5,11,12
	Serum from patients with rheumatoid arthritis	Cathepsin F	Increase	13
	Interferon-c	Cathepsin B	Increase	14
	Oxidized LDL cholesterol	Cathepsin B	Increase	15
	Amyloid- $\beta_{40}$ , amyloid- $\beta_{42}$	Cathepsins S, K	Increase	16, 17
	TNF- $\alpha$	Cathepsin S	Increase	18
	IL-4, IL-10, IL-13	Cathepsin S	Increase	19
Oscillatory shear stress	Cathepsin K	Decrease	20	
Neutrophils	2',3-dihydroxy-5-methoxybiphenyl	Cathepsin B	Increase	21
	PPAR- $\gamma$	Cathepsin G	Decrease	22

Abbreviations: CpG ODN, CpG oligodeoxynucleotide; FGF2, fibroblast growth factor 2; IFN- $\gamma$ , interferon-gamma; LDL, low-density lipoprotein; IL, Interleukin; LPS, lipopolysaccharide; PPAR, peroxisome proliferator-activated receptor; TNF- $\alpha$ , tumor necrosis factor-alpha.

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